Strategic Plan 2010-2015 Division of Information Technology

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## **Executive Summary**

This plan, presented by the Division of Information Technology (DIT) at Bowie State University (BSU) intends to be a reference for the *cyberinfrastructure*; the system integrated by people, equipment and logic tools that guarantee cohesiveness of action through managing the institution's information and communication. The plan is integrated around six major strategic goals derived from the University Strategic Plan and the Academic Development Plan.

## The DIT strategic goals are:

- (1) Promote enhanced use of instructional technology for teaching, learning and research.
- (2) Support the institutional goals of student recruitment, access, retention and success through use of information technology.
  - (3) Provide assistance to faculty and students for adequate use of information technology.
  - (4) Recondition the campus cyber-infrastructure to meet best practices in the field of IT.
  - (5) Increase the efficiency of campus business processes through improved systems integration.
  - (6) Assure personnel and financial stability of the DIT.

Each of these goals will constitute an area of endeavor of DIT for the academic years from 2009 to 2014. Some expected accomplishments during this period are as follows:

- Adoption of a more efficient learning management system, incorporating mobile learning and intensified support of course redesigns to increase quality of instruction (Goal 1).
- Work on the creation of a management information system for student teaching, assessment, retention and success –SSMS (Goal2).
- Develop a self-service helpdesk and new training programs for faculty and students (Goal 3).
- Achieve a complete wireless coverage of campus with integration of mobile devices (Goal 4).
- Establish a permanent program for update and renewal of hardware and software (Goal 5).
- Finally, increase external funding of DIT through contracts and grants.

This document delineates key performance indicators for each of these goals, and defines management procedures to guarantee control and periodic updating of them.

## **Preface**

Strategic plans are vital to the development and success of an organization. They constitute an effort of all governance units for revealing through the written word their shared views about present and future. Far from recipes, strategic plans do not tell what to do every day but they establish overarching guidelines for action, sort of railroads leading to a horizon permanently in movement. They symbolically bind students, faculty and staff in a common language of expectations and leadership. This plan, presented by the Division of Information Technology (DIT) intends to contribute to this common language regarding one major aspect of its institutional life: our cyberinfrastucture, which is a system constituted of people, equipment and logic tools that guarantees cohesiveness of action through managing the institution's information and communication processes.

This plan is a product of a careful process of analysis, dialog and evaluation. It has been set mostly through a deductive process. First, taking into account the existing Strategic plan of the University and the recently published Academic Development Plan. Second, integrating the information about trends in information technology and formulating a set of tentative scenarios. Third, submitting these goals to consideration of DIT personnel and the recipient units. What you see today is the best synthesis we could achieve from this process.

No plan can harness the continuously changing internal and external environment of an institution; for that reason, we have introduced in this plan its own procedures for adaptation and change. It is represented in the last section, dedicated to how to manage the strategic plan. It delineates how the components of the plan may be updated every year and eventually replaced by others more suitable to the future status of BSU. We have just laid out an instrument for making better-informed and comprehensive decisions today and within a time horizon of five years.

Dr. Al Valbuena, Vice-President of Information Technology  $\qquad \qquad \text{July 1}^{\text{st}} \text{ , 2010}$ 

#### Introduction

Recently, the University Council approved two critical documents that define major development actions for BSU in the oncoming years; they are the *Strategic Plan Mid-Point Review 2010* and the *Academic Plan 2010-2015*. This document analyzes the implications of these documents for DIT activities, to lay out the basis for the *IT Strategic Plan 2010-2015*. Previously, DIT had presented a similar plan for 2009-2014 in May 2009. This is an update version that incorporates many new elements. The document comprises of four parts, corresponding to the major DIT activity areas in connection to the campus. Part 1 refers to IT infrastructure and security, encompassing hardware, software and networking deployed on campus, and the special measures to guarantee security and integrity of such infrastructure. Part 2 deals with Academic Computing, which comprises technology support to teaching and learning, assessment, faculty development and technology grants. Part 3 focuses on the campus transaction and decision support systems integrated to the major business processes of the university, such as recruitment, admission, registration, financial aid, student accounts, human resources management and financial operations. Part 4 covers direct services to students, faculty and staff regarding use of laboratories, software tools, help desk, troubleshooting and repair. This area also includes digital services to major clients such as the Library and Student Housing.

## **Assumptions**

The following assumptions underpin the current analysis:

- Moderate student population growth of BSU; the projections of FTE count for undergraduates, as established by the USM (Source: USM Enrollment Projections Fall 2009 thru Fall 2019), are as follows: 4,500 in 2010, 4,623 in 2011, 4,784 in 2012, 4,964 in 2013, 5,250 in 2014 and 5,343 in 2015.
- Moderate impact of retention efforts; current retention efforts of the university with the addition of a student tracking system by the end of 2010 will improve the FTE rate by an additional 5% every year. Then, the adjusted FTE count will be: 4,500 in 2010, 4,850 in 2011, 5,020 in 2012, 5,200 in 2013, 5,400 in 2014 and 5,600 in 2015
- Construction of new buildings; the new building of Arts and Humanities will be finished by 2017 and a new building for Science and Health has been planned to start in 2012; a new residential building is planned for 2014. All this has impact on IT deployment through campus.

## **Technology as Determinant of Change**

The strategic plan of DIT is determined to a great extent by the evolution of its core technology in the oncoming years. We have drawn information about trends and major milestones of technology from the *Horizons Report 2010, Gartner Technology Trends 2010,* and the Chronicle of Higher Education report *The College of 2020*. All three are considered authoritative sources in this matter. Based on this analysis, the following table summarizes IT trends applicable to BSU during 2010-2015.

Table 1: Framework of Evolution of Information Technology for BSU

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Instructional:	Instructional:	Instructional:	Instructional:	Instructional:
-ANGEL LMS	-ANGEL LMS	-ANGEL LMS	-ANGEL LMS	-ANGEL LMS
-Virtual Lab Pilot	-Virtual Labs	-Virtual Labs	-Virtual Labs	-Virtual Labs
-Elluminate	-Elluminate	-Elluminate	-Elluminate	-Elluminate
-Collaborative	-Collaborative	-Collaborative	-Collaborative	-Collaborative
technology	technology	technology	technology	technology
-SmartThinking	-SmartThinking	-SmartThinking	-SmartThinking	-SmartThinking
-TurnitIn	-TurnitIn	-TurnitIn	-TurnitIn	-TurnitIn
	-Mobile Leaning	-Mobile Leaning	-Mobile Leaning	-Mobile Leaning
<b>General Support:</b>	-Open Content	-Open Content	-Open Content	-Open Content
-Microsoft Email	-Electronic books	-Electronic books	-Electronic books	-Electronic books
-Student Tracking	-Research LMSs	-Research LMSs	-Research LMSs	-Research LMSs
Pilot	-Collaborative	-Collaborative	-Collaborative	-Collaborative
-Server	technology	technology	technology	technology
virtualization	-Pilot Pad	-Pad Computer	-Pad Computer	-Pad Computer
	Computer	-Telepresence	-Telepresence	-Telepresence
	-Telepresence	-Virtual Library pilot	- Virtual Inter-	- Virtual Inter-
	-Virtual Library		Campus Library	Campus Library
	pilot	General Support:	-Virtual University	-Virtual University
		-Microsoft Email	pilot	pilot
	General Support:	-Student tracking	-Augmented reality	-Augmented reality
	-Microsoft Email	extended		-Virtual university
	-Student tracking	-Web transactions	General Support:	implemented
	extended	-Cloud computing	-Microsoft Email	
	-Web transactions	-Pilot new ERP	-Student tracking	General Support:
	-Cloud computing	-Virtual HR system	packetized	-Microsoft Email
	-Feasibility study of	- Biometric ID	-Web transactions	-Student tracking
	ERP migration		-Cloud computing	packetized
			-Virtual HR system	-Web transactions
			-Biometric ID	-Cloud computing
			-Integration	-Biometric ID
			LMS/ERP/ Tracking	-Virtual HR system
			& Library	-Integration
				LMS/ERP/ Tracking
				& Library

#### PART I: IT INFRASTRUCTURE AND SECURITY

What the Strategic Plan and Academic Development Plan Say about Infrastructure and Security

#### 1. Strategic Plan

Sub-goal E: Maintain a robust, state-of-the art, highly available and secure information technology infrastructure to support mission-critical operations Objectives:

- 1. Develop, implement, and maintain a strategic Information Technology plan. (In Progress)
- 2. Perform and implement a participatory, unified, and continued approach from all University stakeholders in developing and maintaining an active process to continuously enhance BSU's Information Technology Plan. (Not Begun)
- 3. Ensure sustainable technology projects and initiatives through responsible fiscal planning and implementation. (In Progress)
- 4. Satisfy federal, state, institutional, and University System of Maryland policies, bylaws, and requirements as they pertain to information technology and security. (In Progress)
- 5. Provide for the continuous development and growth of information technology personnel to support the information technology infrastructure. (Not Begun)
- 6. Optimize service availability through proactive monitoring and maintenance for a secure and stable information technology infrastructure. (In Progress)
- 7. Implement institutional guidelines for modifications, updates, planning, and initiation of any information technology related projects and initiatives across the University. (This ensures that coordination and preparation are considered in the introduction of new requirements and resources that would result from such changes.) (In Progress)
- 8. Complete implementation of 100% wireless access across the institution. (In Progress)
- 9. Implement measures and initiatives to ensure secure and readily available access for students to administrative and educational technology applications. (Not Begun)
- 12. Identify IT infrastructure needs to prevent administrative and academic computing outages (both human and hardware/software resources) and allocate support for the updates.

#### 2. Academic Plan

There are no provisions in the Academic Plan 2010-2015 for changes in the university IT infrastructure. However, Provost Stacey Johnson has added the goal of a pilot for a mobile learning system involving four courses, one for each College.

**Summary of DIT Strategic Actions regarding Infrastructure and Security** 

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Continuity	<u>Continuity</u>	Continuity	Continuity	Continuity
-Data center				
-Campus network				
-Voice over IP				
-Security	-Security	-Security	-Security	-Security
-Mobile technology				
	-Student device	-Remote redundant	-Remote redundant	-Remote redundant
<u>Innovation</u>	support	site	site	site
-Network overhaul			-Virtualized	-Virtualized
- Electric support	<u>Innovation</u>	<u>Innovation</u>	computing	computing
overhaul for Data	-Wireless campus	-Campus social	-Campus social	-Campus social
Center	-Remote redundant	networks	networks	networks
-Student hand-held	site	-Virtualized		-Virtual telephone
device plan		computing	<u>Innovation</u>	<u>Innovation</u>
			-Virtual telephone	-Tele-presence lab

## Major Deliverables of DIT during the Period 2010 to 2015

#### 2011:

- DIT is performing a major overhaul the campus network, which includes data center, wired networks, wireless networks, cell and IP telephony, assuring continuity of services
- A plan for the remote redundant site will be laid out
- The Data Center will be enabled to interact with hand-held devices through messaging service and interaction with the LMS
- Through collaboration with external vendor(s), and the Office of Financial Aid, DIT will foster a
  plan of at least one digital device per student with access to network (net book, smart phone,
  pad computer, etc.)

#### 2012:

- The campus network will be extended outside the buildings, achieving near 100% coverage or an entirely wireless campus
- An remote redundant site for the data center will be contracted or co-developed with the University System of Maryland

#### 2013:

- DIT will support various campus social networks, some of them with external linkages
- The concepts of virtualized computing and cloud computing will be introduced to reduce costs, eliminating the dependence on single-user programs
- A considerable growth of collaborative networks is expected, forming social communities in campus.

#### 2014:

- Previous innovations of duplicate data center, virtualized computing and social networks will be consolidated
- DIT will introduce the technology of virtual video-telephony (any device working as a video-phone), eliminating the desk phones

## 2015:

- The university will create telepresence labs to run complex tasks in remote
- The concept of virtual university will be consolidated: a campus accessible locally, nationally and internationally without difference in quality of service

## PART II: ACADEMIC COMPUTING

#### **Need for Online Learning**

Online learning is a critical strategy of BSU survival, not an optional feature, as evidenced by the following trends:

- The Sloan-C report of 2009 for trends in online learning reports that "For the past six years online enrollments have been growing substantially faster than overall higher education enrollments". Currently, it is assumed that about 1/3 of Higher Education students in the US are involved in some form of online learning.
- Undergraduate enrollment at the University of Maryland University College online course grew 17% from 2008 to 2010, much higher than the average growth of 1.3% estimated by USM for the whole system. About 30% of UMUC undergraduate students are African-Americans, nearly 10,000 students (Source USM Dashboard, 2009). It may be argued that the business model of this college appeals more to adult students, but data show that UMUC also tops other USM institutions in number of transfers from community colleges and from other colleges.

- All community colleges that are potential feeders to BSU, like Prince George CC, Ann Arundel CC and Montgomery CC have robust online programs offering over 200 courses per term. It is natural that students look for similar opportunities when they transfer.
- Online learning is an important element to attract and retain students that are employed, as they are liberated from daily commuting. Student records at BSU allow estimating that about 15% of the student population is workers; then, more online courses would be an incentive to retain them.
- Surveys applied by DIT to students reveal that 86% demand more online opportunities.

## Growth in online learning during the last three years

Due in great part to the initiative of Academic Computing, online learning has been growing during the last three years. In 2006, there were only 13 courses taught in cooperation with the "College of the Air", currently there are more than 70 opportunities (attached list). The table below also shows an increase of the offerings per year (Source OPAA).

Table 2: Unduplicated Distance Education Count

	Calendar Year			
	2007	2008	2009	2010
Undergraduate	9	24	45	57
Graduate	0	5	15	34
Total	9	29	70	91

#### What the Strategic and Academic Development Plans say about Academic Computing

1. Goals and Objectives of Strategic Plan

General: Reengineer functions, infrastructure and budget of the Academic Computing unit to support the instructional enterprise.

## Objectives about Instructional Support

- 1 Enhance electronic and traditional instructional tools to increase the students' pass rate on the PRAXIS series. (Completed/Ongoing)
- 2 Identify educational applications and teaching technology tools necessary and utilized in student learning and ensure that OIT provides support to faculty in terms of access, training, development, and maintenance. (In Progress)
- Infuse and integrate technology in all aspects of teaching, learning, and administration. (Ongoing)
- 4 Provide pre-service and in-service teachers with access to state-of-the-art educational technology and training. (Completed/Ongoing)

#### **Objectives about Assessment Support**

- 1 Improve the Testing Services unit to support traditional and on-line instruction and timely advisement.
- 2 Develop an approach for evaluating academic program strength and focus strategies to enhance programs.
- 3 Establish an assessment program that aligns with NCATE requirements.
- 4 Reengineer the Testing Services unit to support traditional and on-line instruction and timely advisement. (Estimated Cost: to be determined funding source: Student Fee budget)

#### **Objectives about Student Retention Support**

1. Expand student and academic support programs that provide tutoring, counseling and mentoring services through early intervention and course-based risk assessment. (Estimated Cost: Access and Success grant funds already allocated to this effort)

Sub-goal E: Enhance technology to maximize enrollment /retention services. Objectives:

- 1. Implement class scheduling software to facilitate the effective and efficient scheduling of courses and classroom space utilization. (Completed/Ongoing)
- 2. Develop and implement a tracking system to monitor the progress of graduate students. (Not Begun)
- 3. Establish a focused communications network for graduate and non-traditional students. Completed/Ongoing)

#### Objectives about Faculty Training/Development

- During the next three to five years, commit adequate resources to faculty and staff development in the areas of learning resources, course delivery, customer service, technology training, and advisement software. (In Progress)
- 2 Provide avenues for professional technology development for all staff. (Ongoing)

## 2. Goals and Objectives of Academic Plan

## Strategic Goal 1. Provide high quality and affordable academic programs and support services for students.

Objective 8: Increase undergraduate and graduate distance education opportunities to provide alternative modes of instruction to students.

- A. By July of 2010, approve a BSU Online Policy.
- B. By Fall 2010, provide appropriate incentives for faculty to learn and work collaboratively to create online programs.
- C. At the beginning of Fall 2010 semester, there will be at least 12 new online courses offered to students in areas such as Mathematics, English, History, Psychology, Nursing and MIS consistent with enrollment trends.
- D. By December 2010, all courses will have an online component consisting at least of the following elements; syllabus, faculty information, announcements, course material and grade book.
- E. By December 2010, assess the existing Testing Center to determine the level of expansion needed to serve the needs of on-campus and distance education. Implementation in Fall 2011, regular operation and annual report May 2012 and thereafter.
- F. Beginning Fall 2011, each departmental area or discipline will have at least one fully online/hybrid course.
- G. Beginning of Fall 2011, each college will have a selected graduate program online, with face-to-face meetings/practicums as required by the curriculum.
- H. Beginning Fall 2012, BSU will offer at least one Bachelor degree program fully online.

## Strategic Goal 3 - Promote regional economic and workforce development.

C. Promote post-baccalaureate and post graduate certificates as workforce and economic development training programs.

The Academic Planning Committee also developed anticipated timeframes for completing the Plan's objectives.

Summary of DIT Strategic Actions regarding Academic Computing

Summary of DIT Strategic Actions regarding Academic Computing					
2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	
-Online and Hybrid	-Online and Hybrid	-Online and Hybrid	-Online and Hybrid	-Online and Hybrid	
Learning	Learning	Learning	Learning	Learning	
Technology	Technology	Technology	Technology	Technology	
<ul> <li>Faculty and student</li> </ul>	- Faculty and student	- Faculty and student	<ul> <li>Faculty and student</li> </ul>	- Faculty and student	
training	training	training	training	training	
-Course	-Course	-Course	-Course development	-Course development	
development	development	development	-Assessment and	-Assessment and	
-Assessment and	-Assessment and	-Assessment and	testing support	testing support	
testing support	testing support	testing support	-Online tutoring	-Online tutoring	
-Online tutoring	-Online tutoring	-Online tutoring	support	support	
support	support	support	- Support of student	- Support of student	
<ul> <li>Support of student</li> </ul>	- Support of student	- Support of student	retention efforts	retention efforts	
retention efforts	retention efforts	retention efforts	-Technology grants	-Technology grants	
-Technology grants	-Technology grants	-Technology grants	-ANGEL LMS support	-Mobile learning	
	-ANGEL LMS support	-ANGEL LMS support	-Mobile learning	-E-Learning instructor	
		-Mobile learning	-E-Learning instructor	certificate	
		-E-Learning	certificate	-New LMS with	
		instructor certificate	-Pilot new LMSs	asynchronous and	
				synchronous learning	
				capabilities	
				-Telepresence labs	
-Reorganization of	-SSMS extended	-SSMS packetized	-Integration of SSMS	-Virtual university	
<b>Academic Computing</b>	-Research new LMSs	-Research new LMSs	with new LMS	model	
-SSMS pilot	-E-Learning		-Telepresence Labs		
-ANGEL LMS	Instructor Certificate				
migration	-Mobile learning				
-Update plan for	pilot				
Testing Center					

# **Major Deliverables of Academic Computing during the Period 2010 to 2015** 2011-2012

- Have BSU Online Policy Approved
- Reorganize Academic Computing as a research and development unit devoted to learning and
  assessment technology, with dual academic and technology support. The unit will have three
  major areas of action: support of online teaching and learning, support of online assessment and
  technology-related grants. This links will allow the Academic Computing unit to integrate its
  planning, implementation and evaluation processes with Academic Affairs units.
- Develop 12 new online courses in Mathematics, English, History, Psychology, Nursing and MIS; the focus will be on "gatekeeper" courses, to increase retention rates (Departments and AC)
- Use SSMS system to upload course syllabi, faculty information and support materials to ANGEL for approximately 1,000 courses (Departments and AC)
- Provide training to 150 faculty members about use of ANGEL LMS, assuming 154 already received training through collaboration of AC and CETL.
- Update plan for a Campus Testing Center (AC and OPAA)
- Plan expansion of virtual server pool dedicated to support LMS and Elluminate, with disaster recovery capabilities

#### 2012-2013

- During whole academic year, the unit will research on new LMSs systems including Blackboard New Generation System
- First Semester: Develop 15 new online courses, with emphasis on General Education and graduate courses in Nursing and MIS (Departments and AC)
- First Semester: Support the College of Arts and Sciences in the design of a Curriculum for a Master of Science in Computer Science Online (Computer Science and AC)
- First Semester: Provide workshop on course development to 15 faculty
- First Semester: procure technical resources for Campus Testing Center computers, furniture, software, etc.
- First semester: Install expansion of server pool dedicated to support LMS and Elluminate, with disaster recovery capabilities
- First semester: expand virtual server pool dedicated to support LMS and Elluminate, with disaster recovery capabilities
- Second Semester: Develop 15 new online courses, with emphasis on General Education and graduate courses in Computer Science (Departments and AC)
- Second Semester: Support the College of Education in the design of a Curriculum for a Master of Education in Instructional Technology (Education and AC)
- Second Semester: Provide workshop on course development to 15 faculty
- Second Semester: oversee installation of technical resources for Campus Testing Center computers, furniture, software, etc.
- Second Semester: based on the accumulated experience with faculty training, AC will establish
  jointly with CETL a Certification Program on E-Learning that will be required to any new faculty
  member in charge of online courses.

#### 2013-2014

- During whole academic year, the unit will research on the new LMSs systems that will be selected at the beginning of the academic year
- The unit will work with an external contractor or internal programmer in the integration of the SSMS system to the new LMS system that has been selected
- In collaboration with academic programs, the unit will do a pilot of Telepresence laboratories, which allow students to accomplish complex laboratory tasks in remote
- First Semester: Develop 15 new online courses, with emphasis on General Education and graduate courses in Computer Science and Education (Departments and AC)
- First Semester: Design Curriculum for a Master of Science in Computer Science Online (Computer Science and AC)
- First Semester: Provide workshop on course development to 15 faculty
- Second Semester: Develop 15 new online courses with emphasis on General Education and graduate courses in Computer Science and Education (Departments and AC)
- Second Semester: Provide workshop on course development to 15 faculty (AC and CETL)
- Announce Bachelor degree fully online to BSU students and provide support to students (Academic Affairs and AC)

#### 2014-2015

- At this point, the University will have about 220 offerings of online courses that require maintenance. AC will need to dedicate about half of the time to course maintenance activities
- The telepresence labs will be implemented in several areas; most likely in collaboration with other USM institutions and research institutions in Maryland

- AC will contribute with other units in DIT in full implementation of the virtual university model, which means accessibility to all university processes from local, national or international sites with similar high quality of service
- New course development will continue more slowly, a rate of 10 courses per year, with emphasis on extending General Education courses to support the bachelor's programs and adding specialized courses to four graduate programs in operation: Nursing, MIS, Computer Science and Education
- According to availability of resources, new graduate programs can be developed e.g. Counseling, Reading
- The bachelor program can be branched to two concentration areas, for instance Business Administration and Science

#### PART III: CAMPUS TRANSACTION INFORMATION AND DECISION SUPPORT SYSTEMS

DIT manages the major transaction and decision support systems used in the institution for critical business processes. On one hand, these include student-centered processes such as recruitment, admissions, registration, financial aid, advising, student accounts, student records and degree audit. On the other, it also involves information support to critical administrative processes such as human resources management, financial operations and physical plant management. This section delineates a foreseeable evolution of these systems and the strategic actions that need to be undertaken.

# What the Strategic Plan and Academic Development Plan say about Transaction Information and Decision Support Systems

## 1. Goals and Objectives of Strategic Plan

Subgoal F: Improve University graduation rates.

## Objectives:

- 1. Train faculty to use the PeopleSoft software and to advise students using a variety of methods. (Completed /Ongoing)
- 2. Explore options for enhancing the effectiveness, efficiency, and timeliness of degree audits to facilitate the continued successful matriculation of students. (In Progress)
- 3. Create a user-friendly degree audit document. (In Progress)
- 4. Establish a system of communication that will keep all students, especially commuter students, aware of registration and graduation related deadlines. (Completed/Ongoing)
- 6. Build linkages between the Academic Advisement Center and departmental advising to promote seamless transition to academic programs.
- 7. Regularly update undergraduate and graduate catalogs with current academic policies and procedures and align student information systems with the policies in the catalog. Subgoal C. Maximize the opportunity for potential growth in revenues through community awareness via BSU programs
- Objectives:
- 1. Provide advertisements of University events through various media, including the website. (Completed/Ongoing)
- 2. Enhance the use of technology to facilitate business transactions for employees and patrons of BSU. (Ongoing)
- 3. Expand the means by which data about programs are made available to the community. (Completed /Ongoing)

## 2. Goals, Objectives and Metrics of Academic Plan

Strategic Goal 2 - Support growth by enhancing recruitment, access and retention efforts university-wide.

Academic Plan Objectives:

A. Enhance the effectiveness and efficiency of the enrollment services as it relates student recruitment and academic administration.

B. Establish and sustain a comprehensive undergraduate advisement system that integrates professional advisors and faculty in a seamless process to increase student success.

**Summary of DIT Strategic Actions regarding Information Transaction and Decision Support Systems** 

Summary of Sit Stategle Actions regarding information transaction and Secision Support Systems						
2010-2011	2011-2012	2012-2013	2013-2014	2014-2015		
-People Soft/Oracle -Transactions system -University website -User applications	-People Soft/Oracle -Transactions system -University website -User applications -PeopleSoft Finance -I-Strategy continuity	-People Soft/Oracle -Transactions system -University website -User applications -PeopleSoft Finance -CRM for Higher Education	-People Soft/Oracle -Transactions system -University website -User applications -PeopleSoft Finance -CRM for Higher Education -Work-flow management support	-People Soft/Oracle -Transactions system -University website -User applications -PeopleSoft Finance -CRM for Higher - Education -Work-flow management support -Human capital mgmt		
-PeopleSoft Finance upgrade -I-Strategy pilot -Degree audit module	-Pilot CRM for Higher Education -Pilot work-flow management	-Implement work-flow management	-Human capital mgmt	-Virtual university model		

## Major Deliverables of DIT during the Period 2010 to 2015

## 2011:

- Roll-Out PeopleSoft Finance
- Support the Registrar to implement the Degree Audit module of PS
- Pilot I-Strategy

## 2012:

- Implement I-Strategy as a continuous university business monitoring system
- Roll-out a CRM for Higher Education
- Assist development of work-flow support system for the whole campus (concept of paperless university processes)

#### 2013:

 Continue development of work-flow support system for the whole campus (concept of paperless university processes)

## 2014:

- Roll-out a Human Capital Management System
- Integrate Human Capital Management System to paperless university processes

#### 2015:

• Integrate all previous efforts in the concept of virtual university: equal service at local, national and international levels.

#### PART IV: DIRECT IT SERVICE TO FACULTY, STAFF AND STUDENTS

#### Introduction

DIT provides a number of direct services to clients related to laboratories, software and helpdesk. In the context of this report, the term "laboratory" will be applied to rooms equipped with computer equipment and peripherals fundamentally for the use of students. These services are also extended to "major clients" of DIT represented by the Library and the Housing Department. The university has also smart classrooms or technology-enhanced classrooms, which are administered entirely by Media Operations. However, DIT is in charge of supplying the networking connectivity and software to these rooms. This is a sub-optimal aspect of BSU organization that is assumed as a limiting condition in the present plan.

# What the Strategic Plan and Academic Development Plan say about direct IT service to faculty, staff and students

## 1. Goals and Objectives of Strategic Plan

**Smart Classrooms and Laboratories** 

- 9. Provide state-of-the-art instructional technology equipment and/or systems to support the teaching and learning process. (Ongoing)
- 10. Infuse and integrate technology in all aspects of teaching, learning, and administration. (Ongoing)
- 11. Provide convenient open computer laboratories for students. (Ongoing)

#### The Library and Dependences

Subgoal F: Provide students, faculty, and staff with convenient access to information and online library resources at any time and from anywhere.

Objectives:

- 1. Communicate the rapid, easy, and precise access to high-quality information for education and research at Bowie State University. (Ongoing)
- 2. Digitize selected BSU publications and important BSU archival materials and advocate for digitization of other materials of value to BSU. (In Progress)
- 3. Establish a digital projects library/laboratory with partners from industry, the government, BSU labs and centers, and others to address important problems in applied library technologies. (In Progress)
- 4. Create a worldwide BSU virtual library to extend the reach of the library's staff via live chats with reference librarians and videoconferencing to the desktop. (Not Begun)
- 5. Provide adequate funding to enhance the library collection to support student learning and faculty/staff scholarship.
- 6. Develop a needs assessment document for library archival space and environmental control and use the information to compete for grant support.

## 2. Goals, Objectives and Metrics of Academic Plan

Strategic Plan Goal 1 - Provide high quality and affordable academic programs and support services for students.

D. Reengineer the physical structure, budget administration and functionality of the Thurgood Marshall Library to align with the Association of College and Research Libraries physical space and collection/services standards and guidelines.

## Summary of DIT Strategic Actions regarding direct services to students, faculty and staff

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
-Campus helpdesk -Student digital labs -Instruction software - Service internal clients	-Campus helpdesk -Student digital labs -Instruction software - Service internal clients -Virtual labs	-Campus helpdesk -Student digital labs -Instruction software - Service internal clients -Virtual labs -Testing center	-Campus and auto- mated helpdesk -Student digital labs -Virtualized software -Internal clients -Virtual labs -Testing center -Biometric ID	-Campus and automated helpdesk -Student digital labs -Virtualized software -Internal clients -Virtual labs -Testing center 1 & 2 -Biometric ID
-Virtual lab pilot -Self-help site	-Automated help -Testing center 1 -Virtualized software	-Biometric ID -Virtualized software	-Testing center 2	-Virtual university model

#### Major Deliverables of DIT during the Period 2010 to 2015

#### 2011:

- Create and implant procedures manuals for key services of campus helpdesk, student digital labs, instruction-related software provision, and housing computing services
- Develop university self-help site

#### 2012:

- Support Academic Affairs in the creation of Campus Testing Center 1
- Introduce virtualized software applications

#### 2013:

- Introduce biometric ID system, to support security and testing services
- Consolidate virtualized software applications

#### 2014:

 Support Academic Affairs in the creation of Campus Testing Center 2 or expansion to Campus Testing Center 1

## 2015:

• Collaborate with other units in establishing the virtual university model.

#### PART V: MANAGING THE PLAN

## Organization

The Vice-President of Information Technology is the maximum executive authority concerning this Strategic Plan; any major modification or extension must be approved at this level. The Associate Vice-President of IT is in charge of coordinating the implementation of this plan and coordinating the application of KPIs, with collaboration of the leaders of different units of the division. Each unit head is responsible for the goals and key performance indicators related to its unit. The University Council on Information Technology is the advisory board to the Vice-President of Information Technology; any major change in the plan must be submitted to consideration of this board, which will produce

recommendation by the next scheduled meeting. Meetings are scheduled monthly, during the academic year.

## **Reviews and Decision-Making**

The following review events are established to assure that the general orientations of this plan and successive versions of it are taken into consideration for the planning, implementation and evaluation of DIT processes and activities:

- Annual Review: during the month of January of each year, DIT will do a thorough review of the goals
  and key performance indicators (KPI). A report will be presented to the UCIT and the University
  Cabinet.
- **Term Review:** at the end of the Spring and Fall terms, according to the university calendar, all units of DIT will do a review strategic goals and KPIs and report to the Associate Vice-President of IT. Changes to the goals or KPIs can be proposed during this review.
- **Amendments:** The Associate Vice-President will present a summary report of the plan to the VPIT, and suggest any corrective actions or changes derived from it.
- Performance Evaluation: During the annual performance evaluation of each employee of DIT, the Strategic Plan will be considered as general frame reference to determine accomplishments and merits, which are measured according to the individual Performance management Plan of each employee.