

# **UF Information Technology**

## **Strategic Plan**

**Submitted to Provost David R. Colburn**  
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University of Florida Information Technology Strategic Plan:  
Preparing the University for the 21st Century  
April, 2002

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## University of Florida Information Technology Strategic Plan

### I. Message from the Vice Provost for Information Technology

Technology is a driving force that is causing rapid change in many aspects of human activity. Currently, technology is transforming the ways we work, study and play. In particular, the interaction of IT and innovation has triggered novel ways of thinking that are leading to deep transformations on how we conduct our day-to-day work and the way we prepare for the future. The implications of technology are around us in obvious and subtle ways.

In the recent past we witnessed the convergence of computer, communications and other technology into Information Technology (IT). As IT became more reliable and cost effective, these technologies penetrated most aspects of the University's activities, and ultimately they have become fundamental and necessary. Information Technology is at once an ever changing enabler and a core resource as important as any other. Information Technology underpins everything we do with information, including its creation, storage, retrieval, analysis, and dissemination.

Uses of IT will range from simple voice messages or an email note with a student's question to a Professor, to on-line registration for courses or access to digitized library information, to high quality multicasting over the Internet2, to personalized portal services, to acquisition, storage, analysis and transmission of large datasets containing DNA sequences or astrophysical data points or MRI images used to guide critical surgery, to simulations to assess changes in the earth's natural systems or full immersion virtual environments, to advances in IT that we are yet to envision.

In order to enable the University community to realize the potential of personalized information/communication/collaboration anytime anywhere, and to provide services and facilities that support academic and scholarly endeavors, IT Professionals and IT service organizations must be aligned with the University mission. This strategic plan is a component of the continuing effort to align the IT organization and resources with that mission. To create the best environment for learning, research, service and extension, to advance our position among the land grant universities, and to test and embrace appropriate new academic models of higher education, we will continue to build and support a high performance technologically advanced IT infrastructure focused on academic support and mission critical service.

Chuck Frazier  
Vice Provost for Information Technology

## II. Summary

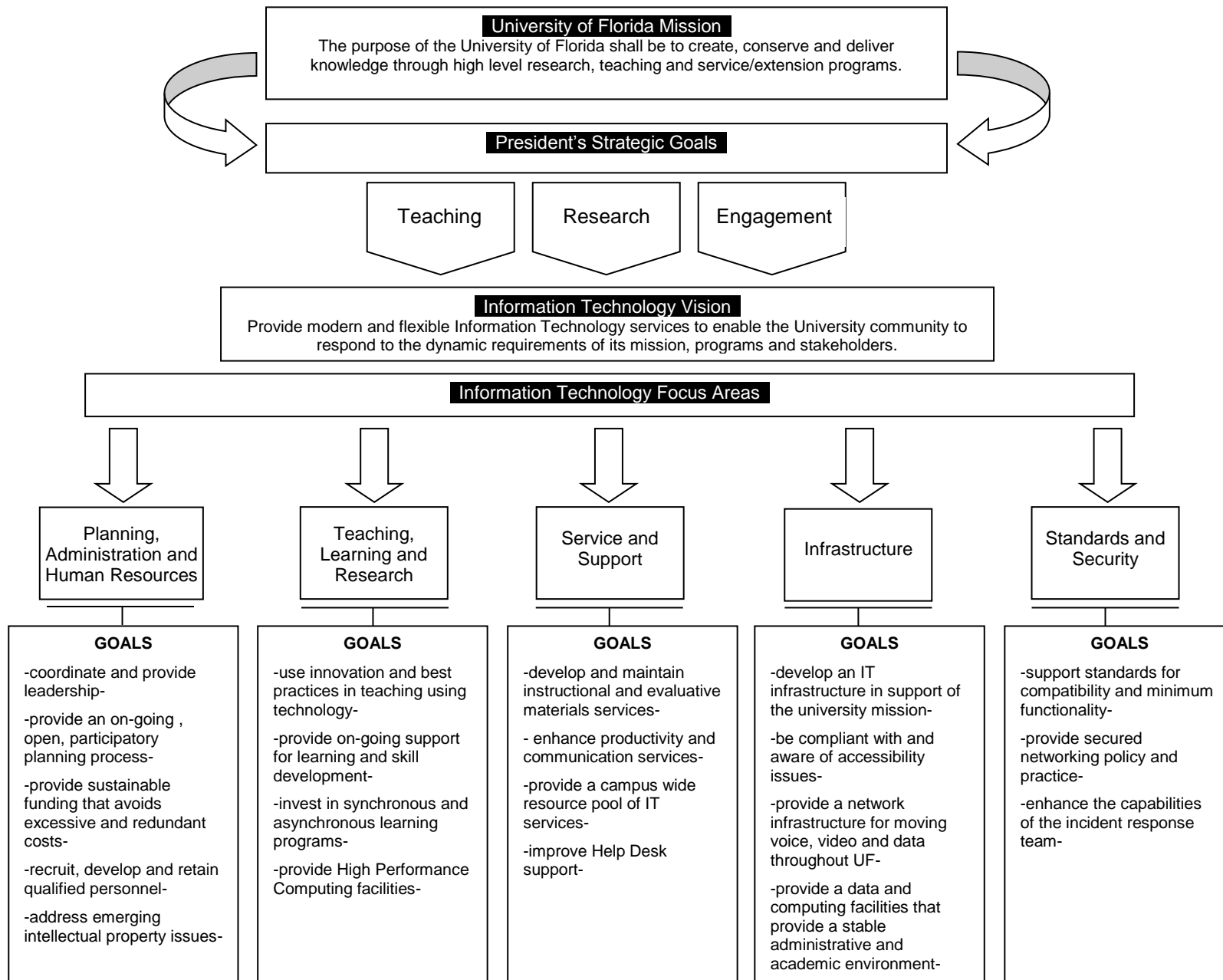
The Office of Information Technology (OIT) was created to provide faculty, students and staff at the University of Florida with a user-centric environment that applies technology to support the University mission.

Information Technology (IT), coupled with a better understanding of its role in pedagogy, research, external communications, and administrative operations will improve the quality of education through individualized learning, interactive learning materials and activities, individualized study plans, and built-in continuous assessment with feedback. IT will also play an important role in shaping the future through enabling new kinds of research and the development of new technologies for broader use. IT will provide new opportunities for the University community to engage external constituents and friends by making our work more visible and accessible. Finally, IT will allow an integrated approach to perform administrative operations effectively and efficiently.

This report is the first result of the strategic effort to align IT resources with the University mission. This on-going process has involved a broad range of individuals from the university community and the ITAC advisory structure. It has included a review of peer institutions, white papers, and discussions among ITAC committee members, faculty, staff, and students.

Through this process, a set of five strategic focus areas were identified: (1) Teaching and Research, (2) Service and Support, (3) Infrastructure, (4) Security and Standards, and (5) Planning, Administration and Human Resource Issues. Under each of these, a series of goals were articulated that are critical to align the organization with the University mission (see strategic alignment diagram).

To realize the vision of an IT organization that supports the University mission, an integrated approach is in place that addresses: (1) On-going strategic planning, (2) The creation of a new IT organization from existing organizations, (3) Strategic allocation of resources and budget guidance, (4) IT architecture planning and management, and (5) Performance measurement to assess benefits and outcomes against total cost of ownership.



**Figure 1: Information Technology Strategic Alignment.**



### III. Introduction

The purpose of the University of Florida's Information Technology Strategic Plan is to articulate a comprehensive vision for information resource management that supports the University's mission and programs. The plan includes:

- **Mission and Goals of the University of Florida (UF)** Provides an overview of the University mission and goals as defined in the UF strategic plan and provides the context for the UF IT strategic plan.
- **Current Environment** Addresses the current state of UF's IT environment and the importance of IT to the institution as it meets the challenges and opportunities of the 21st century.
- **Vision Statement** Provides a qualitative description of the IT organization and infrastructure that UF requires to support its mission and programs.
- **Mission Statement** Defines the roles, responsibilities and activities of the UF's IT community while embracing the full range of program, administrative, and IT perspectives.
- **Opportunities and Challenges** Addresses the major opportunities and challenges facing the IT community at UF.
- **Strategic Focus Areas and Initiatives** Identifies the specific strategic initiatives associated with each focus area.
- **Strategic Vision Implementation** Describes UF's approach to operationalize the plan, measure progress towards implementing the focus areas, ensure development of plans that support the focus areas, and maintain and update the UF IT strategic plan.

### IV. University Mission and Goals

The University's mission is centered on teaching, research and engagement.

“Teaching-undergraduate and graduate through the doctorate-is the fundamental purpose of the University. Research and scholarship are integral to the education process and to expanding humankind's understanding of the natural world, the mind and the senses. Service is the University's obligation to share the benefits of its knowledge for the public good.

These three interlocking elements span all of the University's academic disciplines and multidisciplinary centers and represent the University's obligation to lead and serve the

needs of the nation, all of Florida's citizens, and the public and private educational systems of Florida by pursuing, and disseminating new knowledge while building upon the past. The University of Florida is committed to providing knowledge, benefits and services with quality and effectiveness. It aspires to further state, national and international achievements in support of human values and improving the quality of life.” (University of Florida Undergraduate catalog).

## V. Current Environment

The IT environment at UF is complex and evolving. IT serves faculty, staff and students as the major constituencies, as well as many other external groups. This wide array of stakeholders creates a need for a broad range of services, uses and views of IT resources. In addition, due to the nature of the institution and the manner in which technology was historically deployed, the IT environment is large and decentralized.

Over the last 30 years, UF has seen changes in the technology environment that have shaped the culture of the organization. Driven by the mainframe computer center, centralized systems reached their peak 20 years ago, when the IT vision, budgets, direction and implementation were conducted using hierarchical structures. With the advent of microcomputers, individuals were able to address most of their research, teaching and personal productivity needs on the desktop, and this resulted in the migration of many applications and resources away from centralized control. By the late 1980s, computing was essentially distributed and sometimes disconnected.

Today, the convergence of computer and communication technologies promises to provide an infrastructure for the on-line explosion of knowledge. Today's IT must be based on evolving standards and must be reliable. In addition, miniaturization, improvements in user interfaces and untethered use of IT resources (wireless) are bringing the ideal of knowledge anywhere/anytime closer to reality. As IT becomes ubiquitous, its role will continue to increase in routine work, in multi-site collaborations, and in high-end applications such as distributed and high performance computing. More resources are needed to sustain and improve the related infrastructure and services. Moreover, distributed IT resources need to be coordinated with regard to University wide standards, policies, and mission driven directions.

In this context, a 2001 IT Review Committee (ITRC) was appointed to conduct an extensive review of the University's IT environment and a comparative analysis of other leading universities, and to be the first step of an on-going collaborative vision and planning process (please see <http://www.aa.ufl.edu/itr/pdf/3-28ITreport.pdf>). The ITRC recommendations led to this strategic planning effort and are the basis for the current efforts to make stakeholders effective and efficient in their use of technology, to improve the quality and use of institutional resources, and to position the University to realize the potential of IT.



## VI. IT Vision and Mission Statement

We envision a user centric IT environment that enables faculty, students and staff to be more effective in their roles as they work to accomplish the University mission. This environment will:

- Use advanced IT to support the needs of internal and external stakeholders
- Recognize needs and diversity in the University community and develop a consensus for UF's IT strategic direction
- Maintain security and interoperability of IT resources by adopting or exceeding industry standards and protocols

The mission of IT is to create:

- A technology enabled teaching infrastructure that supports faculty, staff and students by providing technology resources to create better learning environments and improve educational outcomes
- A research computing infrastructure that facilitates research and creative activity and improves our competitiveness
- A communications/networking infrastructure that enables collaboration through appropriate software and hardware platforms capable of transporting and delivering voice, video and data
- A system that improves the ability to access data and information in the workplace, resulting in the ability to work faster and more efficiently
- A client focused, well funded, staffed and supported organizational structure that cooperates with the University community to assess needs, bring about consensus, communicate direction, develop institutional plans and ensure results
- A suite of IT services and resources to enable the University community to better engage external clients and friends

## VII. Opportunities and Challenges

### Opportunities

The opportunities resulting from technological developments are a result of IT dealing directly with the “substance” of the academic enterprise: *Knowledge*. Although information deals with collections of facts and data, advances in the technology are leading towards organizing and accessing these collections in ways that are faster, connected and smarter. Also, IT facilitates interaction between constituents that leads to synergistic relationships. Given our current situation, further investment in modern IT infrastructure coupled with creative thinking and imagination will allow UF to:

- Improve the quality of learning

Rapid improvements in computing power, the quality of user interfaces and a better understanding of the role of IT in pedagogy will improve quality of education through individualized learning (e.g. assessment of knowledge/skills and preferred learning styles, interactive learning materials and activities, individualized study plans, built in continuous assessment with feedback and human interaction when needed).

- Advance knowledge through research

The role of IT in research is extending beyond its conventional uses. IT will play an important role in the development and application of technologies that will shape the future (e.g. genetics, energy, materials, environmental and brain technology).

- Access a larger audience of stakeholders

IT developments are leading towards making physical location irrelevant in one-to-one, one-to-many, and many-to-many interactive communications. These will improve the ability of the institution to reach wide audiences in distance education and engagement programs (e.g. Master Gardener, Clinical Teaching).

- Perform administrative operations effectively and efficiently

IT provides the means required to convert currently disconnected administrative system into a single platform that ensures secure, complete and accurate information resources that are easily and conveniently accessed by different stakeholders in acting towards the mission. (e.g. Enterprise Resource Planning System).

- Maintain leadership as land-grant research institution

Access to and support of modern IT facilities is rapidly becoming an important differentiator for quality research institutions. (e.g. e-Business, Wireless, High Performance Computing). In addition, it is generally accepted that institutions enabled with technology are more effective and efficient in program delivery (e.g. distance MBA degree, The Cooperative Extension Digital Information Source).

## Challenges

- Readiness for change

The fundamental challenge is driven by the need for a better understanding of the ways in which IT performance trends and innovation interact with the University community's readiness to embrace change. To realize the potential of IT, it is crucial to understand how IT improvements lead to the replacement of old tools with new generation tools, how entirely new uses may emerge, and what new needs will result from these developments.

- Investing in IT

The IT investment challenges that UF faces are numerous, including: determining appropriate staffing levels, competing for skilled staff serving the many needs of students, faculty, and staff, implementing life cycle budgeting and replacement, measuring and valuing the investments made in IT, and developing sustainable funding mechanisms that avoid undercapitalization.

- Maintain a secure, flexible and responsive environment

By its very nature, IT change is continuous and fast paced. Under these conditions, it is important for UF to be forward looking. UF must be capable of creating an evolving IT environment that satisfies the changing needs of diverse users while maintaining a modern dependable infrastructure and resources. In addition, the environment must be secure and able to recover from disaster.

## VIII. IT Strategic Focus Areas and Initiatives

The focus areas listed below were identified by a broad cross section of the University community. They identify the strategic direction that will allow UF to capitalize on the opportunities created by IT. The complete reports from which the focus areas were drawn are included in the appendix.

## 1) Teaching, Learning and Research Focus Areas

Related items submitted by: ITAC-AT, ITAC-NI, ITAC-HPC<sup>1</sup>

Teaching, Learning and Research are central to the university mission. It is in this area in which IT will yield its greatest fruits by enhancing and improving what we do today, and by creating new avenues for achieving the University vision for excellence in teaching and learning, research, and engagement. It is now clear that IT is an important element of the system required to make life-long learning a reality, to improve our researchers competitiveness, and to advance our position as a higher education and research institution amongst our peers.

Knowledge and best practices related to the use of technology must be investigated and assessed to bring about the potential improvements and beneficial transformation in our teaching and research programs. In addition, faculty and students must become proficient in the use of technology in a pedagogical context and as a research tool in areas relevant to their field of study.

The focus areas below were identified as strategically important to the University:

### ***Pedagogy and Its Interactions with Technology***

#### *Description:*

Investigation, recognition and encouragement of innovative teaching practices.

#### *Implementation Strategies:*

- 1) Disseminate innovations and best practices in teaching.
- 2) Provide incentives and support.
- 3) Build knowledge regarding pedagogy and technology.
- 4) Consider teaching/technology as an area of innovation within the promotion and tenure evaluation process.

#### *Outcomes:*

- 1) Increased understanding of pedagogy and technology.
- 2) Increased effectiveness in the appropriate use of technology in teaching and learning.
- 3) Increased curriculum suitable for distributed learning.

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<sup>1</sup> ITAC-AT, ITAC-NI, ITAC-HPC are the Information Technology Advisory Committees for Academic Technology, Network Infrastructure and High Performance Computing, respectively.

## ***Technology Training and Development Plans***

### *Description:*

Multi-faceted approach to provide ongoing support for learning and skills development.

### *Implementation Strategies:*

- 1) Assess and enhance existing resources.
- 2) Expand times, locations and methods for training.
- 3) Produce unified training programs targeted to specific audiences.
- 4) Provide follow-up technology support at the University and unit level.

### *Outcomes:*

- 1) Increased and effective use of technology in curriculum.
- 2) Coordinated campus approach to training and development.
- 3) Improved effectiveness in teaching and improved student learning.

## ***Synchronous and Asynchronous Learning***

### *Description:*

Resources and incentives to enable development of comprehensive and effective synchronous and asynchronous learning programs.

### *Implementation Strategies:*

- 1) Develop a distance-learning plan.
- 2) Develop and maintain campus-wide infrastructure supporting technologies such as wireless access, video conferencing, etc.
- 3) Assess and enhance existing resources.

### *Outcomes:*

- 1) Coordinated campus wide synchronous and asynchronous course offerings.
- 2) Improved availability of appropriate technology for anytime, anywhere delivery.

## ***High Performance Computing (HPC)***

### *Description:*

Provide quality HPC facilities and services to the University community and support research and development of new HPC technologies consistent with college missions.

### *Implementation strategies:*

- 1) Develop an HPC facility, a faculty policy board, and sustainable funding mechanisms.

- 2) Create the necessary training, service and support infrastructure for any faculty and student in UF in need of HPC.
- 3) Support a faculty core to conduct research on HPC in collaboration with deans of appropriate colleges and other organizations.

*Outcomes:*

- 1) Improved quality, visibility, reputation and competitiveness of research and education programs through the use of HPC and/or the development of new HPC technologies.
- 2) Improved ability to recruit competent faculty, staff and students.
- 3) Expand the leadership role of UF in the use of HPC across a broad range of disciplines.

## 2) Service and Support Focus Areas

Related items submitted by: ITAC-AT, and ITAC-NI

Change is always difficult. Beyond acknowledgement of the benefits to the University and its clients derived from the use of IT in academic work, it is essential to recognize that the human element of the system is the part that realizes the use of the technology and brings about transformation. The outcomes generated by the use of technologically advanced IT systems and associated technologies depend on a competent user. Therefore, it is important that the necessary facilities, mechanisms, and support infrastructure are in place to allow users to reach and sustain a level of competence to assure the effective and efficient use of the technology.

The focus areas below were identified as strategically important to the University:

### ***Curriculum Development and Assessment Consultancy***

*Description:*

Services for all persons developing and maintaining instructional and evaluative materials.

*Implementation Strategies:*

- 1) Assess and enhance existing services.
- 2) Acquire curriculum development tools that are convenient, accessible and flexible.
- 3) Provide baseline curriculum and assessment services at no cost and advanced services available for a fee.

*Outcomes:*

- 1) Minimized barriers to using technology in curriculum.
- 2) Improved support for campus and distance learning initiatives.
- 3) Coordinated, cohesive offering of curriculum and assessment services.

## ***Enhanced Technology Services***

### *Description:*

Resilient, user-friendly technical services for all students, faculty and staff.

### *Implementation Strategies:*

- 1) Assess and enhance existing services such as Gatorlink, Lightweight Directory Access Protocol (LDAP), and Email.
- 2) Expand and build new value-added services including:
  - a. Public key infrastructure
  - b. Directory
  - c. Calendaring
  - d. VoIP
  - e. Unified messaging
  - f. Partnership for wireless (voice, data, PDA)
  - g. UF eBusiness (utilize IT in business processes)

### *Outcomes:*

- 1) Improved productivity and communication.
- 2) Standardized secure authentication processes.
- 3) New revenue streams.

## ***Technical Consultancy and Collaboration***

### *Description:*

Campus-wide resource pool for information technology services to provide a single source support system for colleges and departmental units.

### *Implementation Strategies:*

- 1) Create an environment that fosters collaboration among application development groups.
- 2) Identify and enlist subject matter experts.
- 3) Provide technical consulting and support for grant writers and non-technical managers.
- 4) Implement mentoring and peer-to-peer skills sharing programs for the campus technical community.

### *Outcomes:*

- 1) Reduced duplication of effort for development and technology support.
- 2) Enhanced support in obtaining grants.
- 3) Single source for technology consulting.
- 4) Reduced application development time and effort.

## ***Help Desk Support***

### *Description:*

Campus-wide, single source, 24/7 support for end users.

### *Implementation Strategies:*

- 1) Assess and enhance existing services.
- 2) Acquire self-help tools and services.
- 3) Utilize technology such as PDAs, nomadic computing, and mobile communications to improve efficiency and effectiveness of the Help Desk.
- 4) On-going focus on customer service.

### *Outcomes:*

- 1) Enhanced responsiveness to customers.
- 2) Increased productivity.

## ***Network Infrastructure Services Evaluation***

### *Description:*

On-going assessment of network infrastructure to ensure the needs of the individual units are met and to ensure that demand and needs are anticipated.

### *Implementation Strategies:*

- 1) Develop process for evaluation of network services including data on downtime, outage frequency and scope.
- 2) Provide reports on network expenditures.
- 3) Disseminate network infrastructure strategic planning information.
- 4) Conduct annual surveys of network management satisfaction.

### *Outcomes:*

- 1) Statistical reports on network functions.
- 2) Reports on network cost.
- 3) Reports on user satisfaction.
- 4) Improved infrastructure and improved user satisfaction.

## 3) Infrastructure Focus Areas

Related items submitted by: ITAC-AT, ITAC-DI&ADM<sup>2</sup>, and ITAC-NI

An important and essential component of the system is the technology infrastructure. Because of the rapid rate of change in technology and the implications of its advances, it has become essential to maintain a balance between the allocation of resources and the expected benefits. Because IT infrastructure greatly influences the

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<sup>2</sup> Information Technology Advisory Committee for Data Infrastructure and Administrative Computing.



superstructure of the organization, it is necessary to conduct a careful analysis of infrastructure directions and investments.

The focus areas below were identified as strategically important to the University:

### ***Infrastructure for Teaching, Research and Outreach***

#### *Description:*

Equipment, resources, and infrastructure to support University mission, both local and distance.

#### *Implementation Strategies:*

- 1) Assess and enhance infrastructure as needed including hardware and software (site licenses).
- 2) Provide central network support to the faceplate with local control beyond the faceplate. Exemptions can be granted for specialized research networks.
- 3) Standardize classroom technology implementations.
- 4) Implement centralized support services such as web, media, and courseware/management.
- 5) Ensure access to University data resources regardless of location.

#### *Outcomes:*

- 1) An environment prepared to adopt new technologies and standards.
- 2) Elimination of unnecessary redundancy.
- 3) Consistent, cost-effective and well-maintained technology infrastructure.
- 4) Increased faculty, staff and student productivity.

### ***Central Site Computing Facility***

#### *Description:*

A strategy to augment existing resources and ensure currentness with technology and sufficient cycles, digital storage, and web server capacity to support the core mission of the University's administrative and academic infrastructure, including HPC needs.

#### *Implementation Strategies:*

- 1) Assess and maintain administrative and academic computing use and size for excess capacity.
- 2) Develop and maintain a stable facility with sufficient redundancy and disaster recovery backup, including a hot backup site.

#### *Outcomes:*

- 1) Stable administrative and academic computing environment supporting the core mission of the University.

## ***Information Technology Infrastructure***

### *Description:*

IT infrastructure that effectively supports the University's mission.

### *Implementation Strategies:*

- 1) Assess unified voice, video and data networks and implement as appropriate.
- 2) Develop standards for "minimum service level to the faceplate" and remedy deficiencies.
- 3) The University should provide a basic level of service to all users. Units that desire/require a higher level of service may pay the incremental costs.
- 4) Develop strategies for improving high speed/high quality access from home.
- 5) Develop consistent, single source database(s) and access methods for mission critical data

### *Outcomes:*

- 1) IT infrastructure that helps units to accomplish their missions efficiently and effectively.
- 2) Faster and more efficient application development.
- 3) Simplified access to commonly used data items.
- 4) Increased data integrity.

## ***Systems Accessibility***

### *Description:*

Information systems accessible to staff, faculty, and students with disabilities in accordance with ADA.

### *Implementation Strategies:*

- 1) Assess needs with periodic feedback from students, faculty and staff with disabilities.
- 2) Develop and implement accessibility policies.
- 3) Commit resources for the conversion of existing systems.
- 4) Acquire appropriate accessibility technologies.

### *Outcomes:*

- 1) Accessible systems.
- 2) Full compliance with ADA.

#### 4) Security and Standards Focus Areas

Related items submitted by: ITAC-AT, ITAC-DI&ADM, and ITAC-NI

Network and data security are leading concerns in the use and deployment of IT. The university collects and maintains large data bases with highly sensitive customer information. Network security is less a technology issue than an organizational one. To ensure that data and network resources are secure, the university must shift from deployment of basic security infrastructure to sophisticated security measures, and to increasing the awareness of the role individuals play in security. In addition and while maintaining the flexibility required by users of University IT resources, standards need to be implemented where they reduce costs, increase productivity, reduce unnecessary variety, ensure interchangeability of data and equipment, minimize waste, ensure safety and ensure quality outcomes.

The focus areas below were identified as strategically important to the University:

##### ***Security of IT Resources***

###### *Description:*

Plans, practices and policies for secure networking, computer systems and data.

###### *Implementation Strategies:*

- 1) Continuously review and disseminate security policies and procedures.
- 2) Separate security policies from procedural and implementation details.
- 3) Improve and enhance the capabilities of the security incident response team.
- 4) Provide on-going security education and awareness activities. Combine training with mentoring activities.
- 5) Perform security audits of campus systems on a periodic basis and remedy deficiencies.
- 6) Improve distributed host-based Intrusion Detection Systems.
- 7) Create partnerships and improve communication mechanisms with unit managers when security measures taken may impact the unit's systems or users.
- 8) Bundle security services with general network management.

###### *Outcomes:*

- 1) Secure networks, systems, and data.
- 2) Enhanced ability to rapidly recover from network intrusions
- 3) Increased awareness and knowledge of security issues for faculty, staff and students.

## ***Guidelines and Standards***

### *Description:*

Establish and enforce standards for the technology environment.

### *Implementation Strategies:*

- 1) Establish and enforce standards for compatibility and minimum functionality for fundamental applications such as e-mail, calendars, web browsers, and office productivity software.
- 2) Define standards for consistent and supported hardware and software with appropriate purchasing and licensing agreements.
- 3) Develop a common look and feel for UF Web presence to include: information architecture, aesthetics, etc.
- 4) Implement single sign-on across all systems with complete integration into UF Directory.
- 5) Create policies and standards for data ownership, data definitions, data commonality, data warehousing creation and management.

### *Outcomes:*

- 1) Increased ease of use.
- 2) Lower support costs.
- 3) Increased systems compatibility.
- 4) Standard 'toolkit' for all students, faculty and staff to use IT in their work.
- 5) Consistent UF web 'brand'.

## 5) Planning, Administration and Human Resources Focus Areas

Related items submitted by: ITAC-AT, ITAC-DI&ADM, and ITAC-NI

A continuous planning and visioning process must be implemented to identify needs, opportunities, and to focus energy and resources. In particular, to ensure that students, faculty and staff are working towards the same goals, and to properly assess the University's response to the changing IT environment.

There are several administrative issues that are critical for success in realigning resources and deploying plans that must be addressed in the short and long term. Because modern IT systems require highly competent individuals to be successful, recruiting, hiring and retaining qualified personnel in a competitive environment needs special attention. In addition, careful consideration must be given to sustainable budget models that ensure successful deployment and maintenance of IT systems. Finally, attention must be given to the emerging intellectual property issues driven by advances in IT, and how they affect teaching, research and engagement.

The focus areas below were identified as strategically important to the University:

## ***Continuing Strategic Planning Process***

### *Description:*

Regular review, prioritization, and update of the IT strategic plan.

### *Implementation Strategies:*

- 1) Develop:
  - a. A project planning and tracking group.
  - b. A mechanism for setting priorities.
  - c. On-going process review (e.g. business processes – best practices).
- 2) Solicit user input to technology planning.
- 3) Make regular use of benchmarking.

### *Outcome:*

- 1) A continuously updated strategic plan that charts the University's direction in IT.

## ***Staff Recruitment and Retention***

### *Description:*

Ability to recruit and retain high quality IT staff.

### *Implementation Strategies:*

- 1) Increase hiring flexibility (e.g. eliminate some degree requirements).
- 2) Create a personnel classification pay plan commensurate with the current IT environment.
- 3) Develop planned career progression.
- 4) Provide for competitive salaries.
- 5) Provide resources for Professional development and certification, and attendance at Professional seminars.
- 6) Encourage experience with and access to the latest technologies.

### *Outcomes:*

- 1) Decreased turnover of IT staff.
- 2) More knowledgeable IT staff.

## ***Funding and budget models***

### *Description:*

Reliable funding for technology that enables long range planning and ensures accountability.

### *Implementation Strategies:*

- 1) Develop revenue streams such as fees for network services, corporate partnerships, endowments, IT student fee, etc.

- 2) Implement a technology refresh cycle for infrastructure, hardware and software.

*Outcomes:*

- 1) Increased and stabilized revenue streams for IT.
- 2) Planned replacements for equipment.
- 3) Availability of resources for IT strategic plan implementation.

### ***Intellectual Property***

*Description:*

Investigate and increase awareness of Intellectual Property rights and issues related to IT.

*Implementation Strategies:*

- 1) Develop information resources and enhancement to policies and standards documents.
- 2) Communicate to the university community existing expertise and available resources.
- 3) Develop systems and procedures that protect intellectual property (class notes, etc.).

*Outcomes:*

- 1) Enhanced Intellectual Property and Copyright policy and procedures.
- 2) Increased understanding of intellectual property issues and resources.
- 3) Decreased risk of copyright infringement.

## **IX. Strategic Vision Implementation**

The University of Florida is committed to using IT as a mission enabler and as a means to position the University at the forefront of land-grant institutions. In order to achieve this, a series of management practices and processes will be put in place to ensure a collaborative and integrated approach to realize the IT environment envisioned by the institution. This will include:

- On-going IT Strategic Planning

Strategic planning will be a continuous process that ensures that the use of old, new and emerging technologies will support the University mission. Strategic planning will continually envision the beneficial use and deployment of technology, address the needs of the future and present, and be in accord with the University's desires and capabilities.

- Creation of a new IT Organization from Existing Organizations

To improve efficacy of central services and improve resource use efficiency, current centrally administered IT units will be reorganized to allow the IT organization to respond to the focus areas identified in this strategic plan and those that arise in the future. This new IT organization will be user-centric, flexible and responsive.

- Strategic Allocation of Resources and Budget Guidance

Budgeting will be integrated with IT initiatives in a way that ensures alignment with strategic and operational planning efforts. This will establish a criteria for investment in future IT initiatives and provide a baseline for strategic evaluation and assessment.

- Information Technology Architecture Planning and Management

The ITAC committees will provide expertise and recommendations for the design and deployment of strategic initiatives to be executed by the IT organization. Attention will be given to standards adoption and retirement, configuration management, architecture baselines, migration activities, security, and stewardship of IT resources.

- Performance Measurement

The effectiveness of the IT organization will be measured in terms of how well it enables stakeholders to realize gains toward the mission. To ensure that investments in technology are meeting programmatic needs and that they are well managed, tools and strategies will be put in place that document fiscal management of IT resources. These will include Total Cost of Ownership (TCO), Return on Investment (ROI) and Cost/Benefit analysis.

## Appendix 1: Committee Activities and Acknowledgements

### *Committee Activities*

Dr. Chuck Frazier, Vice Provost for Information Technology, convened the IT Strategic Planning Committee to develop an IT strategic plan for the University of Florida as a continuation of the efforts initiated by the UF 2001 IT Review Committee. Over the course of 5 months, the ITSP committee read and discussed relevant white papers, studied ITSPs at peer institutions, consulted with specialists and deliberated at length and in depth on specific strategic focus areas through the ITAC subcommittees.

The committee's work was initiated by developing a strategic alignment diagram to identify general focus areas. These were then forwarded to the ITAC subcommittees to identify specific strategic focus areas in each of the areas and to solicit input from their colleagues. These focus areas were then summarized into those included in the report. The ITSP committee developed other sections of the report.

### *Acknowledgements*

This planning effort involved a large number of people. In particular, a large effort was made by the members of the ITAC committees to contribute to this plan. The participating members of the ITAC committees are listed below.

In addition the ITSP committee thanks Mr. Eric Olson and John Holmes for their work in editing the strategic focus area section of the report, also to Mr. Dane Wielins for the review of this document.

### **IT Strategic Planning Committee**

<b>Members</b>	<b>Title</b>
Dr. Alan George	Associate Professor of Electrical and Computer Eng.
Ms. Donna Johnson	Director for IT, College of Business
Dr. Bernhard Mair	Professor of Mathematics
Mr. Dave Pokorney	Director of Network Services
Mr. Steve Pritz	Interim University Registrar
Mr. Fred Royce	Graduate student
Mr. Christopher Sessums	Director of Distance Learning, DCE
Dr. Fedro Zazueta	Professor and Director, AT Office, <b>ITSP Chair</b>

### **ITAC-Academic Technology**

<b>Members</b>	<b>Title</b>
Mr. Joe Burley	Clinical Associate Professor, Nursing
Dr. Marc Hoit	Interim Associate Dean for Research, Engineering
Ms. Martha Hruska	Library, Director of Technical Services
Dr. Raymond Issa	Director and Professor, Rinker Graduate & Distance



	Programs
Ms. Donna Johnson	Director for IT, College of Business, <b>ITAC-AT Chair</b>
Dr. Mary Kantowski	Graduate Coordinator, Education
Dr. Richard Kiltie	Associate Professor of Zoology
Dr. Sue Legg	OIR Director Emeritus
Ms. Faith A. Meakin	HSC Library Director
Dr. Terry Morrow	OIR Associate Director
Dr. Stephen Mulkey	Associate Professor of Botany
Dr. Ken Osfield	Director, ADA Compliance Office
Mr. Tom Santilli	Director, Continuing Education
Dr. Betty Taylor	Director, Legal Info Center
Mr. Mark Trammell	University Webmaster
Dr. Martin Vala	Chemistry Professor
Dr. Charles Williams	HHP Associate Dean
Mr. Jack Worley	Associate Director, Housing
Dr. John Wright	JM Exec Associate Dean
Dr. Fedro Zazueta	Professor and Director, AT Office

### **ITAC-Data Infrastructure and Administrative Computing**

<b>Members</b>	<b>Title</b>
Mr. Stephen Cates	CIO Data Warehouse Manager
Mr. Jim Cobb	Research and Graduate Programs IS
Mr. Norbert Dunkel	Housing Director
Mr. Larry Ellis	Human Resources Director
Ms. Karen Fooks	Director of Student Financial Affairs
Mr. Tony Gordon	Computer Application Coordinator
Mr. John Holmes	Director, Internet Development
Mr. Michael House	Foundation AVP for Administration
Mr. Robin Hodges	Director, OPS Applications
Mr. John Kruczek	UF Controller
Dr. Richard Rathe	Associate Dean, Health and Family Medicine
Mr. Steve Pritz	Interim University Registrar, <b>ITAC-DI&amp;DM Chair</b>
Mr. Ron Schoenau	Director of Information Technology Services
Ms. Barb Sedesse	Computer Systems Controls Coordinator
Mr. Steve Stripling	Orthopaedics IS Administrator
Mr. Tom Thomas	UF Computer Systems Director
Mr. Victor Yellen	Assistant Provost

### **ITAC-High Performance Computing**

<b>Member</b>	<b>Title</b>
Dr. Paul Avery	Professor of Physics
Dr. Henry Baker	Professor of Molecular Genetics and Microbiology
Dr. Michael Conlon	Assistant Vice President for Health Affairs

Dr. Jose Fortes	Professor of Electrical and Computer Engineering and BellSouth Eminent Scholar
Dr. Alan George	Associate Professor of Electrical and Computer Engineering, <b>ITAC-HPC Chair</b>
Dr. Ali Haghigat	Professor and Chair of Nuclear and Radiological Engineering
Dr. Mark Law	Professor of Electrical and Computer Engineering
Dr. William Luttge	Executive Director of MBI-UF
Dr. James Oliverio	Professor and Director, Digital Worlds Institute
Mr. David Pokorney	Assistant Director of NERDC
Dr. Gerhard Ritter	Professor of Computer and Info. Sciences and Eng.
Mr. Ronald Schoenau	Director of University Computing
Dr. Samuel Trickey	Professor of Physics and Chemistry

### **ITAC-Network Infrastructure**

<b>Members</b>	<b>Title</b>
Mr. Stuart Clarry	UPS Computer Applications
Mr. Clint Collins	BEBR Operations Director
Mr. Jason Czaplewski	Systems Analyst, Shands Hospital
Mr. Bill Covey	Library, Head of Systems
Mr. Daniel Cromer	Assistant Director for Customer Service, IFAS IT
Mr. David Gagne	Operations Analysis
Mr. Matt Glover	Network Services
Dr. Sumi Helal	Associate. Professor of CISE
Mr. Mark Hill	Assistant Director of Housing
Mr. John Madey	Telecom Engineer
Mr. Eric Olson	Associate Director for IT & Distance Learning
Mr. Dave Pokorney	Director for Network Services, <b>ITAC-NS Chair</b>
Mr. Russ Poole	DCP IT Director
Dr. Richard Rathe	Associate Dean Com Health & Fam Med
Dr. John Sabin	Professor of Physics
Dr. Susan Sinnott	Professor of Materials Engineering
Mr. Steve Smittle	UAA
Dr. Charles Telesco	Professor of Astronomy
Dr. Joe Wilson	Assistant Professor, CISE

## Appendix 2: ITAC Committee Reports to the Strategic Planning Committee