Information Resources Committee
Report to Florida Gulf Coast University’s Planning & Budget Committee
Spring, 2014

In September, 2013, the Chair of the Planning and Budget Council (PBC), Provost and Vice President for Academic Affairs, Dr. Ronald Toll, charged the Information Resources Committee (IRC) with the following action items:

**ACTION ITEM 1: Review specific recommendations of the Distance Learning Task Force to determine what technology issues should be addressed within the Strategic Plan for Distance Learning.**

Dr. Cathy Duff, Associate VP of Academic Affairs, addressed the IRC during its September 17, 2013 meeting as the Provost’s appointed leader of the Distance Learning Task Force. IRC members offered the following input for consideration in the formation of the task force:

- Address the need for increased level of faculty training in the delivery of distance learning courses – do not assume that the methodology for this is identical to that of traditional, face to face course instruction.
- Increase level of availability of dedicated distance learning course design instruction and assistance.
- Develop a university-wide process to determine and select those courses that are best suited for on-line delivery.
- Define the types of “distance learning” to be included in the Task Force’s report (on-line, remote-live synchronous, lecture capture for asynchronous streamed instruction, hybrid).
- Develop common tools to measure success of distance courses.

**IRC RECOMMENDATIONS ACTION ITEM 1:**

1. The Distance Learning Ad Hoc Task Force was formed in February, 2014. The IRC requests the opportunity to provide additional input to the task force on matters of information technology related to distance learning.
2. Request the opportunity to add additional items such as additional Banner resources concerning admissions, tracking and reporting of distance learning students.
ACTION ITEM 2: Review institutional Information Technology (IT) resources including technology capabilities, budgets, infrastructure and personnel deployment. This includes "platform-level" opinions.

The IRC conducted a broad study of the institutional Information Technology (IT) structure and associated resources currently in place at FGCU that focused on services, challenges, and where applicable, recommendations. The Committee agreed that identifying internal metrics and corresponding external benchmarks was necessary for the accurate identification and review of FGCU’s information technology capabilities, infrastructure, budgets, and personnel deployment. The metrics from the annual “Educause Core Data Service Metrics on IT Financials, Staffing and Services Report” (see Appendix G for the full report) provided the external benchmarks and served as a guide for gathering internal data. These Educause benchmarks, which are based on a “supported FTE” calculation that combines the student, faculty, and staff FTEs, are tied to 11 specific service domains as defined by Educause (see Appendix A). Because these 11 domains do not directly align with the department structure at FGCU, the IRC focused on the IT resources that are found throughout FGCU’s decentralized technology support structure. Emerging from this study are recommendations that serve to optimize the technology support and services offered to FGCU students, faculty and staff.

The Directors and Assistant Directors of each of the University’s primary technology units contributed all pertinent FGCU technology data used for this study:

- Mary Banks, Sven Hahues and Neal Snyder: Business Technology Services (BTS)
- Mario Bernardo: Library Technology Systems
- Pat O’Connor-Benson: Academic & Event Technology Services (AETS)

**IT Capabilities:**

An assessment of the Information Technology (IT) capabilities of FGCU’s technology units was conducted in which each technology area itemized their service and support capabilities. Although common functional naming may occur across technology units, the assessment revealed that each unit’s responsibility demands a unique set of capabilities and well-defined expertise in servicing and supporting FGCU’s varied IT needs. During this assessment the IRC identified distinctive capabilities within each of FGCU’s technology departments and these intricate and diverse IT capabilities are available in Appendix E.

Also, during this assessment the IRC validated concerns that have been held for a number of years - these distinctive capabilities and skills are not accurately reflected in associated position class titles and class codes. As an example, employees who respond to Help Desk calls for office computing are sharing identical class titles and class codes as those employees who engineer classroom teaching systems. The existing technology position classifications are based upon standards that were developed decades ago and do not include current technology fields, such as networking. The rigidity of this classification structure does not allow for the accurate identification of technology staff and their capabilities. Additional guidance from FGCU’s Human Resources Department is required to assess all technology
class titles so that these positions can be more accurately aligned with associated capabilities. In addition to these limitations, staff who hold identical technology class titles but work in departments outside of the core technology areas may not possess suitable skills or have the appropriate experiences that would qualify them to be promoted or laterally transferred into positions assigned the same class title. This has restricted professional growth within and between departments and has also acted as a strong impediment to the University’s mission of retaining talented and exemplary staff.

**IT Infrastructure:**
Infrastructure is defined as hardware (servers, computers, data centers), software (student information system, learning management system, customer relation management), and network (wireless, Internet connectivity, firewall). Although common infrastructure categories are supported across FGCU’s technology units, each unit is responsible for a distinct set of domains, servers, systems, and software titles. See Appendix C for the detailed analysis of the FGCU Infrastructure.

**IT Budgets:**

<table>
<thead>
<tr>
<th>IT Unit or Funding Source</th>
<th>Current Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic &amp; Event Technology</td>
<td>$848,121</td>
</tr>
<tr>
<td>Web, eLearning &amp; Publication</td>
<td>$484,132</td>
</tr>
<tr>
<td>Library Technology</td>
<td>$373,936</td>
</tr>
<tr>
<td>BTS - Business Applications</td>
<td>$3,139,282</td>
</tr>
<tr>
<td>BTS – Helpdesk and Network Services</td>
<td>$810,728</td>
</tr>
<tr>
<td>BTS – Telecommunications (Auxiliary Budget)</td>
<td>$801,957</td>
</tr>
<tr>
<td>End-of-year IT Funding (Allocations as of 5/1/2014)</td>
<td>$625,000</td>
</tr>
<tr>
<td>Tech Fee not included within Unit budgets</td>
<td>$552,400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$7,635,556</strong></td>
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As reported in the 2013 Educause Core Data Metrics Report for Financials, the median percentage of the institutional budget spent on IT for Public Doctoral Institutions is 3.2%. This level of spending translates to $921 per institutional FTE.

As a comparison to this benchmark, FGCU’s budget of $7,635,556 for IT staff salaries, hardware, software, and network infrastructure is approximately 3.75% of the University’s current total annual budget of $203,489,325. Based on FGCU’s supported or institutional FTE of 12,940, this represents an FGCU IT spending level of $590 per FTE.

**IT Personnel Deployment:**
The metrics from the annual “Educause Core Data Service (CDS) Metrics on IT Financials, Staffing and Services Report” provided the foundation for the analysis of FGCU’s technology staffing resources. Considering the well-regarded reputation of Educause reports and the over 750 higher education institutions participating this year in the extensive survey to measure the CDS’s IT metrics, the IRC replaced its previous IT staff benchmarking metrics with those identified in the CDS IT Metrics report.
Using the report’s findings related to IT staffing and Educause’s calculation for “IT Staff FTE : 1000 supported FTE” ratio as the benchmark, the IRC was able to compare FGCU’s IT personnel deployment to the measurements within the CDS IT Metrics report. To calculate the IT Staff FTE, each FGCU IT administrator submitted relevant data for all of their full time, OPS, and student worker employees. Each of the employee titles was then associated with one of the 11 “domains” as defined in Educause report. The following chart assigns the FGCU IT staff across the 11 Educause CDS domains. The chart also compares the FGCUs current “IT Staff FTE : 1000 supported FTE” ratio to the suggested ratio within the Educause benchmark calculations.

FGCU Technology Staff vs. Educause Benchmark
Spring, 2014

FGCUs IT Staffing FTE of 87.5 is 45% of the Educause benchmark of 194 FTEs. Compared to the Educause survey findings, all areas of FGCU technology support are understaffed.

In order to meet the FGCU Strategic Plan’s goal of academic excellence, the IRC believes that attention should be directed to improving the “IT staff-to-supported FTE” ratio. While it may appear that assistance is needed in areas with larger gaps, the IRC has determined that resources in some areas are not as critical to FGCU at this time. For example, the Communications Infrastructure domain shows...
FGCU has .25 staff as opposed to the Educause benchmarked staff level of 15. Due to the newer construction on FGCU’s campus, constant maintenance or replacement of network cabling is not required and therefore additional Communications Infrastructure staff is not a necessity at this time.

The current needs of the University require a focus on the following domains that are integral to the programs and initiatives that will provide for the efficient and effective delivery of courses and the security of critical data:

- Information Security (12.5% of benchmarked staff level)
- Educational Technology (64.7% of benchmarked staff level)
- Information Technology Support Services (54.5% of benchmarked staff level)
- Information Systems & Applications (47.1% of benchmarked staff level)

Finally, a clear analysis of those FGCU employees who work in areas outside of the core technology groups (BTS, AETS, WEPS, Library) but hold technology-related class titles and class codes posed a challenge to the Committee. These positions – identified in the “Other” domain in the Educause report – are difficult to assess as the Committee was unable to determine the exact responsibilities of each position. Educause addressed this challenge in its report:

“To make informed decisions about IT, institutional leaders need a full picture of IT, not just of the central IT organization. However, data on distributed IT remain elusive. CIOs [and/or tech administrators] are encouraged to work with institutional leadership, including HR, to develop practices for gathering more reliable information about distributed IT resources.”

Additional guidance from FGCU’s Human Resources Department will, therefore, be required next year to more accurately assess the scope of technology responsibilities that are held by these outlying staff members. Further, our review of these “Other” technology personnel also provided supporting evidence of FGCU’s obsolete class titles and class codes used by technology positions and the need to address changes required to allow for logical career paths and the retention of exemplary staff.

**IRC RECOMMENDATIONS ACTION ITEM 2:**

1. Improve the “technology staff:FTE” ratio by providing funding to hire new staff in the following key areas of support: Information Security, Educational Technology and Information Technology Support Services.

2. Request that Human Resources conduct a thorough study to redefine all FGCU technology class titles and associated class codes for greater accuracy and clarity of the current workforce and, in doing so, to provide for logical career paths that will facilitate the retention of talented and exemplary technology staff.

3. Participate as a respondent to the 2014 “Educause Core Data Service Metrics on IT Financials, Staffing and Services” so that FGCU’s technology metrics are included in the resulting report.

For details on FGCU Information Technology Resources, see Appendix E - Capabilities, Appendix C - Infrastructure, and Appendix H - Personnel. For 2013 “Educause Core Data Service Metrics on IT Financials, Staffing and Services Report”, see Appendix G.
ACTION ITEM 3: Review University policies related to FGCU’s Information Technology. Identify policy ‘overlaps’ and/or deficiencies and recommendations for improvement where required.

An IRC review of FGCU’s Information Technology (IT) policies and the result of the 2013-2014 operational audit revealed a policy deficiency in the following areas:

- Restricted data policy
- FTP server policy
- Mobile device usage
- Wireless device policy
- Data storage policy

IRC RECOMMENDATIONS ACTION ITEM 3:

1. FGCU technology departments will address the policy deficiency by collaborating on the development of policies.
2. FGCU technology departments will identify and implement a policy communication strategy.

ACTION ITEM 4: Update Strategic Plan for Technology and submit prioritized technology funding requests.

The 2010-2015 Strategic Plan for Technology (SPT) was reviewed and updated to accommodate changes for academic year 2013-2014. Listed below is a summary of accomplished goals and progress made on goals that cross AY boundaries or have a multi-year implementation. A summary of the Priority Technology Funding items and the progress made towards SPT action items are listed below.

Priority Technology Funding items completed or progress made:

- BTS has increased its Internet bandwidth utilizing its partnership with Florida LambdaRail.
- BTS Applications implemented Document Imaging for undergraduate admissions.
- BTS has complete programming necessary to implement Florida Virtual Campus Transient Student
- AETS - Upgraded teaching podium systems in all Whitaker Hall classrooms and in the Arts Complex Room 113.
- AETS - Replaced 150 student computers in classrooms located in Holmes Hall.
- AETS – Increased number of Adobe Connect licenses for multimedia integration and remote course delivery.
- AETS – Virtual Lab for Students expanded to allow for off-campus, remote access. (Presidential Goal).
• AETS – Virtual Lab for Faculty launched, providing for economical and efficient deployment and 24x7 access of course-related software tools (e.g., Adobe Acrobat Pro).
• AETS – 75% of all servers migrated to “virtual” environment (Presidential Goal.).
• LIB – Replaced 25 library study room and specialty lab computers.
• LIB – Replaced 40 library faculty, staff and service point computers.
• LIB – added 26 weekly OPS hours of technology support in library to match expanded library open hours.

**Strategic Plan for Technology action items completed or progress made:**

Goal 4: Services - Achieve academic excellence by providing the highest quality technology services, based upon the assessed needs of faculty, students, and staff.

**Business Technology Services:**

• Implemented document imaging for campus wide deployment, and started deployment with Undergraduate Admissions, which will allow the department to more efficiently process applications by handling the documents electronically.
• Increased its Internet bandwidth utilizing its partnership with Florida LambdaRail. By increasing FGCU’s Internet bandwidth, students, staff and faculty are able to access online resources in a timelier manner.
• Offered training classes, and trained over 210 staff members which gave the attendees a better understanding of the technology they are using on a day to day basis improving productivity and empowering the staff to experiment with new technology.
• Ran programs necessary for benefits open enrollment, fiscal year end closing, Financial Aid year packaging and disbursements, 2013 pay increases.
• Roll out of Secure PC to Administrative Services, which will keep computers running more consistently by removing the ability for unwanted software to get installed on the computer.

**Academic and Event Technology Services**

• Upgraded teaching podium systems in all Whitaker Hall classrooms and in the Arts Complex Room 113, allowing faculty and students a more technology integrated learning experience.
• Provided demonstrations to the colleges and the Teaching Learning and Assessment Center on the use of Virtual Labs and capturing live lectures.
• Phase I of “Lecture Capture Technology Project” has begun with evaluation of vendors and technology. This project will be piloted in select classrooms in the Fall of 2014, allowing faculty to use recorded class material for personal improvement, or to give students an “on demand” look at the material that was covered in class.
• Pending funding allocation, pilot “portable computer classroom” will be launched in the Fall 2014.
• Integration of mobile tablets into classroom teaching podium systems to be piloted by select faculty in Fall, 2014, allowing faculty to experiment with BOYD technology in the classrooms to support their vision of the use of technology in education.
Library

- Library hours have greatly increased this year to 108 per week—added 26 hours of weekly OPS technology support expanded for evening and weekend additional hours, allowing the lab to remain open longer so students can use it during the times they need to use it.
- Library has rolled out mobile solutions such as laptop, tablet and phone printing in the library labs, study room availability mobile notifications, reference lib chat or text, and improved mobile usability interfaces through an upgraded database locator system and catalog, and website, in order to better serve distance and mobile users.

Goal 5: Technology - Provide cutting edge and state of the art technology to the university, and position the university to respond wisely to emerging technology trends.

Business Technology Services:
- Completed programming necessary to implement Florida Virtual Campus Transient Student which allows students from other FSUS institutions to take classes at FGCU that count for their degrees at their home institution.
- Implemented the following systems/interfaces: Mystudentbody, Affordable Health Care, moving student 1098s to TouchNet, Campus Card, Attractive Items load into Banner.
- Upgraded the following systems: Banner Oracle databases, Banner Finance, TouchNet Banner connect, IntelleCheck, Banner Relationship Management, Blackboard, R25 room scheduling.
- Upgraded voicemail, including the visual voicemail functionality which allows voicemails to be converted to email so that they can be read instead of listened to.
- Installed a distributed antenna system in Osprey Hall to increase mobile phone reception for commercial cell phone providers as well as E-911 services. This allows students to use their mobile devices while in their residence.
- Upgraded 90 classroom phones to VoIP, removing old analog phone lines from the classrooms and implementing new phones in some locations that did not previously have phones.
- Upgraded and moved the call accounting system to a hosted solution, increasing availability of the system and reducing equipment need.
- Evaluated outdoor wireless mesh solutions that was going to cover the SOVI pool area. The mesh technology proved useful if a very large area should be covered but was not practical or beneficial enough to justify the cost.

Academic and Event Technology Services

- Replaced 150 student computers in classrooms located in Holmes Hall giving students access to better technology, and keeping the equipment in warranty.
- Increased number of Adobe Connect licenses for multimedia integration and remote course delivery which will allow faculty to teach more interactive courses by
leveraging the desktop sharing, live chat, and video conferencing functions of the software.

- Expanded the Virtual Lab for Students to allow for off-campus, remote access, giving students 24/7 access to the software they previously only had access to while they were on campus. This was a Presidential Goal.
- Virtual Lab for Faculty launched, providing for economical and efficient deployment and 24x7 access of course-related software tools (e.g., Adobe Acrobat Pro).
- Fully replaced the LMS with cloud based Canvas, bringing a plethora of new features to the online learning solution for teaching as well as taking classes. In addition, the SoftChalk online course authoring software is now cloud based.

Web e-Learning and Publication Services

- Working with AETS’s Server Administrators, Upgraded the Web CMS from RedDot 7.5 to OpenText 11.2 to enhance features, and install security updates.
- Working with AETS’s Server Administrators, Upgraded Checkbox (http://survey.fgcu.edu) to work with the latest browsers and add additional features.
- Launched http://Scholar.fgcu.edu, a self-service Web CMS for faculty, allowing faculty to post their own content that they can use as a supplement for their regular education techniques, as well as post content to share with colleagues across the world.
- Updated http://Blogs.fgcu.edu, a self-service Web CMS for FGCU departments, expanding the features available to the users.
- Continue to revise FGCU web templates to enhance the display of FGCU websites on mobile devices. WEP continues to review mobile technology for e-learning uses.

Library

- Replaced 25 library study room and specialty lab computers, giving students access to better technology, and keeping the equipment in warranty.
- Replaced 40 library faculty, staff and service point computers, ensuring that these systems function so that library staff can assist the patrons of the library without having to worry about the equipment breaking.
- The Library has implemented and collaborated on cloud based solutions such as Aleph eReserves, new statewide library discovery and lending systems, and continued to expand use of the Proquest ETD online electronic thesis system used by Graduate Studies.

Goal 6: Sustainability - The University’s commitment to environmental sustainability will be a factor in making decisions about technology use and support.

Business Technology Services:

- Donated obsolete computers to 503c charities and reducing e-waste. Donated 280 PCs in 2013 to Lee county based charities.
- Technology purchases are made to support LEEDS certification and energy star initiatives. All desktop PC and laptops are EPEAT gold rated and support the University’s mission to be environmentally sustainable.
Academic and Event Technology Services

- 75% of all academic servers migrated to virtual environment reducing equipment used, heat generated, and energy consumed. Pending budget allocation, remaining servers will be migrated by Fall, 2014 (Presidential Goal.)
- Donated 157 PCs to charities, reducing e-waste.

RECOMMENDATIONS ACTION ITEM 4:

In conclusion, the Information Resources Committee welcomed the opportunity to conduct this thorough review of the Action Items as charged by Dr. Toll and the PBC. Each committee member was an active participant in this study that, ultimately, served to affirm the vast technology skill set that is held by FGCU employees and the remarkable efficiency by which our University’s technology is collaboratively deployed, maintained and managed. It is evident that the technology interaction among all FGCU stakeholders - as facilitated by the IRC - has significantly contributed to this very successful technology alliance. See Appendix B for Strategic Plan for Technology; Appendix D for prioritized technology funding requests.

Respectfully submitted:
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Dawn Saco, BTS Computer Support Specialist – SAC Representative
Neal Snyder, Director, Telecommunications
Robert Vines, Director, Institutional Research and Analysis