

# Advancing with Information Technology: Strategies for The California Maritime Academy

# Information Technology Strategic Plan

# Mission Statement

The Information Technology Department supports the vision and mission of The California Maritime Academy (Cal Maritime) through the application and integration of technology across the curriculum and business processes. IT provides secure, reliable and stable network and digital services to support the Academy's business practices, enterprise activities, and its central work of learning, discovery, and engagement.

#### <u>Vision</u>

Information technology at Cal Maritime will be fully integrated and aligned with the planning and activities of the Academy. Students, faculty, and staff will be empowered, satisfied, and inspired by the functionality and potential of information technology.

# **Table of Contents**

Preface1.
Introduction1.
<ul> <li>Strategic Directions and Goals</li> <li>Strategic Direction: Provide high quality <i>TRAINING AND SUPPORT</i> for the use of information technologies to assure productivity and efficiency</li></ul>
<ul> <li>Strategic Direction: Achieve advanced levels of PRESENTING AND ORGANIZING INFORMATION to increase satisfaction and productivity</li></ul>
<ul> <li>Strategic Direction: Accomplish substantial enhancements to the information technology INFRASTRUCTURE AND FACILITIES to meet and lead expectations</li></ul>
• Strategic Direction: Refine <i>INFORMATION TECHNOLOGY SECURITY</i> to preserve and protect assets and functionality4
• Strategic Direction: Develop a <i>CONTINUOUS CYCLE OF IMPROVEMENT</i> for campus information technology to meet current and future requirements4.
Implementation5.
IT Planning & Advisory Committee6

#### **Preface**

This strategic plan represents the road map for utilizing information technology at The California Maritime Academy over the next three years. Thoughtful decisions about when, where and how to employ information technology are critical given the extensive need for information technology, its great potential to deliver benefits and efficiencies, and its significant cost.

The plan is predicated on themes that emerged from an environmental scan of the Cal Maritime community, CSU IT initiatives, and information technology in higher education. Those themes have been translated into five general strategies with associated goals that will guide the development and use of information technology. Implementing the plan will emerge through project planning, completion, reporting, and accountability among the IT department, the CIO, the IT Planning & Advisory Committee, and resource allocation at an institutional level.

#### Introduction

The transformation occurring in higher education has much to do with advances in information technology - from teaching and learning to research, service, and business practices. Today's world is one of multiple platforms, distributed services, and demand for instant anytime, anywhere service and access to information. Fiber optics, wireless networks, instant messaging, dot-coms, e-Business, spam, digital asset management, knowledge management, and multi-media classrooms is commonplace in the vocabulary and daily routines of many.

Cal Maritime has a solid computing network infrastructure thanks in great part to centralized funding from our California State University (CSU) system. The next step is clearly to take fuller advantage of that infrastructure. By putting some solid predictable planning, resources, and accountability behind its information technology, Cal Maritime can enrich its existing teaching and learning environment, and get more value out of campus business practices. The students, faculty, and staff of Cal Maritime want the campus to respond quickly and continually to the five strategic directions outlined herein.

This strategic plan has been created at a time of greatly increased integration of information technology throughout society. It has also occurred at the cusp of a changing and unpredictable budget environment. Simultaneously, there is rapid and constant change in the technological tools that are available, and in the price-performance of those tools. Cal Maritime has obvious challenges and opportunities. Nevertheless, if these strategies and goals are pursued diligently, carried out properly, and reasonably funded, new levels of functionality and quality with teaching/learning, student services, and business practices will be achieved.

# Strategic Directions and Goals

# Strategic Direction: Provide high quality *TRAINING AND SUPPORT* for the use of information technologies to assure productivity and efficiency

## Rationale

Information technology holds great promise to enhance learning, teaching, creativity, and productivity. To take advantage of such promise the campus community must be able to use IT applications to their fullest. Support and training opportunities are a key to ensuring that we stay abreast of student learning styles with information technology; and to facilitate among the faculty an awareness of the possibilities of teaching with technology. Similarly, continued advancements with administrative information systems will be achieved with regular training and support.

## <u>Goals</u> (prioritized)

- 1. Assess, establish and maintain appropriate staffing levels of information technology personnel (e.g. help desk, web master, information security officer, trainer)
- Provide quality, anytime, anywhere computing support (e.g. Help Desk, online assistance) to students, faculty, and staff - along with guidelines for levels of support
- 2. Empower our community through consistent training opportunities that appeal to a variety of learning styles
- Create systematic ways of informing faculty of new instructional technologies and encouraging them to adopt those that promise to enhance and improve student learning
- 2. Develop effective methods to discuss and deploy advanced, useful functionality of administrative systems (e.g. PeopleSoft) including the integration of systems
- 2. Create a process to coordinate all software and hardware purchases that is efficient and economical
- 2. Ensure that new application roll-out's in the future be planned and implemented with accompanying training and support
- 3. Explore and take necessary steps for dealing with the cost of providing support and maintenance for campus enterprise organizations (e.g. SPEL, housing, foodservice)

# Strategic Direction: Achieve advanced levels of *PRESENTING AND ORGANIZING INFORMATION* to increase satisfaction and productivity

#### Rationale

Finding, presenting, and logically organizing information are key features of computing technology. Quick and ready access to information is highly prized by internal and external constituencies of Cal Maritime. Prospective students and parents are positively influenced by appealing and useful information systems. Students, faculty, and staff are eager to adapt systems that promise efficiencies and increased productivity.

## <u>Goals</u> (prioritized)

- 1. Redesign the campus web presence in a user-friendly way with the most useful technologies available
- 1. Create and implement a policy for regularly updating and managing web content

- 1. Pursue implementation of portal technologies that incorporate a content management system, single sign-on, an identity management system, and others that would at once integrate with our publicly available web presence and create a useful intranet
- 1. Develop an emergency notification system that provides reliable and vital information in the event of a campus need for immediate action, assistance, or relief
- 2. Develop systems to facilitate campus business practices by accomplishing workflow efficiencies and facilitating sound decisions; where appropriate, implement paperless transactions, document imaging and management, data warehousing
- Continue progress on the CSU Accessible Technology Initiative (ATI) which will ensure our information technology systems can be used by people with disabilities
- Adhere to the PeopleSoft "roadmap" pursuing efficiencies wherever possible including enterprise resource planning (ERP) and integration with other information systems

# Strategic Direction: Accomplish substantial enhancements to the information technology *INFRASTRUCTURE AND FACILITIES* to meet and lead expectations

# Rationale

Computing hardware and software underlay a great deal of our daily work and activity. Over the past several years, there has been a heavy investment of systemwide and campus funding to this information technology infrastructure and Cal Maritime has enjoyed significant computer functionality. In order to realize continued achievement in the development and use of information technology, we must stay abreast of the advances in our infrastructure and facilities and continue thoughtful and efficient upgrades.

## <u>Goals</u> (prioritized)

- 1. Develop and adopt a refresh policy for all campus owned computers
- 1. Supplement and enhance the online learning (e.g. WebCT), and simulation environments including the investigation of alternatives to our current systems
- 1. Maximize the deployment of secure, authenticated wireless access points (according to the CSU ITRP-2 initiative) to achieve 100% on campus coverage
- 1. Continue to build out the Training Ship Golden Bear's network and satellite communications with an eye towards instructional uses and anytime, anywhere access for all on-board
- 1. Redesign and update the current computer labs and distance learning center while simultaneously investigating ways to lessen the load on lab computers (e.g. enabling students to use their personally-owned computers to run software required in courses)
- 2. Develop a roadmap for the deployment and use of e-card (e.g. OneCard, PortPass, etc.) technologies
- 2. Begin migrating and employing Voice over IP (VoIP) to phase out the current campus telephone system (PBX Private Business Exchange); expand campus benefits of VoIP (e.g. unified messaging)
- 2. Create a policy for refreshing printers, copiers, and other selected digital equipment

- 2. Develop environmental policies and practices for information technology that reduce power consumption and mitigate e-waste (used computers, printers, toner, etc.)
- 3. Phase-in virtualization of the existing servers in the Data Center and/or relocate the facility to a new site on campus

# Strategic Direction: Refine *INFORMATION TECHNOLOGY SECURITY* that reliably preserves and protects assets, information, and systems functionality

## <u>Rationale</u>

Cal Maritime must be committed to protecting the confidentiality, integrity, and availability of its information systems, network resources and data. The CSU is currently developing a systemwide security policy to provide management direction and support for information security in accordance with university requirements and relevant laws and regulations. Our involvement in the CSU plan while also attending to needs specific to Cal Maritime is critical to avoiding digital disasters.

## <u>Goals</u> (prioritized)

- Create and implement policies and procedures that counteract IT interruptions to business activities and protect critical business processes from the effects of major failures of information systems or disasters and ensure their timely resumption
- 1. Write procedures into the procurement and deployment of information technology that ensure that security is an integral part of all campus information systems; that access to university resources is managed effectively; and that ensure accurate and secure operations of the systems and applications
- Train the campus community to communicate information security events to allow timely corrective action to be taken; to ensure that employees, contractors and third party users understand their responsibilities; to achieve and maintain appropriate protection of organizational assets
- 2. Develop procedures and employ additional ways (technologies, etc.) to prevent unauthorized physical access, damage, and interference to campus premises and information resources

# Strategic Direction: Enable a *CONTINUOUS CYCLE OF IMPROVEMENT* for campus information technology to meet current and future requirements

## Rationale

Knowing the positive or negative effects of the strategies and goals outlined in this plan require regular assessment, analysis, and refinement. Done properly, a continuous improvement process will identify problems and opportunities and thus help ensure that they are addressed.

## <u>Goals</u> (prioritized)

- 1. Create and implement an assessment plan to measure the progress of the IT Strategic Plan and to ensure that we are making significant achievement in realizing the vision of information technology at Cal Maritime
- 1. Perpetually monitor and evaluate new technologies appropriate for Cal Maritime

- 2. Regularly generate annual reports based on the IT Strategic Plan and the accompanying assessment plan
- 2. Update the IT Strategic Plan according to the results of assessments, an analysis of annual reports, and evaluations of new technologies

# **Implementation**

A concerted and collaborative effort will be required to implement the Cal Maritime IT Strategic Plan and to achieve the vision for information technology at Cal Maritime. A partnership among the IT Department, the CIO, and the IT Planning & Advisory Committee will be crucial to establishing a firm foundation upon which to launch and sustain the plan. The following roles have been identified in accomplishing the plan.

# IT Department

- Develop and implement project plans for their respective activities; identify all resources required to achieve the plan
- Convene regularly to ensure alignment, monitor progress on milestones and evaluate results
- Coordinate and report on work activities
- Provide regular communication and status updates on strategy implementation, providing the CIO with measures that will be presented regularly to the IT Planning & Advisory Committee

## **Chief Information Officer**

- Provides administrative support for the accomplishment of the IT Strategic Plan (templates for planning, status and annual reporting)
- Supports the execution of the plan by aligning resources with objectives
- Convene IT department personnel and individuals related to IT projects on a regular basis to implement strategic directions and goals, identify and remove obstacles to success and report on progress
- Lead effort in defining, planning, implementing and measuring the goals of the plan and ensuring that they are doable and appropriately support the strategic directions
- Ensures communication to the campus and the interface for the IT Strategic Plan with executive leadership
- Identify and secure human, technical and financial resources required to accomplish the plans strategic directions, goals and vision
- Monitor plan activities, collect data, and report regularly to the IT Planning & Advisory Committee

# IT Planning & Advisory Committee

- Coordinates broad campus involvement in the development and annual updating of the IT Strategic Plan
- Ensures positive, proactive communication regarding the plan particularly as is required to achieve the vision for information technology at Cal Maritime

# Executive Leadership

- Endorses the IT Strategic Plan
- Supports the execution of the plan by aligning resources with objectives

The 2007-2008 IT Planning & Advisory Committee developed this strategic plan:

- Josie Alexander, Student Services
- Margo Axsom, Information Technology
- Kyle Chernoff, Student
- Jannette Corpus, Information Technology
- Steve Frazier, Information Technology
- Steve Kreta, Academic Affairs
- Steve Mastro, Budget
- Tamara McLane, Human Resources
- Marc McGee, Admissions
- Carl Phillips (Chair), Library
- Scott Saarheim, Faculty
- Ken Toet, Accounting
- Ken Walsh, Financial Aid
- Bob Wright, Faculty