Information Technology Strategic Plan 2014-2017

Leveraging information technology to create a competitive advantage for UW-Green Bay

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360° OF LEARNING

UNIVERSITY *of* WISCONSIN
GREEN BAY

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Letter from the CIO

Information technology is critical for the University's mission and its successful operations, and information technology is needed to create a strategic advantage for the University. When information technology initiatives align with the strategic goals of the University, the impact can be transformative – empowering faculty to enhance students' learning experience, improving business operations to deliver quality services, and fomenting improvement through the intelligent use of data.

It is my pleasure to present this Information Technology Strategic Plan for 2014-2017 to the University community. The Technology Plan provides a blueprint for achieving the vision of leveraging reliable and emerging technologies and information resources to support the mission of the University. The plan draws upon the University's Strategic Plan, IT priorities across campus, key IT trends in higher education and industry, and a strategic analysis of current IT operations. It is a product of University-wide discussions about the role of information technology in the evolving landscape of higher education and in addressing institutional challenges and opportunities.

The Technology Plan identifies four goals, their respective objectives, and key strategies. The Plan focuses on strategies pivotal for creating a competitive advantage for the University through the effective use of existing and emerging technologies. We have striven to balance "commodity" IT services that are vital for smooth day-to-day operations and leveraging new, innovative technological solutions.

The Technology Plan provides strategic and tactical ideas based on a high-level framework. It does not address the resource needs; it is understood that new resources and the re-allocation of some existing resources will be required to execute strategies and accomplish projects identified in the Plan. The effectiveness of any strategic plan also requires careful and timely execution; an accompanying operational plan outlines how the Technology Plan goals and objectives will be accomplished. The operational plan, a granular level action plan, will create priorities for the projects, establish accountabilities, formulate success indicators, and identify resources needed to implement the projects.

I extend my gratitude to the Technology Council for guiding the process and providing valuable input about the needs of the University. Thanks to the faculty, students, staff, and administrators who provided ideas for the Technology Plan, with special thanks to the IS Division staff for their contributions to the project. I greatly appreciate the IS Leadership Team for their vital insights and expertise, and for their dedication to the development of the Technology Plan.

Rajeev Bukralia

Associate Provost for Information Services & CIO

Executive Summary

The purpose of the Information Technology Strategic Plan is to leverage information technology to advance the mission of the University, to help achieve the goals identified in the University Strategic Plan, and to shape the future direction for information technology (IT) initiatives to create a competitive advantage for the University. The Technology Plan is the culmination of an in-depth process that involved strategic thinking, research on IT and higher education trends, and discussions about technology needs with the University community. The Technology Plan was envisioned and created with guidance from the Technology Council. The Plan will provide direction and set IT priorities for the next four years.

Vision

The vision of the UW-Green Bay Information Technology Strategic Plan is to leverage reliable and emerging technologies and information resources to support innovative and adaptable teaching, learning, and research, and efficient business operations.

The framework for developing the Technology Plan included the following steps to ensure alignment with the University Strategic Plan, IT and higher education trends, and the strategic analysis of the IT unit. The process began with an environmental scan of IT services and discussions with various stakeholders (faculty, students, departments, campus leaders, IT staff, and the Technology Council). The IT services, resources, staffing, and funding levels were benchmarked with the EDUCAUSE Core Data service, and previous IT surveys were used to identify areas for improvement. A SWOT analysis was prepared using this information to identify ideas to preserve strengths, minimize weaknesses, harness opportunities, and mitigate threats. A forum was conducted with the Information Services (IS) Division staff to determine the values to which the IS Division will adhere in creating and implementing this plan.

Values of the Information Services Division

Reliability
We are committed to providing reliable information resources and secure information technology infrastructure to the university community through excellent support in a timely and friendly manner.

Integrity
We are guided by virtues of honesty, transparency, and fairness in our actions.

Adaptability
We adapt to the changing needs of the University to ensure continuous improvement.

Innovation
We are committed to exploring emerging technologies and implementing creative solutions to provide greater value to the university community.

Collaboration
We encourage and harness collaboration among people, units, and institutions for serving the common good.

The following components were used to create the strategic plan: the need assessments from the departments and colleges, the SWOT analysis, values of the IS Division, the vision for the Technology Plan, the University's Strategic Plan, and area scorecards. The Technology Council, IS Division staff, and the IS Leadership Team provided input during each step of the process. The following diagram summarizes the development framework.
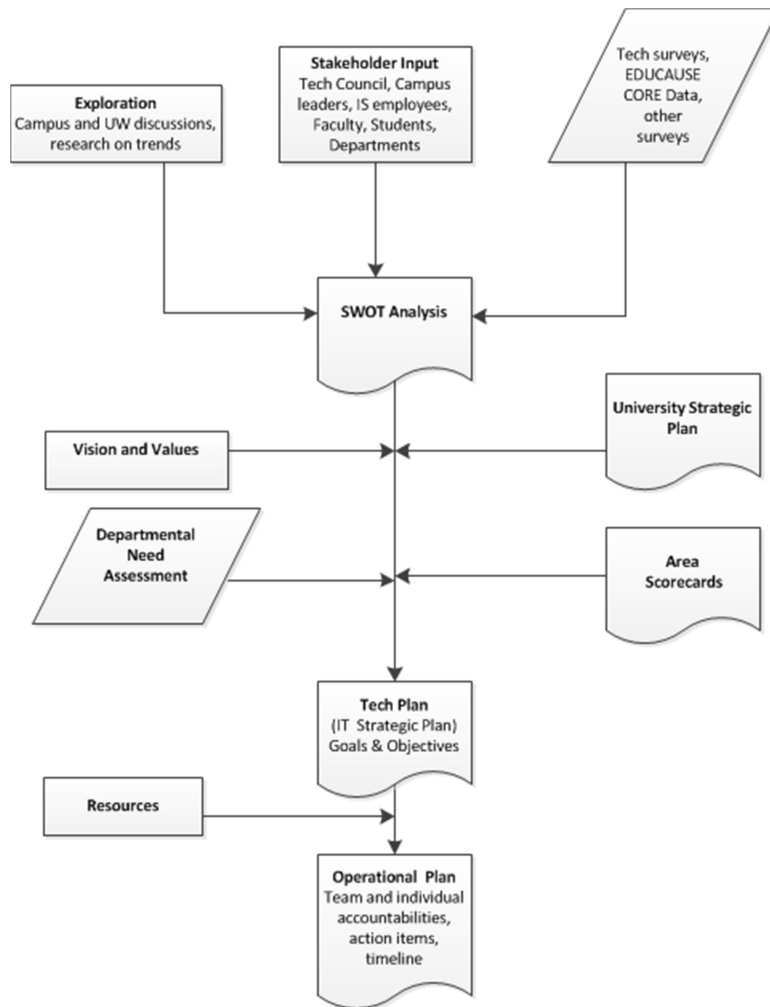
Figure 1: Development Framework for the Technology Plan

The Technology Plan consists of four overarching goals, their respective objectives, and key strategies for achieving the objectives.

Goals	Objectives
1. Advance the academic mission of the University through innovative and effective technologies, resources, and services.	1.1: Leverage technologies and information resources for recruitment and retention efforts and to support student services. 1.2: Provide technology systems and services to enhance student learning and to foster curricular innovation. 1.3: Provide technology infrastructure and support for research, scholarship, and creative activities.
2. Leverage our reliable, secure, and efficient information technology infrastructure and maximize staff potential to foster innovation and excellence.	2.1: Maintain and enhance the IT infrastructure to support the operations of the University. 2.2: Provide a secure computing environment that ensures data privacy and integrity and mitigates cyber-security threats. 2.3: Ensure a strong IT workforce capable of achieving the information technology goals of the University. 2.4: Align funding and explore new funding sources essential for IT operations and new strategic initiatives.
3. Advance business processes and operational efficiencies through effective implementation of information technology.	3.1: Support, upgrade, and enhance current business processes, tools, and administrative systems. 3.2: Evaluate and implement new technologies to improve operational efficiency. 3.3: Ensure excellent service to enable the effective use of technology, resources, and systems by the University community.
4. Provide technologies to enhance communications with the greater University community and the world.	4.1 Leverage web, social media, and mobile technologies to provide effective and consistent content delivery. 4.2 Support effective means of internal and external communications for all University constituent groups.

A separate operational plan, which maps goals, objectives, and strategies into specific projects, accompanies the Technology Plan. The operational plan establishes priorities, accountabilities, success indicators, and timeline and resources for projects. To create project priorities and transparency, the operational plan uses the following guiding principles: availability of resources, impact on the University mission, return on investment, the utilization of technologies that maximize data security and integrity, and the implementation of cost-effective solutions.

Goals, Objectives, and Key Strategies

Goal 1: **Advance the academic mission of the University through innovative and effective technologies, resources, and services.**

Objective 1.1: Leverage technologies and information resources for recruitment and retention efforts and to support student services.

Key Strategies:

- Optimize the effectiveness of Customer Relationship Management (CRM) software to improve communication and engagement with prospective and current students.
- Deploy data analytics to shape strategy and decision making in enrollment management.
- Identify, evaluate, and implement enhancements to processes supported by the Student Information System (SIS).
- Investigate and implement technological solutions to foster communication and interaction between students and advisors.
- Deploy an early alert system to identify and engage at-risk students.

Objective 1.2: Provide technology systems and services to enhance student learning and to foster curricular innovation.

Key Strategies:

- Create individual and campus-wide opportunities for faculty, staff, and students to explore, evaluate, and implement new technologies to improve teaching, learning, and innovation.
- Provide dependable IT-enabled classrooms, computer labs, and virtual learning spaces.
- Provide a robust Learning Management System (LMS) and instructional technology to support ubiquitous learning, learning analytics, and adaptive learning.
- Enhance training options and diverse training modalities for faculty and students.
- Expand ePortfolio technologies to enhance the creation and preservation of personal learning experiences.
- Improve IT literacy to ensure competency in common IT skills for all students.

Objective 1.3: Provide technology infrastructure and support for research, scholarship, and creative activities.

Key Strategies:

- Provide responsive support and innovative technical solutions to meet the needs of faculty and departments.
- Expand expertise in high-performance computing, open-source, and open-standard environments.

Goal 2: Leverage our reliable, secure, and efficient information technology infrastructure and maximize staff potential to foster innovation and excellence.

Objective 2.1: Maintain and enhance the IT infrastructure to support the operations of the University.

Key Strategies:

- Provide a robust, resilient, and reliable wired and wireless data network infrastructure.
- Maintain and upgrade data center hardware and software to ensure scalability to meet future needs.
- Provide a robust and reliable voice communications infrastructure.
- Develop a strategy for integration of personally owned devices to provide secure and effective access to enterprise data and services.
- Develop a cloud computing strategy based on benefits, return on investment, security, and data privacy risks.
- Identify and implement improvements that reduce power consumption within the IT environment.

Objective 2.2: Provide a secure computing environment that ensures data privacy and integrity and mitigates cyber-security threats.

Key Strategies:

- Create a comprehensive IT security position to help address the challenges with information security, network security, disaster recovery, and compliance issues.

- Develop an information security framework based on accepted best practices and standards that will be the basis of managing and mitigating cyber-security threats.
- Implement and maintain hardware and software essential for institutional information security.
- Educate the campus community about information security issues through various training modalities and opportunities.
- Enhance, operationalize, and periodically test the IT disaster recovery plan.

Objective 2.3: Ensure a strong IT workforce capable of achieving the information technology goals of the University.

Key Strategies:

- Provide technical and leadership professional development opportunities for IT employees.
- Provide flexibility in scheduling and projects to allow staff time to work with innovative technologies.
- Recruit, develop, and retain a strong permanent staff and student staff.
- Establish cases for new employee positions focused on the strategic needs of the University and the Technology Plan.

Objective 2.4: Align funding and explore new funding sources essential for IT operations and new strategic initiatives.

Key Strategies:

- Demonstrate and communicate, through a transparent and inclusive governance process, how IT directly impacts the core institutional missions of teaching, research, scholarship, and service to the community.
- Develop metrics and quantitative measures to establish the effectiveness of IT projects.
- Develop a long-range capital plan for IT including funding for lifecycle replacement of hardware and systems including classroom technology.
- Identify opportunities to administer centralized software licenses for cost-savings and operational efficiency.
- Explore opportunities for external funding for IT related projects.

Goal 3: Advance business processes and operational efficiencies through effective implementation of information technology.

Objective 3.1: Support, upgrade, and enhance current business processes, tools, and administrative systems.

Key Strategies:

- Provide ongoing support for existing administrative processes and business systems.
- Streamline workflow and automate business processes to improve business efficiency and reduce the use of paper.
- Enhance interfaces between administrative systems to optimize efficiency and ensure the integrity of shared data.
- Provide access to data and analytical tools to support administrative decision making and compliance.

Objective 3.2: Evaluate and implement new technologies to improve operational efficiency.

Key Strategies:

- Research and deploy a new file storage solution that meets organizational needs including cost, usability, security, compliance, and scalability.
- Deploy a course catalog system for academic departments to effectively manage course information.
- Identify and implement new business technologies and systems, including e-commerce options, which can improve the administrative functions of the University.
- Investigate and implement technological solutions to help assessment initiatives.
- Research and deploy a solution for managing, searching, and archiving digital assets such as photographs and videos.

Objective 3.3: Ensure excellent service to enable the effective use of technology, resources, and systems by the University community.

Key Strategies:

- Develop and enhance training using various modalities for students, faculty, and staff.
- Work with departments to provide training on enterprise technologies.

- Identify and implement ways to further strengthen helpdesk operation.
- Enhance communications to keep the University community informed of changes in the IT environment.

Goal 4: Provide technologies to enhance communications with the greater University community and the world.

Objective 4.1: Leverage web, social media, and mobile technologies to provide effective and consistent content delivery.

Key Strategies:

- Deploy a web content management system (CMS) to improve web usability, accessibility, and content delivery.
- Create a strategy to enhance University's web and social media presence.
- Improve the social media presence of departments to engage with users more effectively.
- Implement a mobile application to provide content and functionality uniquely suited to mobile devices.

Objective 4.2: Support effective means of internal and external communications for all University constituent groups.

Key Strategies:

- Develop a comprehensive plan for digital signage across the campus.
- Optimize the effectiveness of the University calendar, event, and notification systems.
- Research and provide technical solutions to enhance communications with alumni, the community, and donors.