IT Vision and Strategy

Leverage All IT Resources to Better Align with and Enable the Plan for Pitt
Pitt IT: Vision & Strategy

Plan for Pitt

- Advance Educational Excellence
- Strengthen Communities
- Engage in Research & Impact
- Promote Diversity & Inclusion
- Build Foundational Strength

Outcomes

- Access
- Engaged Alumni
- Personalized Learning
- Faculty Recruitment & Retention
- Student Success
- IoT + Data-Driven Decisions
- Engaged Community
- Innovative Research

Guiding Principles

- Effectiveness: The right thing, the right way, the first time
- Security: Information Risk-Based Approach
- Efficiency: Streamline Operations
- Simplicity: Every Wright Tool, Anytime, Everywhere

IT Vision

- Faculty: Teaching, Learning, Research, Service, Technology Partnerships
- Students: Information Access, Engagement, Community, Technology Partnerships
- Staff: Supportive, Engaging, Inclusive
- Region: Support for the Pitt Community

IT Governance

- All IT across Campus
- OCIO
- Campus IT Governance Committee
- Campus IT Governance Subcommittee
- External Advisory Committee
- T&D Leadership Committee
- Data Governance Subcommittee

Illustrated by Karena Bianca, CanvaSketch
Pitt At-a-Glance – Deloitte Report

Pitt maintains a wide and diverse IT footprint across its campuses, reflecting the strategic importance that IT holds in fulfilling the University’s mission.

**Pitt spends over $132M on IT**

- 46% on salaries and benefits
- 54% on goods and services
- 41% of total IT spend charged to CSSD’s budget; 59% charged to non-CSSD budgets
- 94% of IT spend is managed as follows:
  - 48% of commonly used IT hardware and software purchases was through university-wide contracted suppliers or other enterprise agreements
  - 46% was special-purpose hardware, software, or consulting services for a specific responsibility center
  - 80% of IT spend was with 3% of IT suppliers

**621 IT staff FTEs across Pitt**

- 37% in CSSD; 63% across non-CSSD units
- IT staff in 97 schools and departments
IT At-a-Glance – Deloitte Report
While many core IT services are centralized at CSSD, there are a significant amount of IT services decentralized across campus impacting efficiency, effectiveness, and risk management.

Some examples of decentralization include:

- FIS runs and operates PRISM HR and Financials from hardware to applications, resulting in duplicate services, solution selection, and data sharing capabilities
- Pitt has over 19 help desks on campus using at least 16 different ticketing systems
- About 1/3 of all physical servers reside outside the CSSD data center
- At least 4 other data centers across Pitt campuses
Operational Excellence - Context

Although this presentation focuses on innovation, the only way this can happen is IT must be “hitting on all cylinders”. As such, we are committed to:

- Continuous improvement of all IT services
- Stakeholder engaged and transparent processes for selection of enterprise systems and services
- Service Level Agreements (SLA) with campus on performance of critical systems and infrastructure
- Dashboards for community consumption indicating performance and availability levels of critical systems

Further, we are planning the creation of the following capabilities:

- IT Project Management Office (PMO) to bring standards and processes to our projects
- Business Analysis expertise to lead business process reviews and improvements
- Evaluate the feasibility of creating lean/six sigma leaders as further process review resources

Operational Excellence is not just CSSD:

- We need all staff involved in IT committed to continuous improvement of environments they support
- Open to training to keep current with technologies that benefit their units
- Willing to participate in university-wide initiatives
- Provide leadership on experimental initiatives
- Ensure accessibility is a part of IT planning

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The Opportunity – IT Transformation at Pitt
Plan for Pitt
“Together we make a difference”

Advance Educational Excellence
Engage in Research of Impact
Strengthen Communities
Promote Diversity and Impact
Embrace the World
Build Foundational Strength

IT Vision
“what we imagine doing”
Informed by the Plan for Pitt

Students
Faculty
Campus
Community
Region

Guiding Principles
“how we do what we have imagined”
To enable the Plan for Pitt

IT Governance
Simplification
Effectiveness
Efficiency
Security

Draft
Enhanced Student Experience:
- Personalized learning
- New generation mobile apps for engagement with university and beyond
- Information at anytime, anywhere, on any device, customizable to the student’s desire
- Professional experience opportunities, perhaps for credit
- Microsoft partnership for possible student ecosystem
- Accessibility is considered as part of the student experience

Enhanced Faculty Support:
- Standardized classroom technologies
- Portfolio of IT services to support the research enterprise
- Effective software licenses in support of Pitt researchers
- Implementation of Canvas LMS
- AWS and Microsoft Azure cloud services in support of teaching and research missions
- “IT Power Plant” services to support faculty needs

Digitization of the Campus:
- Create an intelligent, data driven campus, able to provide information to the community
- Utilizing smart platforms, improve the public safety footing of the campus
- Provide pervasive wireless connectivity across the campus, buses/shuttles, and the Oakland 5th avenue/Forbes corridors
- Utilize IoT devices to help instrument the campus to provide data to better manage our environment
- Work with ALL IT staff to make Information Technology @ Pitt the premier IT destination for IT professionals
- Accessibility as part of overall campus initiatives

Community Engagement:
- Enhanced use of technology in Homewood and Hill District Community Development Centers
- Leverage vendor partners to offer certification programs at these community centers
- Participation in community programs by hiring community members into CSSD programs
- Provide support services/sponsorship to businesses who can connect to our wireless efforts
- Expand summer IT camps for community youth

Regional Impact:
- Work with non profit organizations to support One Pittsburgh initiatives
- Expand community development engagement across the region
- Enhance technical skills of a critical mass of community members to attract business to the area
- Provide support services/sponsorship to businesses who can connect to our wireless efforts
- Expand summer IT camps for community youth across the region

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Governance
- Governance of ALL IT on campus, not just CSSD
- Areas of focus for governance
  - Data
  - Research IT
  - Student systems
- Doing the right thing, the right way, the first time
- How to best use our campus resources to achieve the above
- How well we deliver on our IT plan, enabling the university to realize strategic goals

Effectiveness
- Streamline IT, org consolidations, eliminate duplications and waste
- Technology standardization plan – use what we have to maximize our IT investments

Efficiency
- Make systems easier/better for faculty, staff, students, and alumni
- Rationalize applications
- Common technology stack, strategic vendor partners deep/broad
- Single IT helpdesk, single point of contact for users

Simplification
- Clear policy creation
- Audit – insure compliance
- Risk-based approach

Security
- Deloitte report recommendation:
  - Implement IT governance – define and stand up a coordinated governance structure to facilitate effective IT decision making and establish roles and responsibilities over enterprise applications and services
- Deloitte report recommendation:
  - Develop and standardize IT career paths to improve talent development and facilitate effective IT staff deployment
  - Create a university-wide IT culture to foster collaboration, enable effectiveness of IT service delivery, and promote partnership for innovation at Pitt
- Deloitte report recommendation:
  - Build mechanisms to enable university-wide coordination on IT budget formulation and strategic investment planning
  - Enhance IT spend management through purchasing policies and purchasing controls to eliminate duplicate IT spend across campus
- Deloitte report recommendation:
  - Adopt a single system for tracking and reporting IT support activity across the university to deliver consistent technology service
  - Re-design the current service catalog to include non-CSSD services available to Pitt end users which provides a single point for searching, ordering, and purchasing IT services
- Deloitte report recommendation:
  - The University’s data and technology resources must be protected, and the privacy of individuals and the integrity of data must be preserved
Governance Structure - Proposal

Office of the CIO

External Advisory Committee

Campus IT Governance Committee

Subcommittee Charged by IT Governance

Data Governance

Subcommittee Charged by IT Governance

Campus IT Governance Make-up
- Chancellor’s Cabinet members
- Deans
- Faculty – Health Sciences
- Faculty – General Campus(es)
- Sr. Leaders
- Students
- Staff

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## Outcomes of IT Vision & Strategy

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<th>Student</th>
<th>Faculty</th>
<th>Campus</th>
<th>Community</th>
<th>Region</th>
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| • Higher recruitment and retention #s  
• Better overall experience for students  
• “buzz” about Pitt  
• Individualized learning opportunities  
• Information when students want/need it, on any device, customizable | • Better support for research activities, yielding more grants  
• More grant funds for basic research instead of needing to run own IT shop  
• Standard classroom configurations allow more time teaching than worrying about technology | • Intelligent campus able to provide information to students, faculty, staff, and alumni community  
• IOT allowing data collection to better inform decision making  
• Pervasive wireless across the campus and beyond  
• Better safety footing  
• Better tools and training to enhance staff productivity  
• Training opportunities for staff to move into new jobs if interested | • Better community engagement with Pitt  
• Technology enabled Community Engagement Centers  
• Improved skillsets of community members  
• Participation in One Pittsburgh initiatives | • Expansion of community development programs in the region  
• Better skilled workforce as a result of above  
• Better support for “organic innovation”  
• More entrepreneurs viewing our region as a destination |
“Big Swing” Outcomes From IT
Vision and Strategy

- Greater access to, and affordability of, higher education
- Improved campus operations and campus community satisfactions through IOT and data analysis for decision making
- Pitt IT (all IT across campus) is recognized for excellence
- Better engagement yields with Alumni as a result of our focus on enhanced student experience/data analysis
- Recruitment and retention of faculty given focus on research IT support, innovation in teaching, and readily available technology
- Improvement in community engagement as a result of wireless access and tech support
- Pitt is the preferred destination for students given focus on enhanced student experience, personalization, and individual learning
- Improvement in community/individual development through training, certification, and employment opportunities
Questions