

Information Technology Services 2015-2019 Strategic Plan

Our Vision

ITS will be an innovative leader and trusted partner in the development and delivery of responsive IT services and support.

Our Mission

ITS, as a partner, evolves and supports IT services that enable the advancement of world-class education with global impact.

Values and Foundational Principles

- We will align ITS resources and plans with Penn State's Strategic Plan.
- We will put the core business of Penn State--teaching, research, and services--in the center of IT service design and delivery.
- We will strengthen our relationships with those providing IT services, recognizing and affirming that IT at Penn State is much larger than ITS.
- We are committed to sustainability of human, financial, and environmental resources.
- We are committed to a culture of teamwork, collaboration, openness, and transparency.
- We will actively develop and support our staff.
- We will encourage innovation.
- We will make our systems and services accessible.
- We will maximize value and cost efficiency of IT services through responsive service development driven by evaluations, assessments, analyses, and other measurements as appropriate.
- We will employ governance, collaboration, and flexible decision making to determine best-fit IT solutions.
- We will identify risks, invest wisely in security measures, and be consistent with policy and compliant with law.
- We will actively seek to incorporate the following ITS Community Principles in all of our endeavors:
Integrity, Honesty, Accountability, Individual initiative, Responsible risk taking, A passion for customer service and technology, Diversity, Inclusiveness, Fairness,

Goal A: Enable Learning

Collaborate with educational support units to research, assess, and support new pedagogical models and educational technologies, enabling growth in residential, online, and hybrid instruction.

Objectives	Strategic Performance Indicators	Measures		
		Current: Baseline	Midpoint: +2 years	Target: +5 years
1. Increase initiatives in learning outcomes assessment.	a. Number of college/campus initiatives supported by ITS b. Number of new initiatives created by ITS and adopted by colleges/campuses c. Implementation of predictive learning analytics platform d. Replacement of ANGEL with new learning management system	TBD	TBD	TBD
2. Scale instructional resources to facilitate improvement in student success.	a. Number of World Campus and other online and hybrid courses b. Number of new ITS-supported learning spaces c. Number of new and enhanced technology classrooms	TBD	TBD	TBD
3. Pilot innovative learning technologies through collaboration with colleges and campuses.	a. Number of technologies used by colleges and campuses that ITS supports b. Number of ITS-supported innovative technology pilots c. Number of courses, faculty, and students using technologies that ITS has launched and/or supports	TBD	TBD	TBD

Strategies

1. Collaborate with educational support units to gather and analyze faculty and instructor needs across disciplines.	Leader:	TBD
2. Cultivate collaborative relationships with faculty to research learning technologies.	Leader:	TBD
3. Establish an effective learning analytics (predictive) platform.	Leader:	TBD
4. Identify and encourage the use of new learning technologies.	Leader:	TBD
5. Increase support for faculty, researchers, and students to access the technologies unique to their disciplines or degree programs.	Leader:	TBD
6. Replace ANGEL with a robust and scalable learning management system.	Leader:	TBD

Goal B: Support Research and Innovation

ITS will collaborate with research support units to develop innovative IT resources and services that enhance research capabilities, enable appropriate access to data, and maximize storage and processing potential.

Objectives	Strategic Performance Indicators	Measures		
		Current: Baseline	Midpoint: +2 years	Target: +5 years
1. Increase the number of buildings and campuses connected to the research data network at Penn State.	a. Number of buildings connected to the research network b. Number of campuses connected to the research network	0	ITS has collaborated to develop a requirements gathering process for new sponsored projects.	ITS is informed of requirements for all new sponsored projects.
2. Develop a method to ensure that ITS is informed of cyberinfrastructure requirements on sponsored projects to aid in future data center, storage, and network capacity planning.	a. Number of sponsored projects in which requirements are communicated to ITS	TBD	TBD	TBD
3. Increase the number of faculty researchers participating in onboarding processes. Increase the number of faculty onboarding activities in which ITS participates.	a. Number of researcher onboarding sessions ITS participates in	N/A	ITS has collaborated to develop an onboarding process for researchers.	ITS is participating in the onboarding process of every new researcher.

Strategies

1. Collaboratively build a Penn State researcher onboarding process.	Leader:	TBD
2. Collaboratively build a requirements-gathering process for new sponsored projects.	Leader:	TBD
3. Collaborate with the Office of the Vice President for Research to gather and analyze researcher needs across disciplines.	Leader:	TBD
4. Identify points of contact for service coordination and communication.	Leader:	TBD
5. Provide federated collaboration tools to allow Penn State researchers to collaborate with colleagues from external institutions and organizations.	Leader:	TBD

Goal C: Modernize Enterprise Systems and Practices

ITS will enable data-informed decision making to drive mission-aligned administrative solutions and support enterprise operations.

Objectives	Strategic Performance Indicators	Measures		
		Current: Baseline	Midpoint: +2 years	Target: +5 years
1. Develop architecture to be used by all enterprise systems and those that access enterprise data, and ensure that all new enterprise solutions comply with adopted University enterprise IT standards.	a. Percentage of infrastructure that adheres to enterprise standards	0	Architecture and standards are developed.	50 percent of enterprise systems comply with architecture standards.
2. Meet the business requirements of the University for all enterprise-wide projects that ITS leads or for which ITS provides supporting technologies.	a. Number of projects engaged b. Number of projects completed on time, on budget, and within scope	0	Baseline is determined.	Increase baseline by 50 percent.
3. Establish a consistent institutional reporting architecture.	a. Adoption rate of institutional reporting structure	0	Standard reporting structure is developed.	50 percent of enterprise services use the standard reporting structure.
4. Decrease the number of systems duplicating functions of centrally supported enterprise systems (i.e., shadow systems).	a. Number of systems across the University performing identical functions b. Listing of approved enterprise systems across the University	0	Baseline is established.	Number of shadow systems decreased by 20 percent.

Strategies

1. Improve relationships with business units across Penn State.	Leader:	TBD
2. Implement consistent, efficient, and accessible enterprise administrative services by aligning with best practices in project and service management.	Leader:	TBD
3. Establish an enterprise IT architecture that addresses data governance, security, continuity, compliance, and modern interoperability (mobility).	Leader:	TBD
4. Ensure data confidentiality, integrity, and availability are fundamental considerations at all stages of enterprise IT system and software development and procurement.	Leader:	TBD
5. Develop a consistent and repeatable enterprise reporting process.	Leader:	TBD
6. Develop staff training and communication plans.	Leader:	TBD

Goal D: Advance IT Effectiveness

ITS will deliver high-quality, customer-focused IT services that scale to meet diverse needs through consistent, collaborative, and efficient practices and progressive IT staff development.

Objectives	Strategic Performance Indicators	Measures		
		Current: Baseline	Midpoint: +2 years	Target: +5 years
1. Increase consolidation of service management and service desk functions across ITS, and support a subscriber model for all of IT.	a. Consolidated IT service portfolio b. Adoption of consolidated service management by ITS units c. Number of service management modules enabled d. Number of service management tools ITS runs	N/A	Pilot group have adopted consolidated service management.	Increase subscribers by 15 percent.
2. House all on-premise ITS servers in the central Data Centers.	a. Percentage of ITS units fully using Data Center services	All ITS units are using Data Center services but not fully.	All ITS units, other than those approved for exception, are fully using Data Center services.	Increase number of IT units across Penn State using central Data Center services by five percent.
3. Increase the usage and adoption rate of ITS core services.	a. Usage rates b. Adoption rates	0	Define formula for usage and adoption rates, and establish baseline.	Increase usage and adoption rates of ITS core services to 50 percent of total possible.
4. Inventory skills in the ITS workforce, and institute procedures for continuous skill development.	a. Inventory is up-to-date	0	Pilot program is complete.	ITS-wide skills inventory is complete.
5. Create job profile and role-specific professional development curricula.	a. Number of curricula developed	0	10 percent of curriculums are in place.	40 percent of curriculums are in place.

Strategies

1. Develop a shared understanding of business relationship management (BRM) and customer relationship management (CRM).	Leader:	TBD
2. Develop and implement common sourcing plans and practices.	Leader:	TBD
3. Develop mobility strategy for ITS.	Leader:	TBD
4. Partner with other IT units to adopt and leverage the principles and practices from the IT Transformation Program (ITX).	Leader:	TBD
5. Develop a repeatable process to identify and maintain and an inventory of the business and IT skills of the ITS workforce.	Leader:	TBD

Goal E: Foster a Collaborative Culture and Community

Ensure that the Values and Foundational Principles of ITS support a healthy community of diverse and supportive staff, making ITS a highly desired place to work and a widely sought unit for collaboration.

Objectives	Strategic Performance Indicators	Measures		
		Current: Baseline	Midpoint: +2 years	Target: +5 years
1. Increase participation in University-sponsored or external wellness programs.	a. Number of employees participating in University-sponsored wellness opportunities, such as Health Matters programs, gym memberships, and the Employee Assistance Program, per Climate and Diversity Survey results	N/A	Establish baseline measure.	Increase number of employees participating in wellness programs by 25 percent from baseline.
2. Determine a measure to track workplace productivity.	a. Number of projects successfully completed per stats from the project management office and service management office b. Number of key performance indicators (KPI) met based on data from the project management office and service management office	N/A	N/A	Baseline for employee productivity is determined.
3. Increase workplace satisfaction and comfort.	a. Number of employees reporting to be comfortable per Climate and Diversity Survey data b. Number of satisfied employees per Climate and Diversity Survey data related to employee satisfaction (defined below). c. Based on survey data, satisfaction is defined by the average level of agreement with the following statements: -I am proud to be a part of ITS. -ITS takes a genuine interest in employee well-being. -I am recognized for my contributions to ITS. -I am given opportunities to develop professionally.	Seventy-eight percent of ITS employees reported feeling comfortable with the climate in ITS. Fifty-nine percent of ITS employees reported feeling satisfied.	Increase employee satisfaction and comfort levels by 5 percent from established baseline.	Increase employee satisfaction and comfort levels by 10 percent from established baseline.

Strategies

1. Develop a program to expose ITS staff at all levels to the benefits of participating in collaborative opportunities and partnerships.	Leader:	TBD
2. Ensure clear expectations of job responsibilities and performance.	Leader:	TBD
3. Facilitate the development of communities of practice across IT.	Leader:	TBD

Overarching Strategies

The following overarching strategies apply to each of the five main goals and are key factors in implementing the strategic plan:

<i>Accessibility</i>	Accessibility at Penn State refers to the right and ability of people to access educational opportunities and perform work responsibilities. Penn State systems, tools, websites, and other technologies that support education must be accessible to people, regardless of their physical characteristics, geographic location, or socioeconomic status. In working toward achieving strategic goals, ITS will not only comply with Federal laws and regulations that address accessibility as it relates to people with disabilities, the unit will also provide leadership toward University-wide accessibility efforts.
<i>Benchmarking, Measurement, and Assessment</i>	Benchmarking, Measurement, and Assessment strategies form the foundation of data-driven decision making. Each goal will incorporate methods for benchmarking metrics across other IT organizations in higher education, establishing baseline data for the goal, partnering with other entities to gather data to measure progress.
<i>Communication</i>	Communication plans will be developed and implemented in conjunction with projects and strategies associated with each goal. Communication will be ongoing among team members, between ITS and ITLC, across colleges, campuses, administrative units and departments, and beyond Penn State as appropriate.
<i>Engagement</i>	Engagement with organizations both internal and external to Penn State will play an important role in moving forward. Individuals, teams, and departments will explore and form mutually beneficial partnerships and collaborative initiatives.
<i>Governance and Planning</i>	Governance and Planning are essential to identifying and prioritizing ITS and IT initiatives and should be applied as they relate to each goal. Establishing governance and planning strategies will help to identify necessary services, determine the most important work, and prioritize efforts and assignment of resources.
<i>Security and Privacy</i>	Security and Privacy are critical for ensuring appropriate levels of data confidentiality, integrity, and availability as well as the reasonable protection of identities and personal information. Processes and procedures that integrate security, privacy, and compliance with legal and regulatory requirements will be adopted as they relate to each goal. This includes all phases of system and service development and procurement, as well as working with University business units to ensure that the security measures taken by third party service providers processing or storing Penn State data are consistent with Penn State's requirements.
<i>Training</i>	Training will be developed for tools, systems, and initiatives as needed to reach each goal. Training will be customized per goal or strategy and may be internal to ITS or focus on helping users and developers of specific tools and services.

Diversity Strategies

Strategy	Leader	Strategic Indicators
Challenge 1. Developing a Shared and Inclusive understanding of diversity across ITS		
1. Seek expertise to strengthen skills in teambuilding, communication, and leadership.	TBD	» Tracking numbers and subject matter of employee complaints and concerns and analyzing data over time Information Technology Services Strategic Plan 2015–19 30 » Analyzing ITS data from the Penn State Values & Culture Survey » Gathering data from the ITS Climate and Diversity Survey » Monitoring program attendance numbers and gathering feedback » Compare ITS data with University-wide data
2. Expand programming on climate and diversity-related topics.	TBD	
Challenge 2. Creating a Welcoming Campus Climate		
1. Ongoing support for University-wide initiatives will be provided.	TBD	» Periodic, unit-wide surveying » Feedback and reports generated by units that host and manage websites, applications, and projects in support of diversity » Comparisons and analysis of current and past survey data » Future Climate and Diversity Survey results
2. New educational opportunities will be guided by results from the Climate and Diversity Survey.	TBD	
3. ITS subunits and committees will collaborate to promote the anti-bullying campaign.	TBD	
Challenge 3. Recruiting and Retaining a Diverse Student Body		
1. ITS will provide expertise to support the redesign of Penn State’s employment website.	TBD	» Customer satisfaction survey » Student diversity data from iTwo
Challenge 4. Recruiting and Retaining a Diverse Workforce		
1. Support and contribute to the redesign of Penn State’s employment website, improving accessibility, functionality, and usability.	TBD	» Diversity of applicant pools » Results from the Climate and Diversity Survey » Diversity within the ITS workforce » Feedback from Penn State’s employment website » Data gathered from iTwo » Diversity data gained through partnerships with business units » Diversity of students entering IT majors as compared to diversity of the ITS workforce
2. Ensure that all potential applicants have access to all features of Penn State’s employment website.	TBD	
3. Advertise ITS positions on nationwide social media sites and affiliates known to attract diverse groups.	TBD	
Challenge 5. Developing a Curriculum that Fosters U.S. and International Cultural Competencies - not applicable		
Challenge 6. Diversifying University Leadership and Management		
1. Benchmark the number of students who self-identify as minorities graduating with a Science, Technology, Engineering, Math (STEM) related degree, and compare with the number of ITS employees who self identify as minorities.	TBD	» Diversity in ITS leadership
2. Ensure all applicant pools have a diverse mix of qualified candidates for ITS leadership positions.	TBD	
Challenge 7. Coordinating Organizational Change to Support Diversity Goals		
1. Training sessions on accessibility topics will be provided.	TBD	» Number of people trained to support diversity » Creation of a community of practice around accessibility at Penn State » Number of people across Penn State involved in supporting accessibility through ATI, the ITS Accessibility Team, and Web Liaisons
2. Guidance will be offered on making instructional materials accessible.	TBD	

Sustainability Strategies

<i>Strategy</i>	<i>Leader</i>	<i>Strategic Performance Indicators</i>
1. Operations		
1. Create a mechanism and resource for coordination of sustainability efforts.	TBD	» Creation of a dedicated resource/role to coordinate, plan, monitor, and communicate sustainability efforts » Development of a mechanism by which to measure energy usage in Data Centers, office spaces, and buildings that house ITS staff and ITS-supported equipment » Increase in numbers of computers participating in systems management across Penn State, resulting in power savings
2. Establish baseline data for energy used in Data Centers and ITS office and equipment spaces.	TBD	
3. Complete work with OPP on data center and server space inventory across the university.	TBD	
4. Create plans to increase the number of computers taking part in the power saving features of systems management across Penn State.	TBD	
5. Use Central Active Directory to manage digital identities and reduce redundancy.	TBD	
6. Strengthen ties with the Sustainability Institute to work toward Penn State's vision of sustainability.	TBD	
2. Teaching, Research, Community Service and Engagement		
1. Create opportunities for engagement and community service for ITS staff.	TBD	» Training and education for students, faculty, and staff on sustainable IT practices » Percentage of ITS staff engaged in collaborative efforts with other organizations, both internal and external to Penn State, on sustainability issues and activities
2. Create training and educational programs for students, faculty, and staff.	TBD	
3. Human Health and Happiness		
1. Increase professional development and engagement opportunities in sustainability topics and activities.	TBD	» Trends regarding staff wellness and satisfaction as shown through feedback collected from the Climate and Diversity Survey » Number of educational programs offered on sustainability topics » Number of staff members participating in collaborative efforts, within ITS and with other units and organizations, to improve sustainability
2. Create and implement telecommuting programs across ITS.	TBD	
3. Provide wellness options for health and physical fitness.	TBD	