UWIT STRATEGIC PLAN

Sic Itur Ad Astra
2017-2022

A Strategic Plan for the University of Wyoming
Division of Information Technology

Breaking Through
2017-2022
A Strategic Plan for the University of Wyoming
The University of Wyoming Information Technology Division will be a recognized leader and trusted partner in supporting the University mission through excellence in information resources and technologies. We will be known for our outstanding support and services, integrated and seamless systems, and innovative use of learning, enterprise and research technologies.

MISSION
Connecting people and ideas; leveraging current and emerging technologies and extending outreach efforts to inspire and advance exceptional teaching, learning, service and research outcomes.
VALUES

Innovation
We are committed to exploring best-practices, emerging technologies and implementing creative, cost-effective solutions to provide great value for the University community.

Integrity and Responsibility
We are guided by values of honesty, transparency and fairness in our actions. We take responsibility for the products of our work. We honor our commitments.

Communication
We are dedicated to the exchange of clear information, understanding that the best work is the result of listening.

Adaptability
We adapt to, and attempt to anticipate, the changing needs of the University to ensure continuous improvement.

Teamwork
We thrive by encouraging and celebrating collaboration, working as a trusted partner with the University community stakeholders and others, including stakeholders state-wide and beyond.

GOALS AND OBJECTIVES

GOAL 1: DRIVING EXCELLENCE
Discover, enhance and maintain core services and systems for the University of Wyoming. Improve staff planning, recruitment, hiring, development, succession and retention strategies to develop a diverse pipeline of top IT professionals and leaders. Advance the academic mission of the University through innovative and effective technologies, resources and services.

GOAL 2: INSPIRING STUDENTS
Deliver solutions and provide opportunities that help prepare students to succeed. Work with campus partners to engage, retain and graduate University students. Explore emerging technologies and current trends to enhance and evolve technology access that promotes active learning, creative thinking and cutting-edge education for University students.

GOAL 3: IMPACTING COMMUNITIES
Provide technologies to enhance communications with the greater University community and state-wide partners. Expand online education and outreach programs. Provide technical expertise to assist in community initiatives.

GOAL 4: A HIGH-PERFORMING UNIVERSITY
Assure the long-term strength and stability of the University by incorporating life cycle planning and budgeting needs to develop sustainable services and to reduce risk by ensuring that university assets are well protected and monitored. Enhance and communicate specific security strategies geared towards maintaining confidentiality, integrity and the availability of information and IT systems. Enhance human capital through the implementation and support of professional development approaches and ongoing technology-skills coursework.
Discover, enhance and maintain core services and systems for the University of Wyoming.

- Support technology systems and services to enhance student learning and to foster curricular innovation.
- Support technology infrastructure for research, scholarship and creative activities.
- Maintain and improve the current IT infrastructure to support University operations, and continue the collaborative process of initiating new systems, applications and technologies to meet the growing needs of the University.
- Provide superior Wi-fi service across all buildings on campus, including residence halls and green spaces.

Advance the academic mission of the university through innovative and effective technologies, resources and services.

- Explore, evaluate and provide access to new technology that gives students hands-on access to tools that enhance their experience at the University and equip them for their future endeavors.
- Support, upgrade and enhance current business processes, tools and administrative systems.
- Evaluate, implement and drive new technologies and services to improve business processes and operational efficiency.
- Provide the UW research community with expert support personnel and research cyber-infrastructure including state-of-the-art networking, computing, software and storage technologies to enhance researchers’ ability to make new discoveries.
- Support and facilitate use of technology that enables interdisciplinarity and promotes the intersection of ideas.
- Partner with Wyoming community colleges and scientific outreach to allow access to UW/NCAR systems for High Performance research computing.
- Consistently and regularly seek new and cutting-edge technology from industry and higher education best practices.
Deliver solutions and provide opportunities that help prepare students to succeed.
• Actively learn what students’ needs and interests are and determine how we can best support their needs.
• Work as a trusted partner with ASUW, the student community and IT student workers regarding how to better serve their academic, research, creative, social and collaborative needs.
• Provide mentorship for students within IT to help graduates succeed in technology-rich environments.
• Develop performance metrics and use them to assess the solutions, systems and platforms designed to contribute to student success.

Work with campus partners to engage, retain and graduate university students.
• Leverage technologies and information resources for recruitment and retention efforts.
• Collaborate on projects with University colleagues that are intended to increase retention rates, graduation rates and student success.

Explore emerging technologies and current trends to enhance and evolve technology and access that supports active learning, creative thinking and cutting-edge training for university students.
• Strengthen institutional structures that support pedagogical innovations both centrally and within various colleges and departments.
• Provide access to technology training resources to support University work and to also build valuable skills.
• Provide assistance in using computer applications and resolving problems through the UWIT Service Center.
• Develop and offer targeted workshops and other learning opportunities for students.
Provide technologies to enhance communications with the greater university community and state-wide partners.
• Inspire new partnerships and build on existing collaborations across the state, region and nationally as well as within campus community by continuing as a leader in technology.
• Leverage web, social media and mobile technologies to enhance effective and consistent content delivery for the University and IT.
• Support and promote effective means of internal and external communications for all University constituent groups.
• Work to provide resources to help campus meet technology accessibility goals.
• Continually work to improve service and support responsiveness.

Expand online education and outreach programs
• Extend technological support and tools to enhance collaboration with University partners.
• Support, promote and expand online education and digital learning.
• Partner with Wyoming community colleges for consolidated efforts in technical resources such as Learning Management Systems, transcript electronic transfer communications and potentially software purchasing.
Assure the long-term strength and stability of the university by incorporating life cycle planning and budgeting needs to develop sustainable services and to reduce risk by ensuring that information technology assets are protected and monitored.

• Evaluate current and emerging technologies to expand their usefulness to the University community, and actively seek ways to improve efficiencies in service delivery, response and communications.

• Improve Quality Assurance by implementing a more formal service design process to ensure all linkages and dependencies are fully and properly addressed when a new service is put into production.

• Align funding and explore new funding opportunities essential for IT operations and new strategic initiatives while fulfilling ongoing maintenance and replacement needs.

Improve staff planning, recruitment, hiring, development, succession and retention strategies to build a diverse pipeline of top IT professionals and leaders.

• Provide access to high performance computing resources to help attract, recruit and retain exceptional research faculty.

• Ensure a strong, diverse and inclusionary IT workforce capable of achieving the information technology goals of the University.

• Ensure excellent service to enable the effective use of technology, resources and systems by the University community.

• Partner with Human Resources to review salary structure and salary policy for Information Technology employees.

Develop and communicate explicit, specific security strategies geared towards maintaining confidentiality, integrity and the availability of information and IT systems.

• Expand and enhance an advanced IT security architecture and planning process.

• Provide a secure computing and networking environment that ensures data privacy and integrity and mitigates cyber-security threats.

Enhance human capital through the implementation and support of professional development platforms and ongoing technology-skills coursework.

• Further the overall IT knowledge, expertise and opportunities across the division.

• Identify and forecast capability and capacity needs to estimate staffing needs and where staffing resources need applied. Adjust training and organizational structure effectively ahead of time.
**KEY STRATEGIC APPROACHES**

**ENHANCING TECHNOLOGY INFRASTRUCTURE**
To preserve and extend the free flow of information and ideas, the level of engagement required by outstanding scholarship, and breadth/quality of University services, Information Technology manages UW’s technology infrastructure as a growing resource that needs continual renewal. Ongoing investment is necessary to meet the increasing demand of technology needs and the ongoing renewal.

**ENHANCING COMMUNICATION STRATEGIES**
To stay connected and extend their reach, individuals and work units of the University are exploring new forms of electronic communication. While informational web pages, broadcast email and course specific communications are generally available, there is increasing desire for immediate, easy and adaptable means of sharing/receiving information. To help inform and involve a variety of constituents, IT will broaden its support, promotion and use of new communication technologies. The new technologies should allow our customers to select the frequency, means and level of detail appropriate to their needs and interests.

**IMPROVING PROCESSES AND SYSTEMS**
Investment in technology over the years has enabled significant improvements in University processes and allowed new, highly productive levels of workflow and engagement. As new tools become available and additional new needs arise, IT will continue to support and promote changing process and system improvements. By applying new data management techniques and leveraging data across various systems, IT will better support new levels of productivity and integration across the University. In addition, IT will focus on internal process and system improvements and advanced technology. Seeking and implementing new systems and processes will help streamline IT service workflows, provide greater transparency for IT staff and users and provide for better decision making.

**IMPLEMENTING DEPENDABLE AND SEAMLESS, SECURE ACCESS ACROSS OUR VARIOUS INTERNAL, REMOTE AND CLOUD SERVICES TO PROVIDE FOR SAFE ACCESS ANYWHERE, ANYTIME**
As UW’s use of remote access, federated and cloud services expands, the technology infrastructure directly managed internally is being coupled with seemingly infinite number of other networks, networked smart devices (IoT) and systems. IT works to integrate these and other external resources seamlessly into the University’s technology ecosystem while maintaining the level of quality, reliability and security its users expect. Though generally effective in addressing specific requests, IT will further develop identity management and federation techniques, remote access capabilities, virtual environments and cloud service standards that will allow more uniform results and place less burden on individual customers. Our customers should expect to use their approved access to University information resources from anywhere, anytime and with an appropriate yet functional level of security.

**ENABLING ENGAGEMENT BY CONTINUING TO IDENTIFY, IMPLEMENT AND DEVELOP COLLABORATION TOOLS, IDENTITY AND ACCESS MANAGEMENT AND NEW COMMUNICATIONS TECHNOLOGIES.**
To support these needs and offer greater flexibility and functionality in the communication services offered students, staff, faculty and others affiliated with the University, IT will implement unified communication technologies that more seamlessly combine voice, data and video communications capabilities. We will also integrate these technologies into a variety of University offerings and assure their availability from local classrooms/offices/homes, outdoor spaces and from elsewhere in the world.
GOAL 1: DRIVING EXCELLENCE
Discover, enhance and maintain core services and systems for the University of Wyoming. Improve staff planning, recruitment, hiring, development, succession and retention strategies to develop a diverse pipeline of top IT professionals and leaders. Advance the academic mission of the university through innovative and effective technologies, resources and services.

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Baseline</th>
<th>2023 Target</th>
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<tbody>
<tr>
<td>Network Uptime</td>
<td>98.98%</td>
<td>99.50%</td>
</tr>
<tr>
<td>Wireless</td>
<td>Establish Baseline</td>
<td>Implement High Density wireless coverage in 100% of student and instructional areas on campus</td>
</tr>
<tr>
<td>Learning Management Classes (WyoCourses)</td>
<td>32%</td>
<td>50%</td>
</tr>
<tr>
<td>Video Users (Zoom)</td>
<td>288</td>
<td>2,000</td>
</tr>
<tr>
<td>Faculty, student and staff feedback (listening sessions, focus groups)</td>
<td>Intermittent</td>
<td>Scheduled quarterly</td>
</tr>
<tr>
<td>Administer IT staff satisfaction survey and customer satisfaction survey</td>
<td>3.89/5</td>
<td>4.2/5</td>
</tr>
<tr>
<td>Integrate the usage of High Performance Computing (HPC) into at minimum 5 undergraduate courses as part of the core objectives</td>
<td>None</td>
<td>Minimum of 5 courses Availability of web-based HPC access</td>
</tr>
<tr>
<td>Extend on-demand High Performance Computing (HPC) capability, educational opportunities and interactive research computing through web-based access methods</td>
<td>None</td>
<td>Availability of web-based HPC access</td>
</tr>
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MEASURING SUCCESS

GOAL 2: INSPIRING STUDENTS
Deliver solutions and provide opportunities that help prepare students to succeed. Work with campus partners to engage, retain and graduate university students. Explore emerging technologies and current trends to enhance and evolve technology access that supports active learning, creative thinking and cutting-edge training for university students.

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<td>IT performance metrics for student issues (UWIT Service Center)</td>
<td>15 Current Service Request options</td>
<td>25 Service Request options</td>
</tr>
<tr>
<td>Lab usage and availability metrics (on campus and remote)</td>
<td>UW Student Labs (2017)</td>
<td>Consolidate or expand lab locations and increase usage based on growth of student enrollment and usage factors</td>
</tr>
<tr>
<td>Lab usage and availability metrics (on campus and remote)</td>
<td>684,807 Logins</td>
<td>1.2 hours per session (average)</td>
</tr>
<tr>
<td>Number of development and tool deployments for student recruitment and retention applications requests</td>
<td>2,105 Student Lab Computers</td>
<td>Continue evaluation and testing of current applications and artificial intelligence to increase student recruitment and retention</td>
</tr>
<tr>
<td>Number of development and tool deployments for student recruitment and retention applications requests</td>
<td>128 Student Computer Lab locations</td>
<td></td>
</tr>
<tr>
<td>Number of development and tool deployments for student recruitment and retention applications requests</td>
<td>5 Main applications currently in production.</td>
<td></td>
</tr>
<tr>
<td>Number of development and tool deployments for student recruitment and retention applications requests</td>
<td>14 applications currently in testing/development</td>
<td></td>
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**GOAL 3: IMPACTING COMMUNITIES**
Provide technologies to enhance communications with the greater university community and state-wide partners. Expand online education and outreach programs.

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<tr>
<td>Percentage of faculty/staff/students who are aware of and are using UWIT services, based on surveys and usage reports</td>
<td>76%</td>
<td>95%</td>
</tr>
<tr>
<td>Methods of communication used for UWIT campus notifications and announcements, including new methods of communication not historically used</td>
<td>Email, Facebook, Twitter, Newsletter</td>
<td>All Social Media, SMS Text, Email, New methods not developed, Banner</td>
</tr>
<tr>
<td>Number of off campus locations supported by UWIT</td>
<td>21 Remote sites</td>
<td>Increase number of remote users supported</td>
</tr>
<tr>
<td>Number of new services created for support of on campus and off campus service requests</td>
<td>Currently offer 280 services</td>
<td>Review services ongoing to support new initiatives, applications, process improvement</td>
</tr>
<tr>
<td>Community and regional engagement statistics</td>
<td>Currently not tracked</td>
<td>Track statistics, and identify ways to improve community and state engagement</td>
</tr>
<tr>
<td>Facilitate community college (Wyoming) and scientific outreach through implementation of access and authentication mechanisms</td>
<td>In development</td>
<td>Statewide LMS; Transcripts and Reverse Transcript implementation with community colleges; High Performance Computing access to UW Resources</td>
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**GOAL 4: A HIGH-PERFORMING UNIVERSITY**
Assure the long-term strength and stability of the university by incorporating life cycle planning and budgeting needs to develop sustainable services and to reduce risk by ensuring that information technology assets are protected and monitored. Develop and communicate explicit, specific security strategies geared toward maintaining confidentiality, integrity and the availability of information and IT systems.

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<td>Develop full life-cycle replacement budget.</td>
<td>In progress.</td>
<td>Developed and funded</td>
</tr>
<tr>
<td>Enhance security awareness training for faculty, staff and students</td>
<td>Various classes, newsletter and email blasts.</td>
<td>Enhancement of security training for faculty and staff</td>
</tr>
<tr>
<td>Hours used on High Performance Computing by researchers</td>
<td>22 Million CPU Hours</td>
<td>Increase hours consistently as access to high performance computing expands. Promote HPC use.</td>
</tr>
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</table>