

TECHNOLOGY SERVICES STRATEGIC PLAN 2018-2023

PURPOSE

Technology Services partners with Pacific Northwest University of Health Sciences' students, faculty, staff, and Board of Trustees in the areas of technology infrastructure and support, instructional design, and information security to provide innovative services that are integral to the delivery of the curriculum and to fulfill the University's mission and vision.



Theme 1: Workplace and Academic Innovation

Digital workplace initiatives promote university-wide employee engagement through technology investments focused on continuous learning and effective collaboration. It's about defining how we work together using a common set of tools and services and providing clear, upfront, ongoing education on their use and best practices.

Academic innovation begins with partnering with faculty to understand how students may benefit from technology-enhanced teaching. Technology Services will support and encourage faculty that are comfortable experimenting with new pedagogies that include active learning activities and blended classrooms.

“Businesses that will be successful in the future will be those who break down the barriers between people, workplaces and technologies and empower their employees to be productive and creative wherever they are. IT is a catalyst for new ways of working.” Klaus Hulse, Microsoft Western Europe VP

2018-2019 Plans

Goals	Objectives	Measurements
Define common set of tools & services used across campus and establish a 'technical-cultural' indoctrination practice	<ul style="list-style-type: none"> Define product/service owners' role and responsibility Define level of support for each product Create training and marketing opportunities/materials for supported products 	<ul style="list-style-type: none"> Service catalog published on web site with information about each tool or service: what it does, who is responsible, how to use it Shared understanding of what tools are best to use for a particular task or project
Continuing engagement with faculty on best practices	<ul style="list-style-type: none"> Motivate and support faculty to use pedagogical best practices in course design and delivery Exemplar sessions showcasing outstanding use of technology in classroom 	<ul style="list-style-type: none"> Revised courses reflect best practices Increased use of existing features in instructional tools and services Positive student survey results Faculty-lead workshops demoing pedagogical best practices
Enhance campus collaboration spaces	Outfit key meeting rooms with collaboration-oriented A/V equipment	At least two meeting rooms are updated with enhanced A/V equipment



Integrate telemedicine experiences into COM curriculum	Expose COM students to telemedicine practice	Telemedicine is integrated into at least one active learning activity
Reduce student reliance on printing by providing effective alternatives to note-taking	Reduce student printing quota	Printing costs reduced by 20%

2019 and Beyond

- Explore augmented reality for application in simulation labs (2019-2020)
- Invest in an identity management solution that provides secure single sign-on to PNWU local and cloud-based resources (2019)
- Establish a baseline set of staff office and collaboration skills and individual learning plans to meet position and departmental skill needs (2019)
- Purchase a campus-wide learning platform with courses in base and advanced skills (2019)
- Create collaboration and active learning spaces in new building spaces (2019-20)
- Evaluate learning management system market for possible replacements (2019-20)
- Create a secure PNWU intranet with a task-based architecture (2020)

Related Initiatives From Across Campus

University Strategic Priorities

- Strengthen and advance the COM
- Become an academic leader in NW communities

Enrollment Services

- Record retention of student data
- Implementation of NetPartner’s self-service module for PowerCampus

Finance

- Paperless A/P
- Electronic signatures
- Updated finance-related forms

NWCCU Accreditation

- 2.G.6: The institution provides appropriate instruction and support for faculty, staff, students, and administrators in the effective use of technology and technology systems related to its programs, services, and institutional operations



Theme 2: Information Security

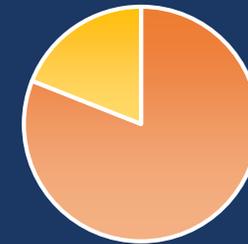
In 2017 PNWU experienced a sharp increase in the number and sophistication of hacking attempts and there is no doubt they will continue to escalate.

A blend of policies, end user training, and technology solutions are needed that recognizes risks and takes appropriate precautions while allowing the university to remain nimble and growth-oriented. Ideally we prevent security incidents from occurring in the first place, but documented plans and processes are also needed for incident responses including forensic procedures for breaches and compromised systems.

A risk-based assessment is a key starting point in evaluating what assets we have, what information we collect and store, and where we are most vulnerable. Remediation or mitigation of the identified risks, threats, and vulnerabilities can be properly budgeted and planned according to the prioritization or criticality of IT assets and data assets.

Business continuity (or disaster recovery) plans are a natural fit with the activities associated with an IT assessment. With our IT assets and institutional data stores identified, we can define what the most critical functions are and how to mitigate interruptions in IT services such as email, web, databases, and file servers.

81% of US institutions
have conducted an IT
security risk assessment.



Alignment. Information security was the top concern among the IT staff, our strategic planning focus group, and Educause's #1 issue in higher education IT for the past two years running.

2018-2019 Plans

Goals	Objectives	Measurement
Perform a comprehensive risk assessment	<ul style="list-style-type: none"> • Understand where the greatest risks and vulnerabilities are in our technical infrastructure, our partners, and our business processes • Inventory IT and data assets 	<ul style="list-style-type: none"> • Risk assessment plan is created • Security-related projects are prioritized
Update business continuity/disaster recovery plans	<ul style="list-style-type: none"> • Ensure institutional data is stored appropriately and protected against disaster • PNWU business is able to resume functioning with minimal downtime in case of disaster 	Plans are in place for any major disruption of our technical infrastructure
Respond to security incidents with a defined protocol	<ul style="list-style-type: none"> • Comply with legal responsibilities • Document procedures for a variety of information security incidents including malware intrusions, social engineering attacks, unauthorized network access, or lost or stolen devices. 	An information security incident response plan is created (Fall 2018)
Campus-wide adoption of information security policies and best practices	Reduce threats and vulnerabilities	<ul style="list-style-type: none"> • Data classification guidance created and distributed • Data governance policy written and approved • Mobile device security policies are in place
Purchase cybersecurity insurance	Reduce legal and financial risk to institution of breach or other security incident	Insurance purchased

2019 and Beyond

- Projects implemented based on risk assessment plan (2019-21)
- Implement data classification and governance practices (2019)
- Penetration testing conducted (2019)
- Additional technical infrastructure evaluated for enhanced security (2019-21)
- Add position focused on information security (2021+)

Related Initiatives From Across Campus

University Strategic Priorities

- Strengthen and advance the COM

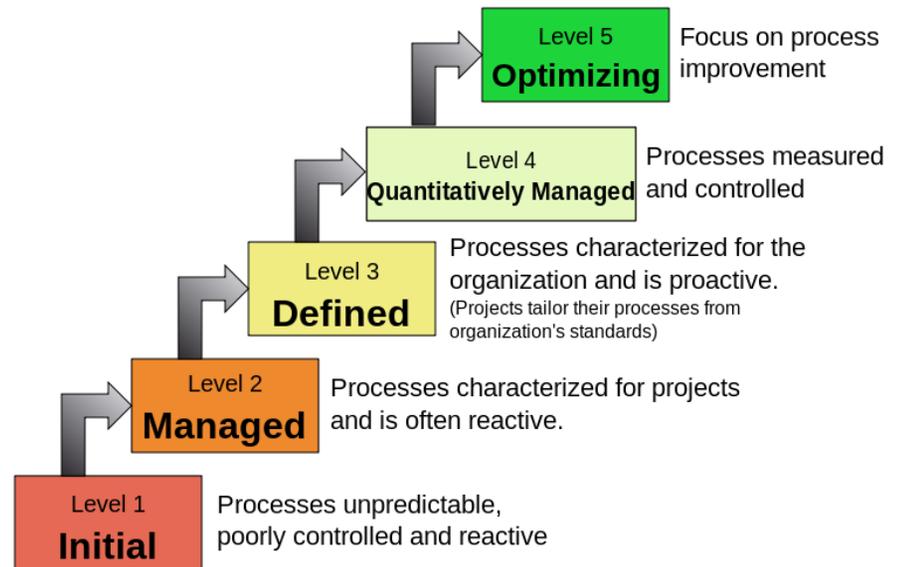
Scholarly Activity

- Ensure compliance with all research guidelines, including IRB, HIPPA, FERPA, FDA
- Ensure appropriate level of security is in place based on data classification

Theme 3: IT Maturity & Operational Excellence

Maturity models assign a scale of 1-5 to processes that occur in information technology, where a one is a process that is completely foreign each time it's encountered, to a five that is measured and optimized. Our goal is to create policies and procedures that are commonsense, well understood, and managed effectively for the benefit of our entire community.

In the 2017 student exit survey, 91% of students are either satisfied or completely satisfied with Technology Services. Operational excellence is about continuing that track record of customer service while balancing a need to work on longer-term projects that are less immediate but are impactful to university and IT strategic plans.



2018 Plans

Goals	Objectives	Measurement
<ul style="list-style-type: none"> Create a policy library for PNWU Revise and create appropriate IT policies and procedures 	<ul style="list-style-type: none"> University-wide policy library location is available and searchable while also securing sensitive operational processes Ensure appropriate oversight for applications and services 	<ul style="list-style-type: none"> Policy library is created IT policies are up-to-date and approved
Effective management reporting tools	<ul style="list-style-type: none"> Record all helpdesk encounters via ticketing system 	Reports are available that enable management decisions (help desk functions operating at a level 4 maturity)

	<ul style="list-style-type: none"> Define categories of IT services in ticketing system 	
Effective change management processes are in use	Impacted groups on campus are informed of changes, updates, and downtime	<ul style="list-style-type: none"> Process is in place Impacted groups are informed
Device lifecycles are defined and optimized	<ul style="list-style-type: none"> Purchasing and disposal of equipment is well understood and routine Appropriate funding is in place 	<ul style="list-style-type: none"> Standardized purchasing processes are in place Equipment disposal is scheduled
Begin work on data governance	<ul style="list-style-type: none"> Create necessary data classification and governance policies Begin work of identifying data locations 	<ul style="list-style-type: none"> Governance policies and guidelines written and approved Roadmap for data governance is defined
Create a modern PNWU web site	<ul style="list-style-type: none"> Hire a web site administrator Responsive framework implemented for mobile devices Revise information architecture 	<ul style="list-style-type: none"> Web site accessible from any device Internal and external users able to find resources more quickly Positive survey results
<ul style="list-style-type: none"> Consistent audiovisual experience in each classroom Faculty are comfortable with technology in each classroom 	Faculty are immediately familiar with and able to use equipment in any classroom	<ul style="list-style-type: none"> Reduced help desk tickets related to classroom activities Annual student and staff surveys reflect positive attitude toward classrooms



2019 and Beyond

- Full refresh and redesign PNWU web site, potentially replacing content management system (2019)
- Project management & prioritization methods (2019)
- Optimized data management & governance (2020)
- Full COBIT/ITIL checklist of IT maturity evaluated (2020)

Related Initiatives From Across Campus

University Strategic Priorities

- Position PNWU for complementary programs
- Strengthen and advance the COM
- Become an academic leader in NW communities

Enrollment Services

- Develop programming interfaces to move data from systems of record to auxiliary systems

Institutional Effectiveness

- Survey tools that increase reporting capabilities
- Policy library and processes

Marketing & Communications, Development

- Complete design and implement appropriate web presence for PNWU

NWCCU Accreditation

- 2.G.5: Consistent with its mission, core themes, and characteristics, the institution has appropriate and adequate technology systems and infrastructure to support its management and operational functions, academic programs, and support services, wherever offered and however delivered.



Theme 4: Growth & Sustainability

With new programs being planned; construction of a building underway and blueprints for a second being drawn up; and additional staff and faculty being continuously brought on, PNWU is a case study in rapid growth of a young university. How will IT respond to the demands of growth and maintain its distinctly customer-oriented service? How will its technical infrastructure accommodate growth? And how will IT funding account for standard equipment replacement cycles and a shift to cloud-based, subscription services?

Educause’s 2017 Top 10 IT Issues, #10: IT services and infrastructure are moving outside the institution, generally to the cloud, and cloud funding depends on ongoing expenditures rather than one-time investments.

Sustainability is riding the crest of institutional change by closely coordinating with critical change areas: COM leadership, the Provost, and especially Finance. Technical infrastructure is both expensive and routine, with well-established lifecycles and often documented roadmaps of product replacements. When new equipment is purchased, plans need to be in place and evaluated annually for when it will be de-commissioned and how replacements will be funded. Also, too, with each replacement cycle comes an opportunity to evaluate if it continues to make sense to purchase, lease, or shift to cloud-based services with subscription fees.

2018

Goals	Objectives	Measurement
Replace end-of-life networking infrastructure	<ul style="list-style-type: none"> • Replace equipment prior to system failures • Equipment and services purchased that enhance innovation and meet campus demands 	Necessary infrastructure replaced according to defined timeline
Create sustainable financial model for known IT costs	Work with Finance and President to ensure budgets are appropriate for fiscal year costs	FY19 budget incorporates infrastructure costs

2019 and Beyond

- Additional staffing needs to support growth and maturing organization (2019, 2020)
- New building construction reflects needs of occupants and university (2019, 2020)

Related Initiatives From Across Campus

University Strategic Priorities

- Position PNWU for complementary programs
- Strengthen and advance the COM
- Become an academic leader in NW communities

Simulation Center

- The Sim Center has similar funding model issues for replacing equipment that is near end-of-life, and adapting to the increase in simulation activities

Finance

- Support funding oversight and planning for university

NWCCU Accreditation

- 2.G.8: The institution develops, implements, and reviews regularly a technology update and replacement plan to ensure its technological infrastructure is adequate to support its operations, programs, and services.



Appendix: Technology Accrediting Standards

[Commission on Osteopathic College Accreditation \(COCA\) Standard](#)

4.3 Information Technology	A COM must ensure access to information technology to support its mission.	<ol style="list-style-type: none"> 1. Provide the information technology strategic plan. 2. Provide the most recent technology assessment report.
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[Northwest Commission on Colleges and Universities \(NWCCU\) Standard](#)

2.G.5 Physical and Technological Infrastructure	Consistent with its mission, core themes, and characteristics, the institution has appropriate and adequate technology systems and infrastructure to support its management and operational functions, academic programs, and support services, wherever offered and however delivered.	
2.G.6 Physical and Technological Infrastructure	The institution provides appropriate instruction and support for faculty, staff, students, and administrators in the effective use of technology and technology systems related to its programs, services, and institutional operations.	
2.G.7 Physical and Technological Infrastructure	Technological infrastructure planning provides opportunities for input from its technology support staff and constituencies who rely on technology for institutional operations, programs, and services.	



2.G.8 Physical
and
Technological
Infrastructure

The institution develops, implements, and reviews regularly a technology update and replacement plan to ensure its technological infrastructure is adequate to support its operations, programs, and services.



Appendix: Strategic Process

This document is the result of two half-day planning sessions facilitated by the Director of Strategic Planning and Accreditation, Angie Girard. The first involved the Technology Services staff, and the second was a group invited from all over the campus representing administration, research, and academic areas.

Educause's *Top 10 Issues and Strategic Technologies of 2017 and 2018* were used as a national benchmark of higher education IT thought on strategic issues.

<https://www.educause.edu/research-and-publications/research/top-10-it-issues-and-strategic-technologies>