California State University
Northridge

Information Technology Plan
2009- 2010

October 2009

The FY09-10 IT plan was developed before the full extent of the impacts on CSUN of the economic recession and the state budget crisis were known. Since the plan's adoption, budget cuts and staff furloughs have curtailed the resources available to invest in its implementation. We continue to pursue most of the strategies and initiatives described in this plan. However, we have had to adjust the priorities and the timing of some initiatives. We have also needed to focus on some new priorities to facilitate cost savings and productivity gains across the university.

INTRODUCTION

In 2007, the division of Information Technology developed a plan for technology at CSUN. The plan represented a consensus view of our most important technology goals and opportunities. The 2007 plan has shaped our priorities for technology investment and projects within the division and across the University. We have used the plan as a framework to align technology priorities with University planning priorities. The plan has focused our limited technology resources on projects that contribute to our most important institutional goals.

Many things have changed since 2007. There are new leaders in place in key positions throughout the University, including the IT division. These new leaders have brought new ideas and priorities that must be reflected in our planning. Today, CSUN faces a different economic situation than two years ago in which constrained University resources forces us to sharpen our priorities to explore how technology can be used to lower our operating costs and increase the number of students we serve. The increased pressure on resources also demands that we make wise and focused investments. It requires that we continue to evolve our project prioritization practices to maintain clear alignment between technology investments and institutional goals. It requires us to continue to mature our project management practices and skills so that they can make our execution of projects as efficient as possible. It also requires us to maintain focus. In the past two years, we have observed that our effectiveness as an IT organization and an institution increases when we can sustain focus on a manageable set of simultaneous projects and priorities.

While less dramatic of a shift, technology has also changed since 2007. Emerging opportunities such as mobile and cloud computing are quickly becoming major strategic issues. Social networking, virtual worlds and collaboration spaces are changing the way students, and increasingly, faculty and staff interact. The availability of web hosted applications and open source solutions have expanded choices for individuals and organizations. This presents both opportunities and challenges as we balance the need to protect the security of our information assets and provide solutions that are rich in capabilities and cost-effective to operate.

For all these reasons, 2009 seemed to be the right time to take stock of our existing plan and propose a refined IT plan for the future. Beginning in January 2009, IT leadership engaged in discussions with Vice Presidents, Deans, division and college leadership and IT advisory groups about our University technology strategy and priorities. These conversations have helped clarify existing priorities, better align the workload with the total resources available and provided valuable insights into emerging needs that will shape future projects. The IT leadership group also engaged the staff within the IT division in the planning conversations, which provided important input grounded in the realities that our staff faces each day.
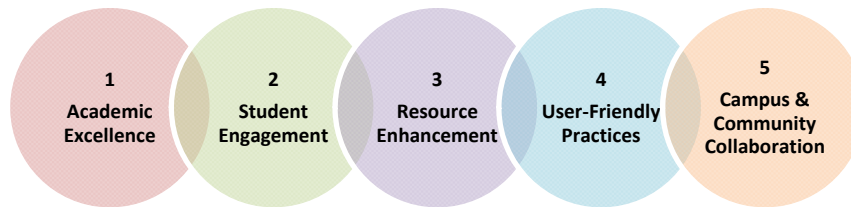
What has emerged from these conversations is a plan that reflects both our need to focus and the desire to leverage technology to support the University's mission and goals. This document proposes a refined set of priority strategies and initiatives. It will be used by the IT leadership to seek validation of our priorities and to inform decision-making about the key areas for investment.

The remainder of this document is organized in three sections. We begin by summarizing some of the key accomplishments completed last year. We then propose a set of strategies and initiatives to continue to move CSUN's agenda for technology forward. In our third section we discuss how the IT division is evolving the use of metrics.

The accomplishment and strategies sections are color coded to link back to the University Planning Priorities, described in President Koester's Annual Convocation Address (http://www.csun.edu/presofc/speeches/2008convocation.html).

The five planning priorities are:

1 Academic Excellence	2 Student Engagement	3 Resource Enhancement	4 User-Friendly Practices	5 Campus & Community Collaboration

ACCOMPLISHMENTS

Before considering where we go next, it is important to take stock of what we have accomplished during the previous year:

- Enhanced 20 classrooms to meet **smart classroom** standards with projector, computer and user-friendly control system. ○○○
- Facilitated a faculty LMS task force to evaluate replacement **Learning Management System**. Completed comparative analysis between Blackboard and Moodle options. ○○
- Facilitated a faculty email task force to evaluate replacement **faculty email** options. Completed comparative analysis between Exchange and Google. ○○
- Established the **Teaching and Learning Bytes** noon-time series - a forum for faculty to share how they are successfully using technology in their teaching. ○○○
- Completed initial technical analysis to transition **students and alumni to Google Gmail**. Coordinated with Associated Students and Advancement stakeholders. ○○
- CMS **SOLAR best practices**
  - **Student** - Class Schedule enhancement and online schedule of classes adjustment, SMS texting self service – to enable option for ConnectED emergency notification. ○○
  - **Finance –** upgrade to version 9.0 which was a (Chancellor's Office-mandated) foundational step to allow newer functionality such as Electronic Funds Transfer and streamline travel reimbursement processing. ○
  - **Human Resources** – rollout eRecruit functionality to streamline posting and applicant processes, enhance HR data warehouse reporting, streamline hiring process (including rollout of eRecruit functionality to automate posting and applicant processes) and streamline de-provision employee process. ○
- Completed the implementation of a **Unified Technology Support System** (UTSS) (including implementation of the EB Suite help desk ticketing system) to facilitate greater collaboration and information sharing between the IT division and local IT support staff. ○○
- Enhanced, one-stop **Academic Technology web presence** – a one-stop web page link for faculty to obtain information regarding technology. ○○
- Completed **enterprise business continuity plan.** ○○○
- Continued to improve and sustain a **secure and reliable infrastructure**:
  - Implemented **self-service wireless network authentication** which enabled users to register on the wireless network without calling help desk or visiting walk-in center. ○
  - Rollout of **new web infrastructure** to support enterprise web environment. ○○
  - Completed **network access layer refresh** – to enhance reliability and capacity of wired network. ○○○
- Began implementing **server virtualization** to make more efficient use of space and energy and to provide foundation for more efficient use of resources. ○
- Launched **Information Security Awareness Training** to employees across campus. ○○○○
- Administered second **annual IT survey** to measure student, faculty and staff satisfaction and utilization of CSUN technology and technology services. ○○

IT PLANNING STRATEGIES

This section describes the strategies that are the priorities for CSUN Information Technology in FY09-10. Most are continuations of multi-year initiatives to improve our ability to use technology to meet the institution's strategic goals. The presentation of each strategy includes a brief description of its alignment with CSUN's institutional goals and a list of key initiatives that will enable us to implement the strategy.

1. **Enhance the tools and support for more extensive use of hybrid and online learning in parallel with efforts to improve technology in traditional classrooms.**

    We anticipate that the economic crisis combined with growing interest among students and faculty will accelerate adoption of online learning. The implementation of a new primary learning management system is a foundational step to creating an environment that can facilitate more effective use of technology in teaching and learning. Much learning will continue to take place in traditional classroom settings on campus; therefore we must continue to evolve infrastructure and services to support the effective integration of technology in the curriculum for classroom learning.

    - Enhance Hybrid and On-line Learning
        - Expand faculty use of the Faculty Technology Center. ○ ○
        - Implement and migrate to the new Learning Management System (LMS), develop self-help "getting started" on new LMS and tools to help migrate existing users. ○ ○ ○
        - Collaborate with the library to develop a strategy for managing reusable learning objects. ○ ○
        - Define a support model for course redesign that optimizes instructional design expertise throughout the campus – colleges, library, and IT. ○ ○ ○
    - Improve Ease of Use and Support for Smart Classrooms
        - Establish a consistent classroom computer environment by developing a standard image for classroom computers. ○ ○
        - Establish a single phone number for faculty to call to request classroom support that triages to the appropriate college or IT technicians. ○

2. **Enhance data and tools to better support analysis and decision-making.**

    Increasing graduation rates and the reducing the time to graduation remain important institutional goals for CSUN. Enhancements to My Academic Planner (MAP) have improved students' ability to plan their academic careers and enhanced our ability to perform degree audits for graduate students. However, we have not begun to address increasing institutional needs for access to a student data warehouse that would enable us to more easily analyze data drawn from multiple systems to support data driven decision-making, assessment and planning.   The student data warehouse would also feed other applications needing access to student information.

    - Implement a **student data warehouse.** ○

3. **Continue efforts to improve the capabilities and use of CMS SOLAR.**

    SOLAR is the name for CSUN's suite of administrative systems including Human Resources, Finance and Student Administration systems. It is foundational to our ability to deliver efficient and effective student and administrative services to the University community.

    - Review and **reduce SOLAR modifications** which will reduce support and maintenance load. ○

- Focus on **student enhancements** ○ ○
  - Student (and employee) **Electronic Funds Transfer** (EFT) to allow electronic refund checks.
  - Implement **Demand Pay** functionality that will allow for up-front collection of fees.
  - Continue **enhancements to My Academic Planner** (MAP) to permit new transfers and new First Time Freshman to use tools. Planning using college major road map guides, prerequisite checking outside of registration and enrolling a planned schedule automatically to match road map to the schedule of classes.

4. **Deploy technology in partnership with other divisions to embed self-service, self-support in CSUN services.**

CSUN is making an institutional commitment to enable students, faculty and staff wherever possible to solve their own issues, answer their questions and transact business with the university when they want and where they want. This type of self-service, self-support model is necessitated by the scale of the University plus the constraints on our campus resources. It is also the best way to support our increasingly mobile student and faculty populations. Technology will play an important role in helping to transition our services and information to a self-service/self-support model.

- Build on the unified technology and support system implementation to create a **shared knowledge base.** ○ ○
- Enhance **SOLAR self-service** by developing more intuitive and interactive user interfaces. A key technology in this effort will be the *my*Northridge portal. ○
- **Expanded Self-Help** options to enable users to answer their own technology questions via technical guides, searchable FAQ's, list-serves or user forums. ○
- Develop **new portal page for student applicants and admitted students** using Web 2.0 functionality and design. ○ ○

5. **Continue information security improvements.**

The IT division will continue to focus on sustaining a secure and reliable infrastructure that has the capacity to meet the needs of the University community. We will continue to expand our information security program and test and refine our business continuity plans.

- Evaluate and implement **encryption for server backups and desktop storage for "level 1 confidential" data.** ○ ○
- **Identify and segment all Payment Card Industry (PCI) devices** into one network zone. This applies to systems processing or stored credit card information. ○

6. **Continue to improve and sustain a secure and reliable infrastructure.**
CSUN already has committed to a considerable number of projects that will improve the technology infrastructure and raise the productivity of all our technology units on campus. These projects are deploying core technologies that are often pre-requisites to many future opportunities to use technology to impact strategic objectives.

- Implement new **data center services strategy** (with supporting funding model) to support enterprise SAN storage, file services, virtual server farm and server back-up. ○ ○
- Migrate **faculty email to Exchange.** ○ ○
- Migrate **student and alumni email to Gmail.** ○

Broadcast email tool replacement – evaluate and implement a vendor-supported product to replace current campus-developed tool. ○ ○

- **Majordomo email list enhancement.** ○ ○
- Implement the second phase of the **campus identity management project** (Access Management) that will enable single sign-on to multiple systems. ○ ○
- Implement the (Chancellor's Office-mandated) **Federated Identify Management** project to provide connectivity to the upcoming CMS Finance system-wide Data Warehouse and CMS Common Financial system. ○ ○
- **Enhance wireless network:** ○ ○ ○ ○
    - Increase coverage and provide increased level of density (includes Bayramian Hall, Bookstore, Library and Sierra Center).
    - Provide wireless coverage to interior spaces that are not covered today (includes Chicano House and Matador Hall).
    - Provide wireless coverage to exterior spaces that are not covered today (includes G3 Parking and Tennis Courts).
    - Upgrade all housing buildings to the Aruba wireless platform.

METRICS

Metrics enable us to review the effectiveness of IT services, provide evidence to inform decision-making and enable us to track the outcomes of our strategies. Becoming a measurement-driven organization has been an evolutionary process.   The table below describes what we have done to date, our priorities for this year and our future direction.

Time	Elements in Place
Phase I (FY'08)	• Inaugural constituent satisfaction survey
Phase II (FY'09)	• Continue constituent survey • Comparative benchmarking of IT staffing and investment levels using the EDUCAUSE core data service
Phase III (FY'10)	• Continue survey and comparative benchmarking • Introduce IT performance and utilization metrics for major technologies and services • Pilot outcome measures for major IT projects
Future Phases	• Continue survey, benchmarking and IT performance metrics • Institute outcome measures for all major IT projects • Implement institution wide measures of IT investment and outcomes

CONCLUSION

Throughout the year, the University's IT governance and advisory committees will use the framework of this plan to help develop recommendations for project priorities and to develop an understanding and projection of the future use of technology at CSUN.

The IT plan is reviewed and revised annually as part of the institution's regular goal setting and budget planning processes. As major shifts in institutional priorities or technology occur, Information Technology will work with the University to identify new technology goals and strategies.