Strategic Investment Plan for the Information Technology Enterprise

Oregon State University
2016-2018
Technology and information occupy a critical role in a 21st century university and are an essential part of developing greater efficiencies in institutional and administrative functions. Greater accountability, enhanced expectations of a current generation, and growth in the development, management, and delivery of digital resources point to the expanding role that big data, analytics, and information technologies provide as a strategic and enabling asset.

OSU Strategic Plan 3.0, 2015

There are two core themes to the investment strategy, achieving scale and enabling transformational experiences.

Oregon State University has embraced contemporary approaches for technology; mobile computing and cloud-based services are the norm. This serves OSU’s goals particularly well. Mobile enhancements untether faculty from the teaching podium to engage more directly with learners. Our learners, researchers, instructors, and workers not only gather and share data from our fields, forests, rivers, oceans and atmosphere, we collaborate with our colleagues in real time, be they on or off campus. Cloud services also enable anywhere, any time collaboration and work, providing useful and modern services that enable the learning, research and outreach activities of the OSU community.

As we enter 2016, we must build upon this momentum by creating an environment where each person can assemble a personalized learning and research experience from a well-selected set of tools and services. We will transform the university through a scaled and comprehensive approach that quickens the pace toward success, reducing overall expense and redundant effort even while allowing each person the flexibility to learn, teach, research and engage.
The Evolving Information Landscape

The top trends shaping OSU’s IT investments and priorities are:

Intense scrutiny on learner success
We must enable the necessary curricular and co-curricular approaches that allow learners to thrive, learn and graduate. New demographics of learners need more flexibility in pacing and credentialing. Across all forms of learning, data is essential to understand what works, measure progress and improve outcomes.

Big data and the Internet of things
Past practices for IT services must evolve toward contemporary approaches that support computing on massive and personalized scales. Vast arrays of increasingly smart instrumentation underpin OSU’s natural resources, engineering, science, and human-focused research enterprise, enabling cutting edge research while creating data in massive streams that require ever-increasing computational, storage and network capacities.

Speed and flexibility
Through the private sector, academic partnerships, and university resources, these solutions support new forms of work, research and learning. Regular change and improvement is a hallmark of this new paradigm, enabling (and requiring) that our community quickly and regularly adopt new tools and services.

Cyberthreats to information and systems
Cyberthreats are pervasive, threatening the reliability of our systems and data, and posing the risk of harm and loss for the university and the members of our community. It is essential that we remain current with security tools and practices to prevent attacks and loss of data, and the OSU community must be knowledgeable and diligent in protecting their personal and shared resources.

Investment Principles

New investments in technology must meet at least one of these criteria:

- Enable substantial and measurable progress toward Strategic Plan 3.0
- Provide a positive measurable return on investment
- Reduce risk by an amount that justifies the investment
Key Initiatives

Each of the following initiatives serve the University’s strategy for meeting the goals identified in Strategic Plan 3.0, and to develop greater accountability and greater efficiencies in institutional and administrative functions. The benefits gained from these initiatives depend on the University’s ability to invest, the capacity to absorb new initiatives, and our community’s willingness to act collectively and purposefully toward common solutions.

1. Transformative learning experience
   - Empower learners and teachers by extending the Learn@OregonState ecosystem of learning tools and analytical capability. Leverage our investment in Unizin to accelerate progress toward a transformative experience for all learners.
   - Embrace open content and new forms of course materials, substantially lowering the cost for learners and guaranteeing access from the first day of the course.
   - Develop next generation approaches for informal learning spaces, creating technology-enhanced digital maker and visualization learning spaces that support learner engagement with the tools and approaches of the 21st century.

2. 21st century work experience
   - Fully embrace contemporary solutions for productivity, supporting communication and collaboration activities that are fully device and location independent, supporting the complex work styles of our community members.
   - Invest in technology-enhanced administrative services when accompanied by business process improvements to create true efficiency in the work experience.
   - Invest in training to assure that OSU’s technology investments are fully utilized by our faculty, staff and learners.

3. Research growth
   - Move to a university-scale approach to cyber-infrastructure with a comprehensive data center and research computing strategy.
   - Create a center of excellence for research computing, offering programs and expertise that help OSU researchers most effectively move toward big data-scale solutions.
   - Bring research administrative functions into the 21st century through technology enabled, efficient business processes. This improves researcher efficiency, improves the university’s compliance profile, and enables a deeper and more accurate understanding of progress and gaps.
University-scaled approaches

Communication, publication, notification
- Create a digital concierge experience for learners and employees, making it easier to find information and resources, and use university systems.
- Enable excellent web publishing, and assure our ability to communicate with parents and the community in the event of a catastrophic event.
- Embrace modern approaches and create rich engagement with learners and community members through personalized notifications, easy access to resources, and just-in-time information.

Become a data driven university.
- Create actionable information and analysis through a comprehensive approach to data and information, extending the work done through CORE and Institutional Research to move to the next level of realization.

- Understand the full lifecycle of engagement with OSU, from childhood programs, through recruitment, learning career, industry partner, donor, parent and fan. Leveraging work successfully done in several colleges, move to a comprehensive and standard approach in managing the university’s varied systems.

Cybersecurity
- Use security measures and design principles that protect OSU’s information and systems.
- Raise and sustain cybersecurity awareness and education throughout the OSU community.

University-wide customer relationship management (CRM)