

Information Technology Services Division



2016 Annual Report



Table of Contents

I.	CIO Summary	2
II.	ITSD Organizational Overview.....	3
a.	Mission and Goals	3
a.	Organizational Structure Change	4
III.	Unit Goals and Achieved Initiatives for AY 2015-2016	4
IV.	Significant Strengths and Major Achievements.....	7
a.	Teaching and Learning	7
b.	Technology Support: University Hall.....	8
c.	Research Computing	8
d.	Information Security	8
e.	Communications Infrastructure Services (Wi-Fi, VDI & and Internet Connectivity).....	9
f.	Applications and Project Management	9
g.	Service and Support Desk	10
h.	Training and Communication.....	11
i.	Classroom Support and Audio-Video Production	12
j.	Identity Management: Upgrade to 11G.....	12
V.	Beyond IT: Collaboration and Outreach	12
a.	Internal Partnerships	13
b.	Students Recognition	13
VI.	Comparative Technology Costs: UMass Boston and Peer Institutions.....	13
VII.	Moving Forward: Making ITSD better by Addressing Our Weaknesses	15
a.	ITSD 2016-2017 Strategic goals & Challenges.....	15
b.	Addressing ITSD Weaknesses: Improving Efficiency and effectiveness.....	16
VIII.	Appendixes.....	18
a.	ITSD 2015-2016 Expenditures.....	18
b.	ITSD Organizational Chart	20
c.	Graphical Representation of Services Provided Per IT Service Area	21
d.	2016 MISO Survey Highlights.....	33
e.	MISO survey Analysis: Importance and Satisfaction of IT Services.....	42
f.	Training and Professional Development.....	42
g.	Acknowledgements.....	43

I. CIO Summary

I want to take this opportunity to thank you for your support and collaboration during the 2015/2016 academic year. As a unit, the Information Technology Services Division (ITSD) at the University of Massachusetts Boston has implemented major initiatives during the year to improve the infrastructure, increasing our network capabilities and bandwidth, enhance support for teaching and learning, and research, and engage in outreach activities in support of the University's mission and strategic goals. Those initiatives, along with measurements of the effectiveness of our existing services, are articulated in the following pages.



My first year as your CIO started with interviews with each person in ITSD, individually or in small groups, as well as over 40 customer meetings with senior campus leaders and their teams to get an initial customer view of our services and your needs. The overriding themes from these meetings were collaboration and candor, appreciation for the dedicated folks who comprise ITSD, and that UMass Boston needs more, and better, IT services. I shared with everyone who would listen that *IT is all about people serving people*. While we are experts in technology and its application in enabling both individuals and teams across campus, the benefit of IT is realized through working with you and your teams on *your* priorities.

While there were many topics and requirements discussed, a number of themes emerged from the conversations which have allowed us to prioritize our work this year to maximize your benefit.

Wireless – Multiple issues regarding our wireless service were raised including signal coverage across campus, signal capacity in high traffic areas, and authentication issues which required people to reconnect as they moved around campus. In response, we are currently deploying a completely re-engineered wireless service specifically designed to solve the signal and capacity issues specific to the use profile of each indoor space on campus (excluding stairwells and restrooms). For example, high demand areas such as classrooms, the Campus Center, and Clarke will now have the capacity to properly serve those areas. Additionally, we have resolved the authentication issues. These improvements will be in place for the Fall 2016 start of classes and we will have staff at the ready to make any last minute adjustments as required. If you experience wireless issues, please help us help you by alerting our Service Desk (ITServiceDesk@umb.edu or 617.287.5220) to your wireless (or any) service issue.

Customer Support Services – Uniformly, the customers expressed their appreciation of the dedication and skills of the IT staff including the Service Desk and Desktop Support. That said, they find our support processes and tools to be particularly problematic. In response we initiated a project to move to a services management tool called ServiceNow. ServiceNow is state of the art in this domain and includes foundational functionality such as service ticket generation (including by our customers, directly) and management, Service Catalog, and Knowledge Management to allow our customers to directly query a solution database for information regarding a problem or service. We expect ServiceNow to be operational over the January intersession and it will evolve

significant over the coming years. Additionally, we have hired our Assistant Vice Provost for Client Services, a new position reporting to me. In addition to supporting our Client Services staff and the ServiceNow project, this executive will be responsible for evolving our support processes for all ITSD services focusing on value (and simplicity) for our customers.

Mobile Device Support – Our customers rightly pointed out that many of our services don't work well on mobile devices such as smartphones and tablets. This is particularly important to our student customers, many of whom carry mobile devices as their only technology. In response, we are in the process of modifying umb.edu for responsive design while simultaneously updating content and functionality. Responsive design modifies the delivery and content of umb.edu specifically for each type of mobile device resulting in a dramatically improved mobile user experience. Additionally, working with the UITs from the President's office, we have create 'mobile Wiser'. Wiser is the service our students, including those we're recruiting, to query information and make self-service transactions to manage their course administration (think drop/add).

In the following pages you'll find reference to these, and many other, service improvements. The one thing these services all have in common is that the measure of their success is how much ITSD has been able to enable each constituent achieve their objective.

Thank you, again, for welcoming me to campus over the past year and for working with all of ITSD to improve UMass Boston IT services for all. Should anyone reading this report want to connect with me directly, I would welcome your email, call, or visit.

Thank you, as well, to the talented, hard-working professionals who are ITSD. They are the ones who make the phrase *IT is all about people serving people* a reality at UMass Boston.

Sincerely,



Bob.Weir@umb.edu, 617-287-5410, Healy Library Lower Level

II. ITSD Organizational Overview

Change seems to be inevitable and ubiquitous. However, the primary goal for any change is to enable organizations to increase its effectiveness and competitiveness. As the technological backbone for the University of Massachusetts Boston, the Information Technology Services Division (ITSD) recognizes that in order to strengthening customer service, the division needs to adapt and adjust.

a. Mission and Goals

The primary goal of ITSD is to provide the best service and support to our faculty, students, and staff. With a little more than 100 dedicated staff and more than 60 student employees, we support a wide variety of services listed under five departments:

- Application Services
- Client Services
- Communications and Infrastructure Services
- Educational Technology and Learning Commons
- Research Computing

With the hiring of Robert Weir as new CIO in June 2015, his acumen of technology in both the business world and higher education is important in shifting ITSD to a service organization that will meet the needs of faculty, researchers, students, and staff. In order to foster a student-centered environment both inside and outside the classroom, ITSD adopts a collaborative approach in working with internal and external stakeholders in supporting the University strategic goals, providing faster and quicker service to the community, decrease response time, thus increasing customers' satisfaction.

a. Organizational Structure Change

During the 2016 fiscal year, the Information Technology Services Division (ITSD) had the opportunity to make significant changes in its organizational structure by creating 4 new positions - to improve client services to faculty, staff and students; implementing an ITIL based system ServiceNow that will assist with managing service requests, change management, knowledge management, service catalog and other service enhancing initiatives ; investing in Salesforce as the university's CRM system; and lastly managing the increasing number of applications IT is being asked to support. The retirement of two senior staff will allow us to shift resources where needed and provide additional support in the new classroom building – University Hall. However, several key positions remain to be filled – web developers, network engineers, telecom/VoIP engineers, instructional designer and Manager of Computer Lab Operations to name a few. One major organization change was the merger of two teams – Classroom Technology Support & AV Services. This allowed us to flatten the organizational structure and make ITSD more agile as a division. A copy of the new organizational chart is available in the appendices section.

III. Unit Goals and Achieved Initiatives for AY 2015-2016

With an increase in students' enrollment at UMass Boston, and the rise in the number of new facilities comes an increase in technological demands & needs. The following sections highlight the major initiatives accomplished by the five different departments within ITSD in support of UMass Boston five strategic goals:

Advance Student Success and Development

- IT Service Desk services were extended to evenings (9:00pm) and weekends (Saturday – 9:00am to Noon and Sunday 1:00pm to 4:00) during the semester so students, faculty and staff are able to get technical support. Access to systems (password) continues to be the most frequently asked question. Research on a complete "Self-Service" system to reset passwords is underway. This would help reduce the number of calls into the Service Desk but more importantly improve the level of service to our students.

- In Spring 2016 all the technology in the CLI (Center for Library Instruction) was upgraded – this included 24 computers, AV equipment, document camera & instructor podium. The CLI room is used primarily for library instruction/information literacy and related events, which is critical for student success.
- Several programs were implemented to promote student responsible use of technology including security awareness in topics such as phishing, password management, social media, & identity theft.
- Significant improvements were made in the pay for print system which allowed students to retrieve lost or poorly printed jobs. An additional printer was added on the 2nd floor of the library for ease of access. An area that students said needed improvement – a member of the computer labs was assigned to ensure that all printers were in good working order. This reduced printer down-time and hence improved student satisfaction. The FY 17 pay-for-print contract calls for the vendor to replace all the printers with newer models and install new printers in ISC and University Hall.
- Support for iPad initiatives started in CNHS – SAILS program and NCLEX examination preparation. The student success rate in getting certified has been an area of concern. Working closely with members of the CNHS department, we are assisting with the deployment and support of the iPad program.
- Based on the success of undergraduate admissions, ITSD is deploying Salesforce as the CRM (Constituent Relationship Manager) with a single student database spanning all aspects of UMass Boston is underway.

Enrich and Expand Academic Programs and Research

- Laying the foundation for Instructional Continuity – all courses were migrated to the cloud. This allows UMass Boston to customize our offerings without having to depend on other campuses.
- In Spring 2016 for the first time all courses (2,500+) listed in WISER had a presence in Blackboard. Training and outreach efforts have begun to get faculty to adopt this platform as a teaching tool.
- Two instructional designers assisted with the Davis Grant – Taskstream ePortfolio project. The integration with Blackboard, training and other support services were availed off.
- The instructional designers were assigned as Liaisons to various colleges and academic departments. This has become important as we roll out the Instructional Continuity program.
- The usage of the MGHPC (Massachusetts Green High-Performance Computing) was dramatically increased. Along with this additional ‘support services’ were also offered. This was achieved with the help of outreach and training.

Improve the Learning, Teaching, and Working Environment

- Several projects such as the enhancement to the umb.edu website, implementation of a new library system, course evaluation system & creation of a ‘service catalog’ and other modules within ServiceNow were started in FY 16 and are expected to be completed in FY 17.
- New technology to support and enhance teaching and learning were installed in University Hall – 9 echo360 systems, AV equipment to support active learning in the TEAL classrooms and the CLI room saw major upgrades.

- An upgrade to the document management system, Xythos was completed allowing documents to be stored securely using encryption.
- Installation of 170 computers as part of the “replace” program have been completed. Along with this, the Kace agent allowing remote access to manage computers was installed on over 2,000 workstations across the campus. IT staff were also trained on supporting Windows 10.
- The implementation of VoIP (Voice over IP), the next generation phone system which combines telephony and internet continued across campus with University Hall. Several related project such as “Contact Center” are dependent on the VoIP system and slated to be completed in FY 18.

Establish a Financial Resources Model Consistent with the University’s Vision Statement

- ITSD was fortunate to be granted a total of \$2.4 million for capital projects. However, as the funding was allocated in January, we had a short window (6 months) which we used to commence working on the following projects: (a) re-engineering wireless across campus, (b) a comprehensive solution for data storage, (c) ServiceNow – a tool to enhance service management, (d) Virtual Desktop Infrastructure & Thin Clients, (e) Classroom Technology in University Hall, (f) Replace UPS in data center & (g) Upgrade servers that support Research Computing.

Develop an Infrastructure Supportive of the Preceding Goals

- Enhanced network bandwidth by 400% - from 1gb to 5gb.
- The implementation of the Virtual Desktop Infrastructure (VDI) system went live in September 2015.
- McCormack & Wheatley buildings have been saturated with Wi-Fi; additional coverage in the campus center, Library 10th Floor and Clarke Athletics was completed.
- Implemented Apple’s MDM solution to manage the iPad in the Classroom project.
- The target of installing Kace on 2,000 computers was reached.
- Coordinated the integration of technology for the ISC. This includes, wired, wireless, telecommunications, AV, security systems, and support services. Today over 32% of rooms have been upgraded to digital.
- Fuze video streaming service continues to be a success and is used by many across campus -- CNHS as part of their online program, College of Management for meetings and webinars, etc.
- Provided a full high availability, secure environment for campus Microsoft SQL databases in support of campus based software applications.
- The hardware and implementation services have been purchased for the upgrade to the Xythos systems. Anticipated completion is by Fall 2016.
- Investment in the software & licenses for ServiceNow – an ITIL based service solution has been completed. Implementation to commence in early FY 17.
- The migration from R25 to Live25 was delayed for several reasons – changes in the customer service center, changes in the way the campus manage events, new facilities such as ISC and Bayside coming onboard have pushed back the migration to January 2016.

IV. Significant Strengths and Major Achievements

As a unit, ITSD thrives to respond to our customers' needs and provide them with the best and faster services possible. This section outlines the technological services ITSD provided to the UMB community in order to respond to their needs and enhance services for the UMB community:

a. Teaching and Learning

In response to the prior winter's series of snow emergencies, the eLearning and Instructional Support team (eLIS) undertook a multipart instructional continuity effort. A "Winterize Your Course" event was held in December along with a new Learning Continuity blog, a Quick Start Guide to Blackboard, and a promotional video. In January 2016, all courses were migrated to Blackboard's managed hosting service allowing us to manage our instance of Blackboard independently of other campuses. We formed a College Liaison program to improve communication between instructional designers and College Deans, Department Heads, and Program Directors. In the Spring, we began creating a Blackboard course shell for every course in Wiser so that faculty could more readily make their courses "hybrid" without special processing by the Registrar's office. Although only 1,127 web-enhanced courses were requested in Spring 2016, 3,488 course shells were created (also 358 online courses). In an effort to expand Blackboard usage, the Associate CIO, the eLIS manager, and the College Liaison met with the leadership of each college to promote the use of Blackboard as well as our consulting and training services.

Working in collaboration with Office for Faculty Development, Center for Innovative Teaching, CAPS and University Libraries, we hosted the 10th annual Conference on Teaching and Learning. Faculty were recognized and awards given for their innovative methods in teaching. Instructional designers participated in the rollout of the Taskstream ePortfolio system to General Education faculty and courses under a Davis Grant. We offered faculty the option of Reef Polling, a new type of iClicker software which uses a smartphone with local Wi-Fi rather than a traditional clicker. We began piloting Blackboard Collaborate Ultra, a new LMS-integrated web-conferencing system which is Java-free, and browser-based and will enable us to expand web-conferencing use to web-enhanced courses. VoiceThread, with its many enhancements, continues to grow in popularity. We held the first in a series of faculty events in May 2016 and now have 274 faculty members using this software in their classrooms and in online courses versus 129 on June 2015. Instructional designers are testing the latest adaptive courseware, with both Cogbooks and SmartSparrow already being piloted. Instructional designers built the first non-credit badge program of any UMass campus, the Project Risk Management badge, offered through CAPS and were instrumental in designing and implementing an innovative fully online Global Health course using competency-based education (CBE) pedagogies.

From an innovation perspective, a MakerSpace Lab which allows faculty, students and staff to collaborate and create 3D objects was opened. With limited resources, 3 printers, a 3d scanner and a couple of computers were purchased. Efforts to collaborate with the student robotics club and other entities across campus have also begun. Training courses have also been designed and have started being offered as part of Summer Camp.

The eLearning and Instructional Support staff are very self-motivated and are looking to move forward adopting new technologies to enhance teaching and learning. With new technologies and projects moving forward, the need to backfill the open instructional designer position is critical. This would allow us to hire staff with skills in educational technology, including 3d printing and integrating new services within the curriculum.

b. Technology Support: University Hall

In January 2016, UMass Boston opened its newest building – University Hall for classes. The infrastructure in this building is state of the art and designed to meet the needs of faculty, students and staff for years to come. The building is saturated with Category 6A cabling for all data jacks which supports the wired, wireless, VoIP (Voice over IP) phones, security card access system and critical building systems. The wireless coverage has been saturated throughout the classrooms and meeting spaces as well as social and open areas.

University Hall has 26 General use classrooms, including a Technology Enhanced Active Learning Classroom. The building also contains 16 Science Labs, 14 specialized rooms for Performing Arts, a Sound Recording Room, practice studios for dance and music, a Recital Hall and a reconfigurable Theater. All of the spaces are equipped with state of the art AV Technology which can be utilized for teaching and learning. All of the large classrooms are also equipped with Echo 360 Classroom Capture systems and iClicker technology. The building also has digital signage TV Monitors on the first and second floors.

c. Research Computing

The Research Computing department has continued to train new users for both local and Massachusetts Green High Performance Computing Center (MGHPCC) shared compute resources, more than doubling our use of the MGHPCC. We have significantly expanded our local Graphic Processing Unit (GPU) cluster, from 60 to 144 GPUs, and trained additional lab groups on the system. Local storage administered by the Research Computing group was increased by 40TB during FY16. ITSD installed and configured a more secure implementation of the survey and project management tool, REDCap, for researchers working with confidential survey data. The Research Computing team also expanded capacity for staging on our backup system by 40 TB. We provide 600 research consultations to more than 130 departments. The investment in new qualitative software apps – MAXQDA and Atlas.ti were completed in FY 16 thereby giving our faculty the additional tools needed for research.

d. Information Security

The information security team continues to work closely with the UMass System Sub Committee on Information Security, which is represented by ISO's across the five UMass campuses. The information security engineers continue to operate the McAfee ePO anti-malware server with newly added support to virtual machines underway. Security has an ongoing Security Education Training and Awareness campaign increasing significantly its education activities during the month of October (Cybersecurity Month). A partial internal firewall software upgrade was done re-architecting wireless delivery to wireless controllers and access points in the process which solved numerous problems that ailed our wireless service offering.

e. Communications Infrastructure Services (Wi-Fi, VDI & Internet Connectivity)

The Communications and Infrastructure Services (CIS) group planned and expanded wireless accessibility in order to provide full coverage, and improve wireless services in those areas identified as high user traffic. With assistance from external vendors and VARs (Extreme Networks and Blue Spruce), familiar with the challenges and uncertainties associated with wireless, managed the project implementation and advised on future placement of Wireless Access Points (WAP). As part of this plan, the university's back-end infrastructure core network equipment was upgraded to support next generation WAP and network switches and to accommodate the expansion in the Science building. CIS staff replaced over 400 wireless access points (Model 39xx) and added 75 new units. The scope and complexity of the project brought multiple teams together so as to offer the students, faculty and staff a better experience using Wi-Fi. One of the challenges faced is the growing number of students coming onto campus and the additional devices they carry with them – which lays a greater burden on the network speed and coverage. Also, balancing security and open access is a fine line that the network and security engineers work on.

An important step within the Data Center Optimization (DCO) plan is the ongoing efforts to virtualize hardware-based servers across campus. We are in the process of deploying another “egress” point via Mt. Vernon St. to failover network traffic in case of an accidental cutoff from Morrissey Boulevard. That was a key step to provide business continuity for our in-house data center. CIS engaged the engineers from the president’s office to start building the conduits to facilitate the DCO project. Phase one of the unified telecommunications project, namely the backend server and infrastructure foundation of VoIP, has been accomplished, and phase two, which encompasses the roll-out of end points VoIP phones is ongoing. Wireless services were saturated in both Wheatley and McCormack, and the foundation to offer VDI was laid. In addition, CIS played a critical role in the opening of the new Integrated Science Center and planning for the new academic building, as well as the relocation of the utility corridor.

Picking up in the virtualization trend, the network engineers working closely with Focus Technologies built the infrastructure to support desktop virtualization, allowing for the first time applications offered in the labs to be accessed from off-campus. For a commuter campus such as ours, this off-campus service is critical for the success of our student.

f. Applications and Project Management

ITSD supported the expansion of the document imaging system now in use by the Provost's and Chancellor's offices, and the ITSD applications department. ITSD also provided training on BuyWays, WISER Grey Heller responsive, PeopleSoft, Security, Expression Engine Content Management, Document Imaging, and completed the implementation of the Site Improve Web Governance system across the campus, training over 100 new web editors, which now includes PDF Checker capabilities and ADA Compliancy checking. All Web Forms were assessed for ADA Compliancy and reworked as needed. ITSD continued development and implementation of “Engage” for The Office of Community Partnerships, the “Incident and Accident” application for the use of Public Safety, EH&S, and HR, the “Employee Exit” process and web form was reworked and has gone live. In addition, the "Records Retention" web application was enhanced and went live across the campus for A & F and the retainage of all paper

documents, meeting the State of Massachusetts schedules and working with the Commonwealth Archives and Iron Mountain.

Working closely with the Communications Office, ITSD commenced the redesign of the campus website, moving toward a device-agnostic, mobile friendly, responsive design, and a project which will continue throughout FY17 and likely into FY18. A fully robust disaster recovery architecture was developed to ensure availability of the web site should a disaster occur, including daily backups, additional server environments and on site storage as well as offsite storage, we continue to host our environment at Arcustech on fully redundant failover server architectures. ITSD continues to enhance, upgrade, and support the RAVE and AlertUS emergency notification systems and the implementation of the Alert Beacons, and supports the software and database architecture for our Document Management and collaboration software Xythos and completed an annual upgrade, in addition to the testing of the AES256 encryption capability.

ITSD selected Service Now to provide a fully functional ITIL Service Management Suite, the project has commenced, to be implemented in FY17, providing additional modules and replacing the current, antiquated HEAT ticketing system. ITSD, along with our sister campus's acquired a campus wide survey tool Qualtrics. We completed the RFP and selection of Scantron Campus Climate to replace Scantron manual bubble sheets for course evaluations along with Dartmouth. ITSD has assisted the Library in the acquisition and technical oversight for the recently procured ALMA /Primo system, with the project to commence in FY17, replacing the Voyager system. We have implemented the echoSign application for online electronic signatures for HR, Contracts & Compliance, ITSD, and A & F.

We upgraded the Quali Business Continuity Planning system and have commenced review of all pre-existing data and will continue to mature and populate the plan throughout FY17. In addition, we have begun a formalized DRP Disaster Recovery Plan, to be completed by December 2016.

g. Service and Support Desk

As the front door in providing services to the University community, the IT Service Desk responded to almost 34,464 tickets with September being the busiest month with the highest number of calls recorded as shown in the table. The IT Service Desk has seen increasing call volume for several years and fiscal year 2015-16 set an all-time record due possibly to increased enrollment, enhanced systems and services, and the increasing number of applications and items to support. An upgrade to the Identity Management System to 11G required that all users have ONE email id. This impacted about 700 faculty, staff and students. The Service Desk played a critical role in working with each of the patrons, assisting them along the way to consolidate accounts and ensuring that they can login and access all their content.

IT Service Desk services were extended to evenings (9:00pm) and weekends (Saturday – 9:00am to Noon and Sunday 1:00pm to 4:00) during the semester so students, faculty and staff are able to get technical support. We responded to 745 after hours support requests. The latest customer satisfaction survey from faculty, students and staff were above 90% (Satisfied + somewhat satisfied]

In addition, the Desktop team worked on and closed 4,831 tickets. That is an average of 402 tickets per month. We successfully deployed and distributed 170 computers as part of the “annual replace” program. Along with this, the Kace agent allowing remote access to manage computers was installed on over 2,000 workstations across the campus. IT staff were also trained on supporting Windows 10 and starting July 1, 2016 will support this latest version.

Monthly IT Service Desk Calls	
MONTH	# OF CALLS
Jul 2015	2,643
Aug 2015	3,662
Sept 2015	4,715
Oct 2015	2,433
Nov 2015	1,925
Dec 2015	2,074
Jan 2016	3,439
Feb 2016	2,686
Mar 2016	2,914
Apr 2016	2,479
May 2016	2,736
June 2016	2758

h. Training and Communication

We continue to offer marketing and communication assistance to many groups in IT and within UMass Boston. When IT wants to promote an event, launch a new service, or improve community education on an IT-related topic, the Communications and Marketing Team in the Instructional Technology Center (ITC) helps in creating a strategy and designs print and digital content. Some of the big projects worked on this year were a series of fliers and ads for Cyber Security Awareness Month, a new IT Services Quick Reference guide sent to all faculty and staff on campus, organization and promotion of an event for language faculty on an eLearning tool called VoiceThread, creation of posters and a full program booklet for the University Conference on Teaching Learning and Technology, the publicity of new upgrades, including delivery via mobile devices, to the student WISER system, promoting awareness of IT's Wi-Fi Under Construction project, and much more. We also offer an annual Tech Summer Camp training series, a new event created in the Fall 2015 with training and discussion all summer throughout October on technology topics for staff on campus.

The Training, Communications, and Marketing department was created in 2014 and in a short period have accomplished a great deal. We have offered over 750 training sessions in various disciplines including instructional support, PeopleSoft and office productivity applications.

The Social Media marketing plan has also been developed and is scheduled to be implemented in the coming months. Productivity, creativity, and customer service have been the hallmark of this young self-motivated team. Adding additional staff will enhance productivity across all areas.

i. Classroom Support and Audio-Video Production

The merger of Classroom Technology Support and Audio Visual Services which began in FY 15 and completed in FY 16, allows us to expand and improve our services to faculty and students. The synergies between the two departments allow us to offer a true one stop support to our faculty on the technology available in the classrooms.

We added 14 additional Echo360 Classroom Capture appliances, including 9 in University Hall. We commissioned the AV Systems in 55 new teaching spaces in University Hall and plan to have all of the new classrooms, labs and teaching spaces open for Fall 2016. We provided project management and AV support for 10 AV Installations for various UMass Boston Academic departments, including 4 new classrooms at Bayside for CAPS. We expanded our UMass Boston TV Digital Signage System to University Hall and Bayside buildings. We provided AV Support for all major university events including IDEAS Boston, Convocation, and Commencement to name a few.

Additionally there is a *MakerSpace Lab* located on the 3rd floor of Science in room 34, used in conjunction with faculty teaching in the SFE is an area where faculty, students and staff from different disciplines can come together to create, collaborate & learn. The open-access, self-service lab today contains two entry level 3d printers, one professional 3d printer and one 3d hand-held scanner. Two computers – one iMac and one Dell Optiplex with the software needed allow faculty, students and staff to create and edit images that can be created on these 3d printers.

We encourage students and the clubs as well as faculty from all disciplines, artists, researchers, STEM subject to encourage their students to visit the lab and begin collaborating and innovating. Additional resources and services that faculty, students, staff and community members can use, such as Laser Cutters for creating models & prototyping & Plotters to create posters, decals, signs; soldering equipment; etc. hope to be added in the coming months.

j. Identity Management: Upgrade to 11G

In June 2016, as part of a University-wide upgrade to the systems that manage your account in various applications (i.e. Wisser, Blackboard, email), the Boston campus will be introducing a single email account for users. Faculty and staff who take classes at UMass Boston will no longer be required to have two email accounts – your existing account will provide you the access to all the web services you need. Whether you are a student, staff or faculty you will only need one email account to access all needed UMass Boston applications. Having two separate email accounts, with different passwords and different access capabilities can be confusing and frustrating for many users. By issuing one email account per person, we will improve security, reduce costs, and make your life simpler.

V. Beyond IT: Collaboration and Outreach

ITSD has been active in developing partnerships and collaborate with other UMass Boston academic and administrative departments in giving students the opportunity to learn new skills in the field of technology.

a. Internal Partnerships

ITSD worked closely with the Healey library in providing project management and application support for a new library information system. Much credit to Enrollment Management team for working closely and assisting ITSD to support the Salesforce Constituent Relationship Management (CRM) implementation and create a new enterprise architecture plan. We implemented the new responsive WISER (Grey Heller) student center app, allowing access via mobile devices to a responsive front-end for students the upcoming academic year, and presented at student orientations. ITSD remains engaged with a number of Internal Audit needs, including the data center, HR, and Finance Audits. Working in tandem with our sister campus's and UITS/President's Office, we have facilitated the Identity Management 11G upgrade, which will take place in early FY17 leading to a single e-mail identity across the campus for all. We commenced the design and requirements gathering for a student portal (although due to funding this project is currently temporarily on hold).

b. Students Recognition

The CIO's Office recognized all students' workers in IT this year during National Student Employment Week, April 10 -16, 2016. During this week, staff was asked to wear buttons in support of student employees in IT. The CIO hosted a student luncheon to recognize their contributions and presented all students with a Certificate of Appreciation. Students play a critical role in supporting the services we provide – from staffing the computer labs, providing tier 1 support at the service desk and assisting faculty with questions in using the technology in the classrooms. Eight students were selected as leaders within the different departments, these students are: Andy Quach (Client Services), Margaret Salas (Application Services), Earl Gambino (Computer Labs), Valerie Vargas (Classroom Technology), Adriana Armano (Telecommunications), Ayush Vyas (Classroom Technology), Tsenquun Enkhtur (Communications, Training and Marketing), and Jaclyn DeChiro (eLearning & Instructional Support).

Each of these students received a Certificate of Appreciation, the second IT Student Leadership Award, along with the letter that was written about them in support of their nomination for the award by managers from various units in IT.

VI. Comparative Technology Costs: UMass Boston and Peer Institutions

The University of Massachusetts Boston has identified eight institutions¹ as peers for comparison purposes and used as benchmarks in the UMass President's Office Performance Measurement System (PMS). **IPEDS**² participants such as the University of Missouri Kansas City (UMKC), one of UMass Boston's peer institutions, uses a combination of three functional expenses for comparison purposes to estimate IT costs on a FTE student basis. A description of these expenses is presented in the table below:

¹ https://www.umb.edu/oirap/facts/peer_institutions_and_urban_coalitions

² <http://nces.ed.gov/ipeds/datacenter/>

Type of Expense	Description
Academic Support	Functional expense category that includes expenses of activities and services that support the institution's primary missions of instruction, research and public service
Students services	Functional expense category that includes expenses for admissions, registrar activities and activities whose primary purpose is to contribute to students emotional and physical well-being and to their intellectual, cultural and social development outside the context of the formal instructional program
Institutional Support	Functional expense category that includes expenses for the day-to-day operational support of the institution

However, using IPED data, there is no way to disaggregate the data and determine for sure the total amount allocated to technology per student FTE. This approach of combining the three functional expenses mentioned above is used for comparison purposes only. According to the table below, UMass Boston IT costs estimation per student FTE is the same as the University of Nevada Reno, approximately \$8,772, taking a 4th position compared to its eight peers' institutions.

UMass Boston Technology Costs Estimation Per Student FTE Compared to Peers' Institutions					
School (Ranking*)	Total Students Enrollment	Academic Support Expenses	Student Services Expenses	Institutional Support Expenses	Information Technology Expenses³
University of Maryland, Baltimore County (320)	13,839	\$9,902	\$877	\$12,623	\$23,402
University of Louisville (494)	20,592	\$5,610	\$1,746	\$3,553	\$10,909
University of Illinois at Chicago (340)	25,747	\$5,950	\$2,073	\$1,970	\$9,993
University of Massachusetts Lowell (454)	17,191	\$2,524	\$2,613	\$4,178	\$9,315
UMass Boston (525)	17,030	\$2,596	\$2,046	\$4,130	\$8,772
Univ. of Nevada, Reno (445)	16,681	\$2,941	\$2,841	\$2,337	\$8,119
University of Memphis	20,379	\$1,963	\$3,878	\$2,066	\$7,907
Univ of Missouri—Kansas City (599)	16,685	\$3,131	\$1,428	\$3,007	\$7,566
Cleveland State University (649)	15,038	\$2,059	\$1,613	\$2,533	\$6,205

³ IT expenses is total category of Academic Support, Student Services and Institutional expenses – 2014 IPEDS Data.

* Forbes – 2016 America’s Top Colleges

Based on the ranking by Forbes – 2016 America’s Top Colleges, UMass Boston ranks towards the bottom, with only Cleveland State University and University of Missouri – Kansas City having lower rankings.

University of Maryland Baltimore County (UMBC) ranks the best among our peers; however it has the highest per student expenditure on IT (\$23,402 vs UMB @ \$8,772). Although UMBC IT has a smaller staff (about 25% fewer staff (73) as compared to ours (104)), they have over 40 IT staff managing technology directly in departments. They use an equal number of student employees as us – about 70. Their investment in infrastructure such as virtualization, cloud computing, portal systems, etc. make them a leader. Their efforts to collect metrics and analyze the results comparing them with peer and across all institutions allows them to make informed decisions. A strong emphasis on planning for all areas of IT, including an overarching strategic plan has allowed UMBC focus its efforts on enhancing services to faculty, students and staff. In addition, UMBC supports key systems such as a ‘Service Catalog’, a student portal, a single ticketing system and students in residential halls.

VII. Moving Forward: Making ITSD better by Addressing Our Weaknesses

As we move into the 2016-2017 fiscal year, the focus of ITSD would be on improving our technological services, increasing wireless performance and availability, providing project management oversight and application support to other UMB departments.

a. ITSD 2016-2017 Strategic goals & Challenges

As a unit, ITSD has continually embedded in its plans activities to support the University’s strategic goals and will continue to do so. Here are some of the activities ITSD aims to embark in 2016-2017:

UMASS BOSTON STRATEGIC GOALS	2016-2017 ITSD GOALS
<i>Advance Student Success And Development</i>	<ul style="list-style-type: none"> ➤ Develop a Student Portal ➤ Define and publish a support catalogue for all IT services ➤ Extend IT services and support to weekend and evening hours ➤ Events/Outreach Efforts: Vendor demos, training ➤ Work with Systems Team to offer One-Drive service to UMB users ➤ Offer support using social media & chat ➤ Security Awareness Month October
<i>Enrich And Expand Academic Programs And Research</i>	<ul style="list-style-type: none"> ➤ Develop a training system to increase adoption of Blackboard and make it easier for Faculty to adopt Blackboard. Presently about 40% of all courses use Blackboard ➤ Support migration to hosted environment – All courses – August 31, 2015

<i>Improve The Learning, Teaching, And Working Environment</i>	➤ Support TaskStream ePortfolio system as part of the Davis Grant
	➤ Provide project oversight, training, upgrade, and technical support for enterprise applications used by the campus such as R25 migration to 25Live. Xythos Document Management, Identity Management (IdM), Code42 Crashplan, MS SQL Server 2012, Document Imaging (DI), Expression Engine CMS, OneForm business process reengineering, RAVE and AlertUS Emergency Management, AlertUs Beacons project, AES256 encryption module, Titanium and Point & Click, EZProxy System using Shibboleth, etc.
<i>Establish A Financial Resources Model Consistent With The University's Vision Statement</i>	➤ Increase professional development across the board
	➤ Fill open positions (Senior Web Developer, Instructional Support Manager, Instructional Designer, etc.)
	➤ Launch new HR website
	➤ Engage Office of Community Partnerships web application, phases II and III
	➤ Commence intranet planning
<i>Develop An Infrastructure Supportive Of The Preceding Goals</i>	➤ Increase and enhance Wireless Coverage
	➤ Installation and configuration of Checkpoint Firewall/VPN/Packet Shaper appliance, Juniper border routers
	➤ Implementation of a Contact or Call Center for Enrollment Management and Service Desk
	➤ Implementation of an automated call routing system at the switchboard
	➤ Selection and implementation of a NAC (Network Access Control) System

b. Addressing ITSD Weaknesses: Improving Efficiency and effectiveness

In order to move forward and improve our services, ITSD needs to develop an action plan that will support our customers and foster a more effective and responsive ecosystem in IT. ITSD will continue to collaborate with other internal and external entities such as the Healey Library, UITs, and other universities among the UMass system in order to improve value added services, obtain volume pricing for new applications and software to name a few. Some areas of concerns to be addressed are:

- **Planning:** Some of our peer institutions spend considerable time in creating a strategic plan for IT as well as for each department which tie in together. Getting buy-in from members of the staff is critical in ensuring that everyone is working towards the same goal, thereby making the organization more efficient.
- **Business Processes:** In order to eliminate redundancy and improve customers' satisfaction, ITSD will need to streamline its processes to decrease wait time and add values to technological services.
- **Difficulty attracting qualified candidates:** Work with Human Resources and the Office of Diversity and Inclusion (ODI) to improve the turnaround time of the search and hiring process and associate job descriptions to a higher salary to attract the best candidates. Alternative solutions such as

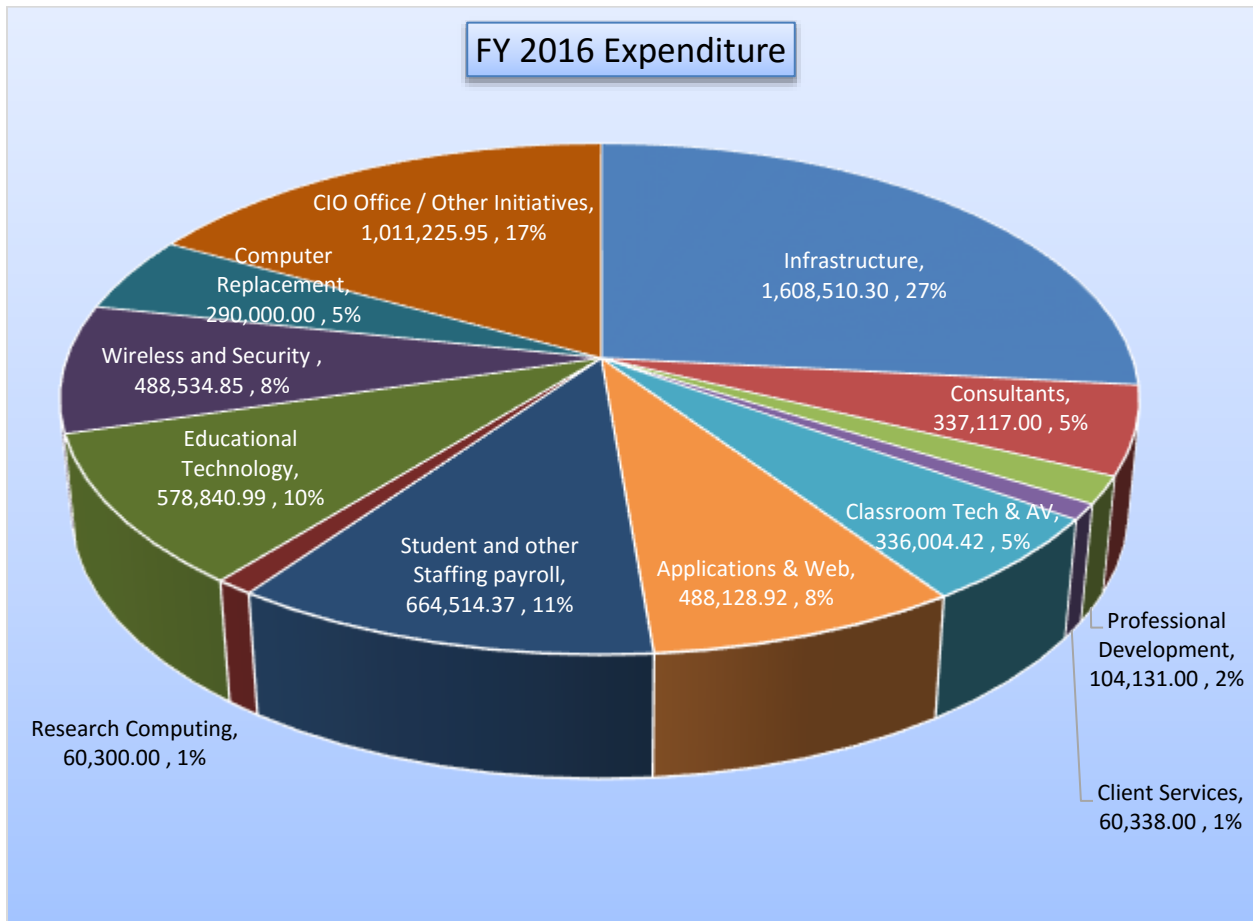
promoting from within and training the staff or hiring students directly out of school may offer a temporary solution to an ever growing problem.

- **Professional Development:** Increase internal growth for professional staff and promote staff within IT and the University in order to promote job enrichment and employees' satisfaction and engagement. By re-aligning some of its staff to better utilize their skill sets ITSD can improve customer service and satisfaction. Also, ITSD needs to provide professional development for its staff to keep up with the changing technology and environment. Rather than relying on services from consultants, there is a need to invest in our staff and empower them with new knowledge and expertise.
- **Project Management office (PMO):** the process of creating a PMO has begun. Staffing the office will be critical to ensure that projects are completed on-time and within budget, thereby allowing IT to use our scarce human and capital resources to its optimum.

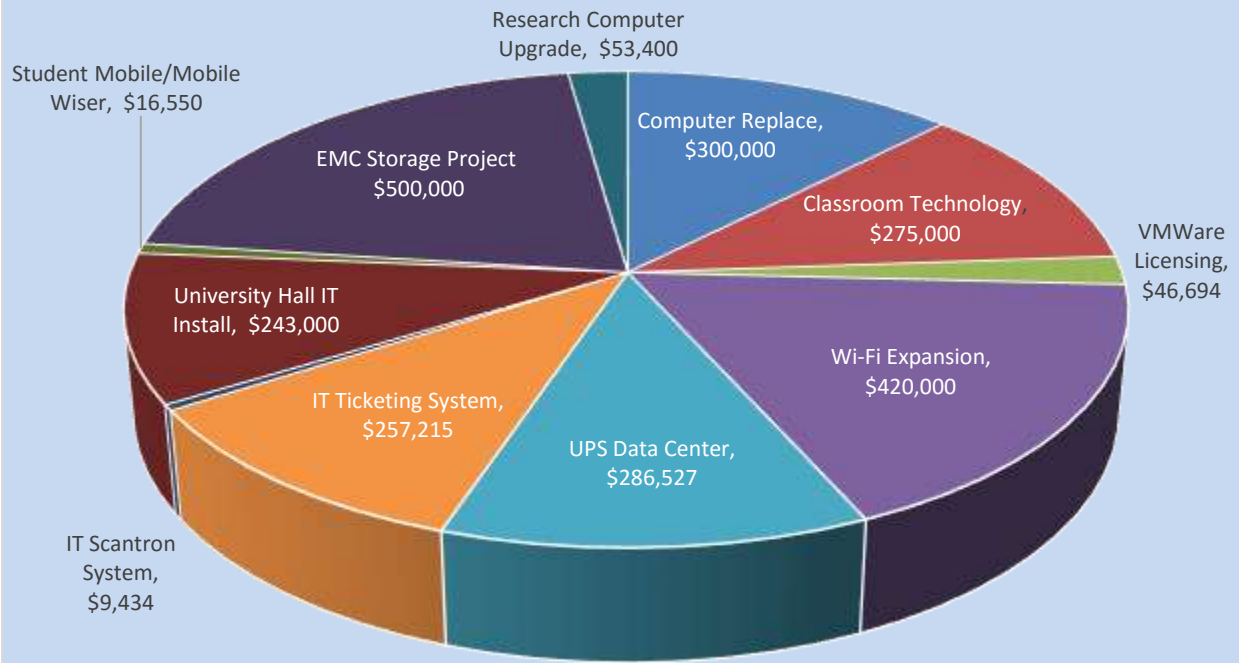
VIII. Appendixes

a. ITSD 2015-2016 Expenditures

The 2015-2016 operating budget for ITSD excluding salary staff was approximately \$6,027,645 as displayed in the graph below. The 'Other' category include: Telephone recharge, copy, mailing, office supplies, and small equipment (peripherals).



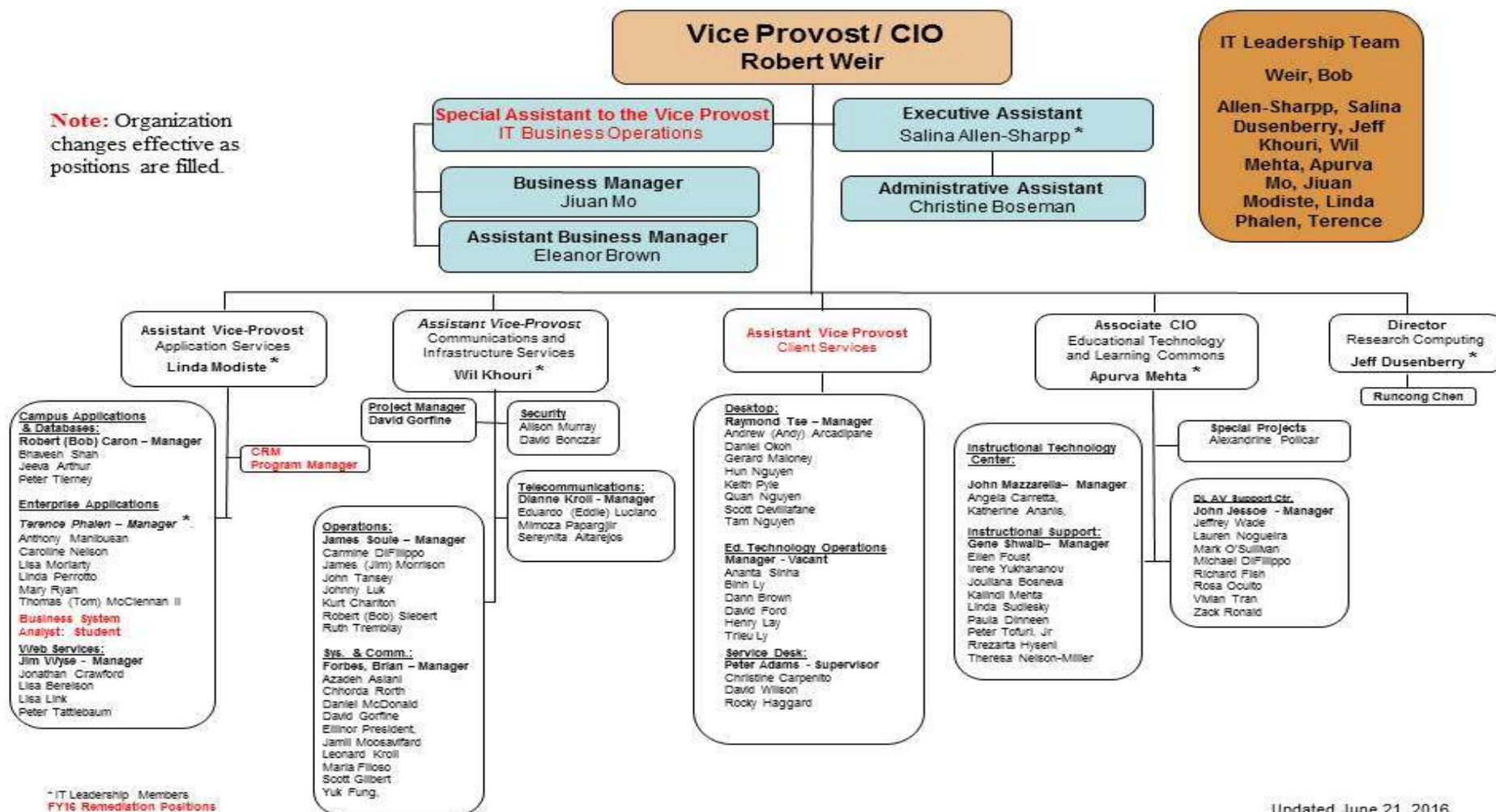
FY 2016 - Major Projects - \$2,407,820



b. ITSD Organizational Chart

Information Technology - June 2016

Note: Organization changes effective as positions are filled.



* IT Leadership Members
FY16 Remediation Positions

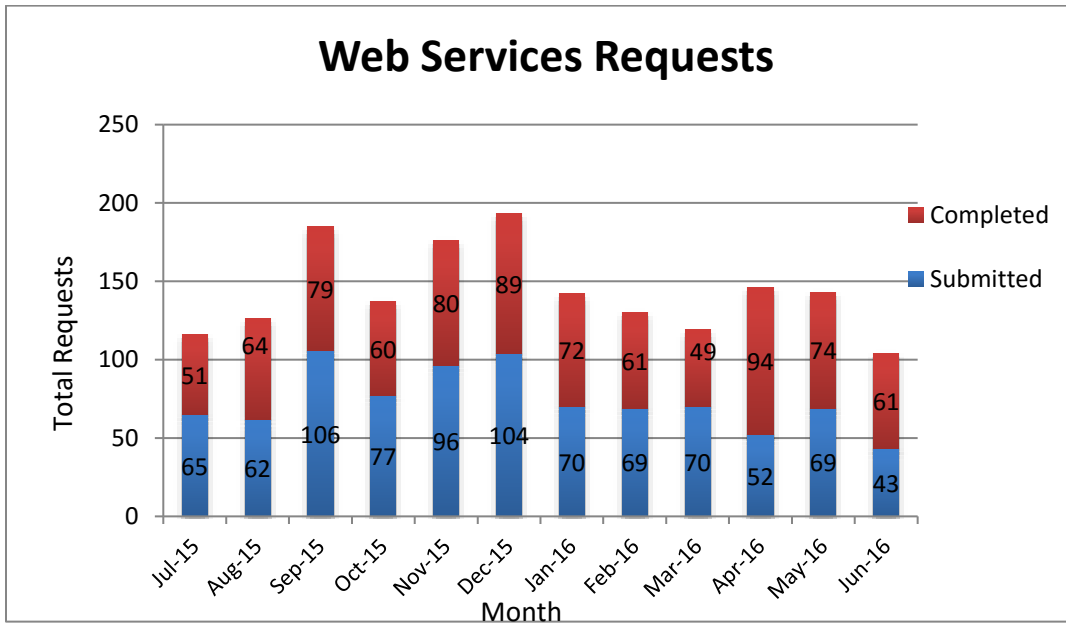
Updated June 21, 2016

c. Graphical Representation of Services Provided Per IT Service Area

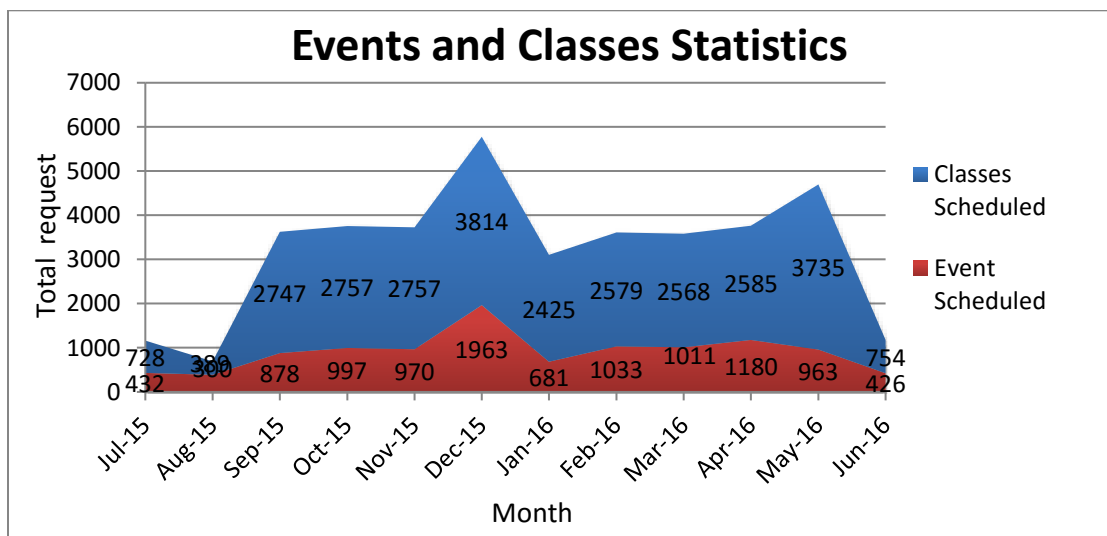
i. Application Services Group

The Application Services Group comprises of three different teams: applications administration, project management, and web services.

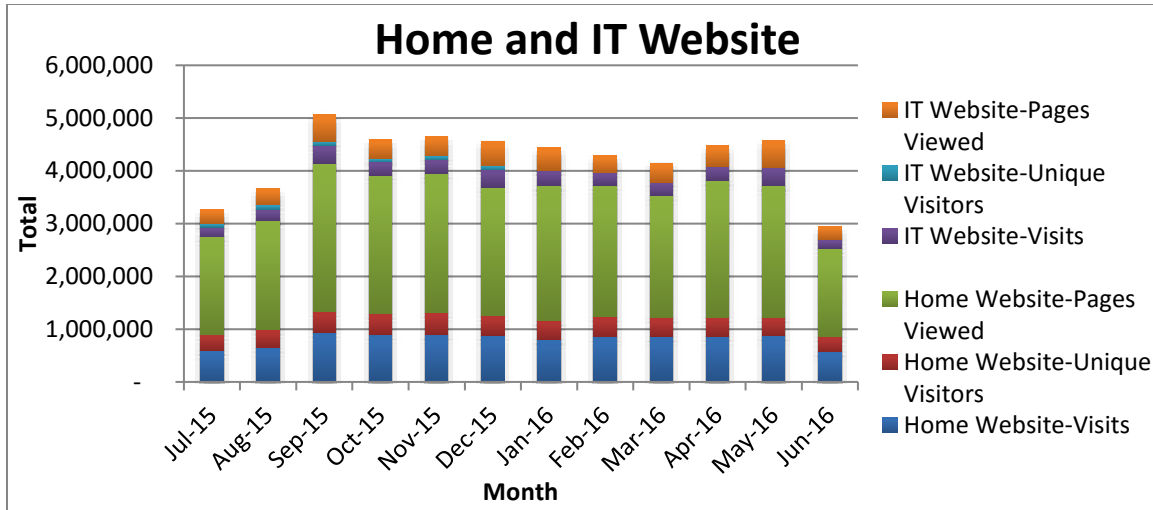
In 2016, a total of 883 requests were submitted. Out of which 834 were successfully completed. Sept 2016 was the busiest month in the submission of 106 of web requests.



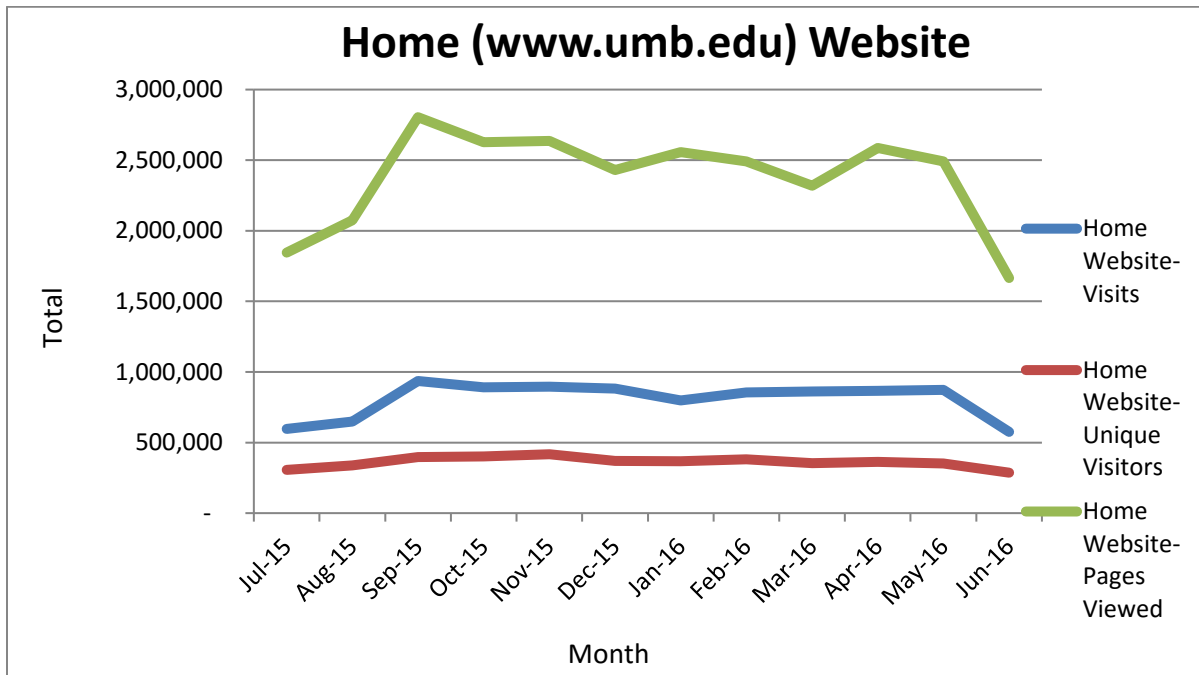
During the 2016 academic year, we have successfully scheduled 27,749 classes and 10,923 events. The number of classes scheduled increased from 300 in August 2015 at the end of the Summer session to 3,814 in December 15 before the beginning of the Spring 2016 Semester.

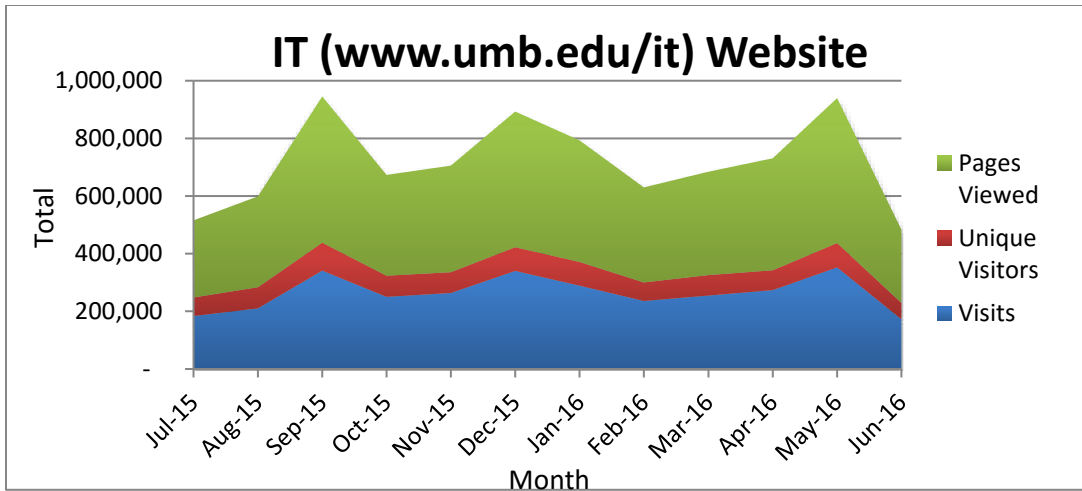


September 2015 and May 2016 had highest number of visitors as September is the beginning of the fall semester and May is the spring semester.



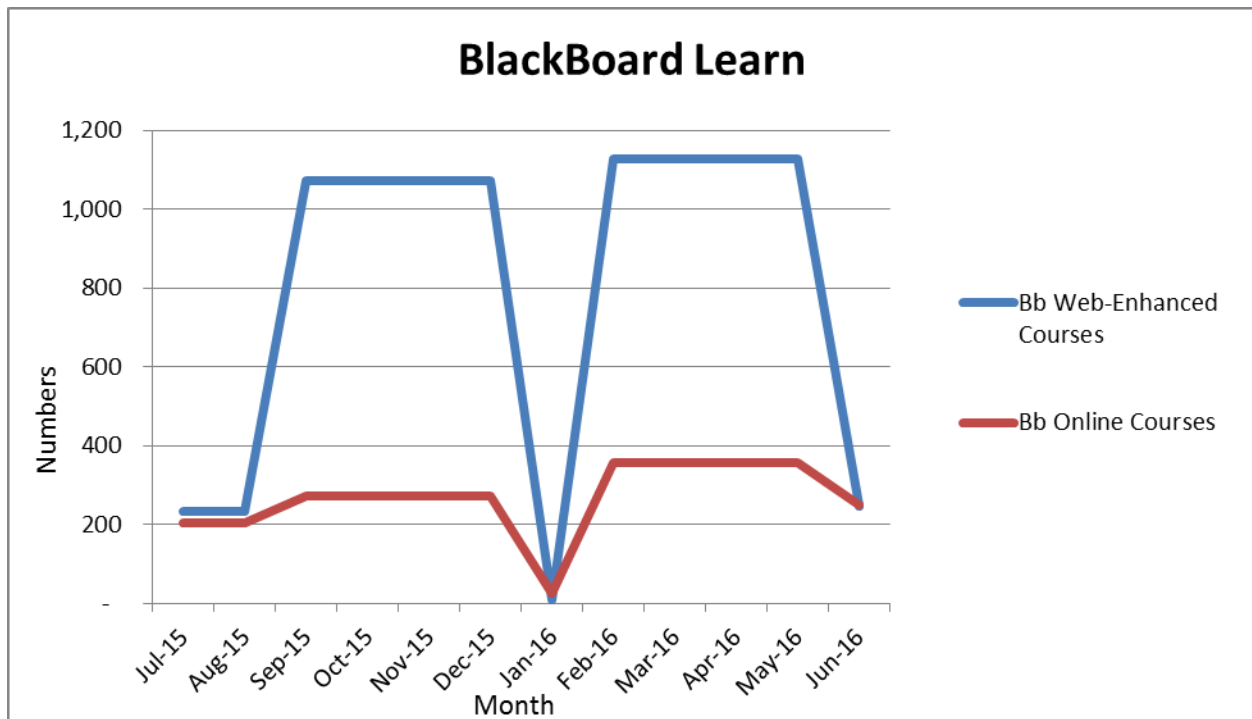
Visits and unique visitors to UMass Boston home page start going up in the beginning of the fall semester. The number of pages viewed is the highest during the application deadline period as prospective students seek information through the website.

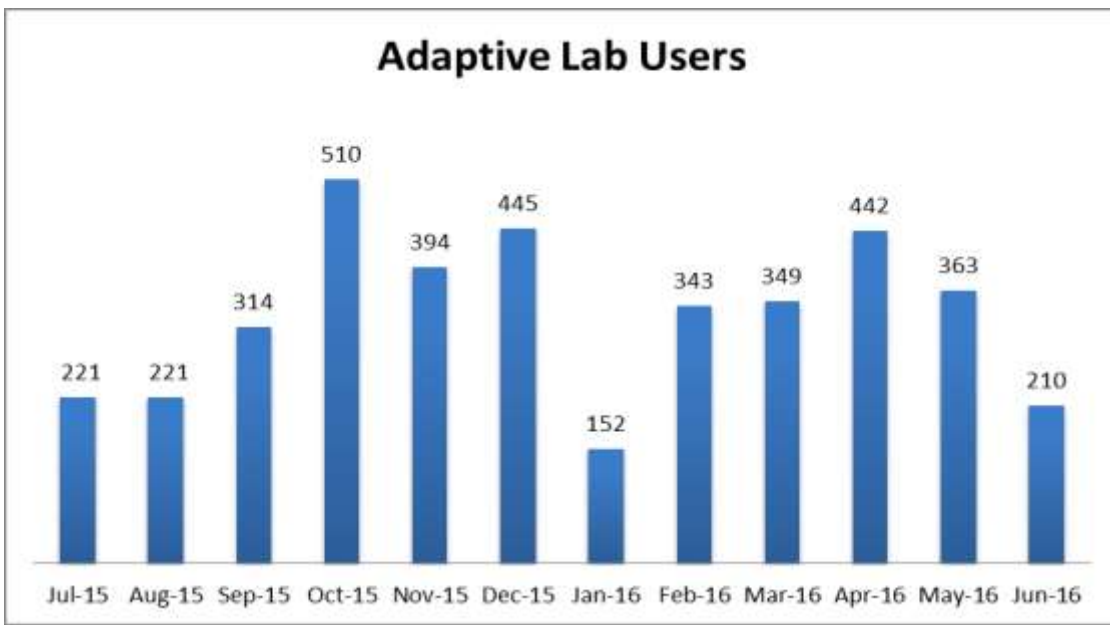
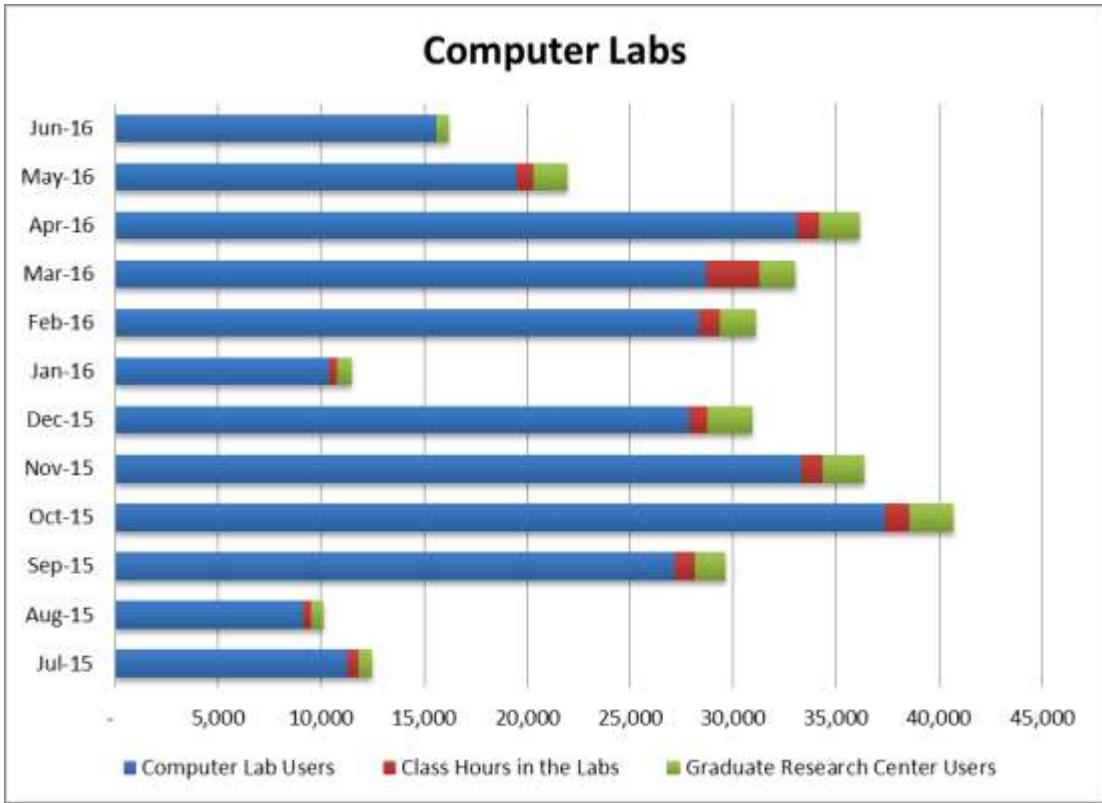


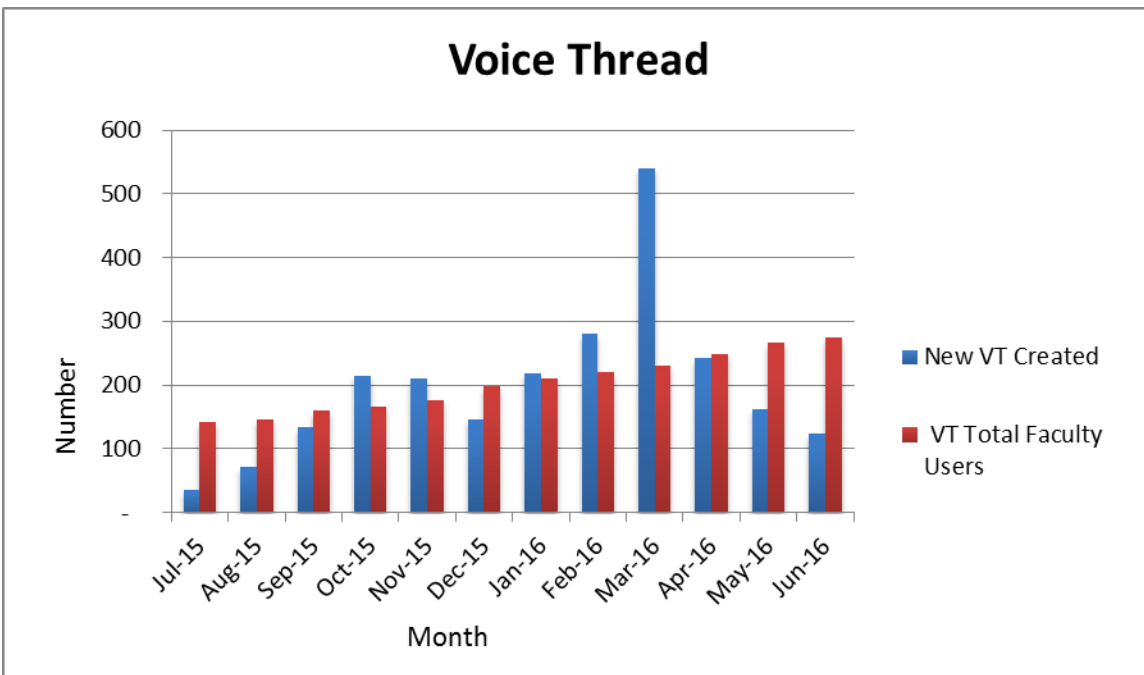
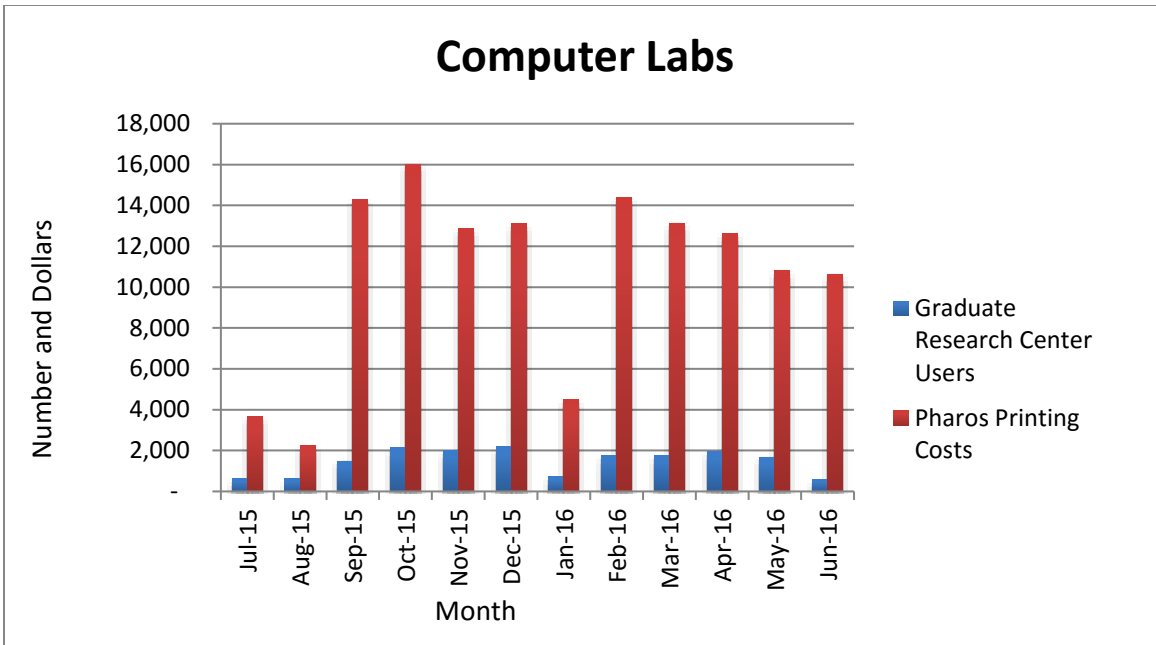


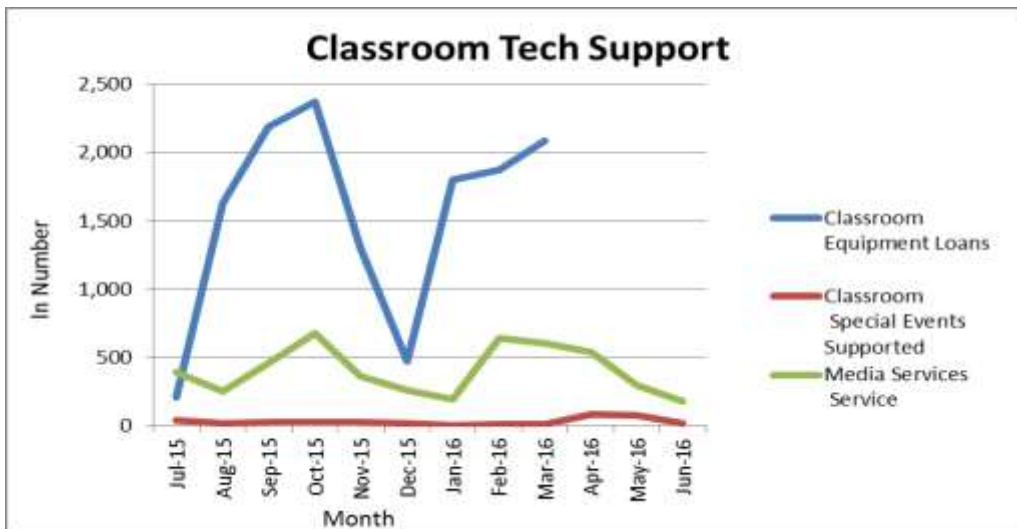
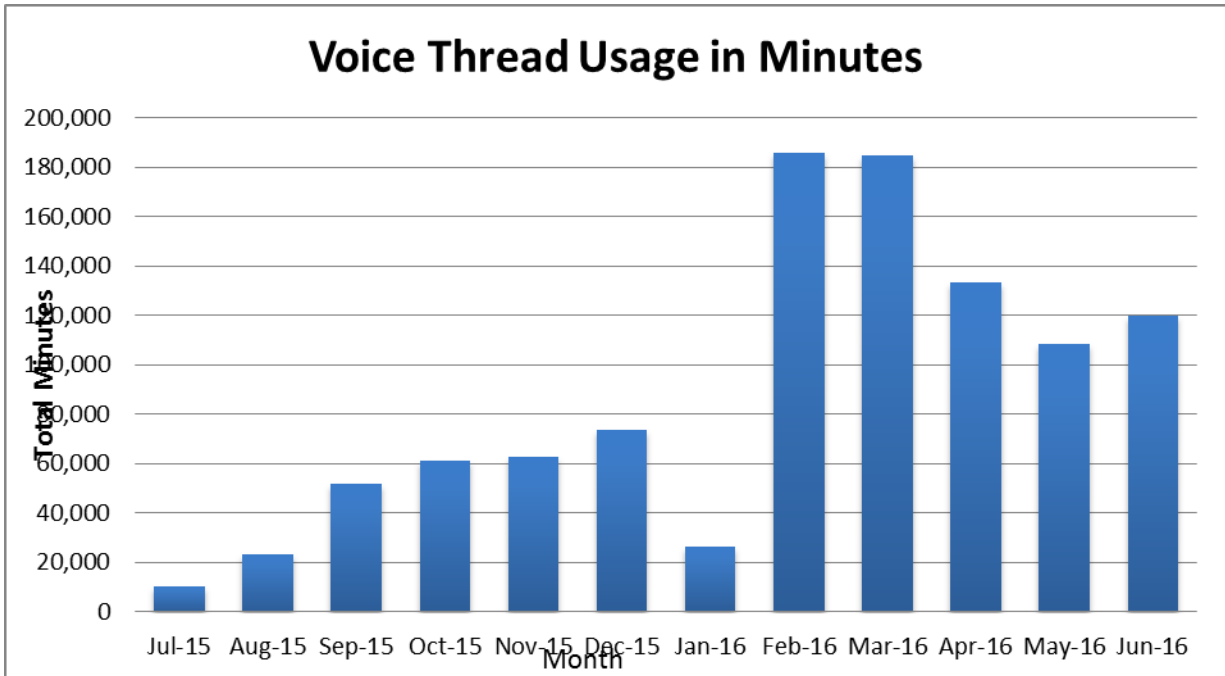
ii. Educational Technology Group

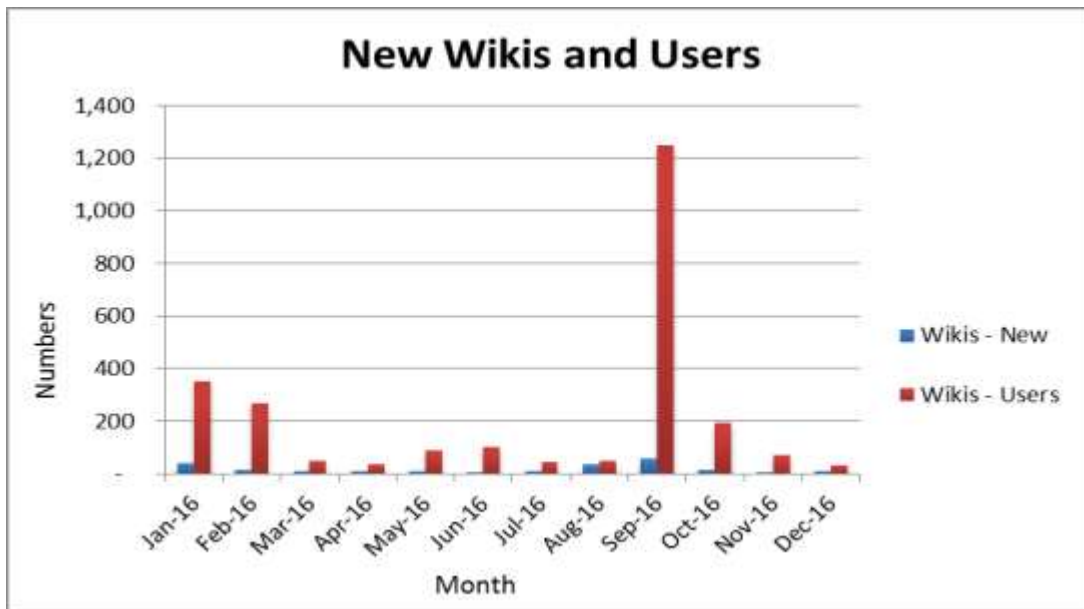
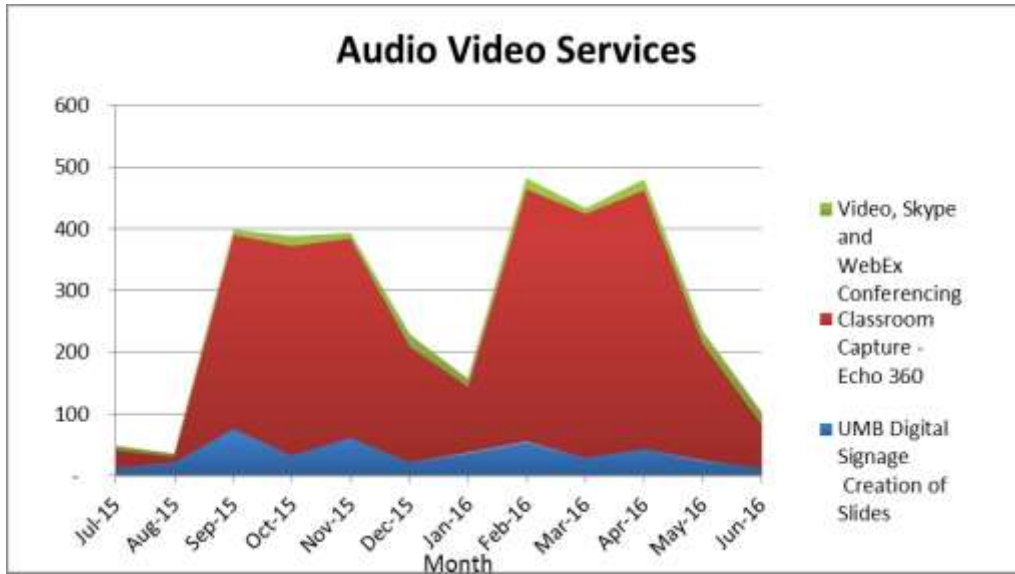
The Educational Technology group and Learning Commons comprises of three groups: Instructional Technology Center, Instructional Support, Digital and Audio Visual Support Center.

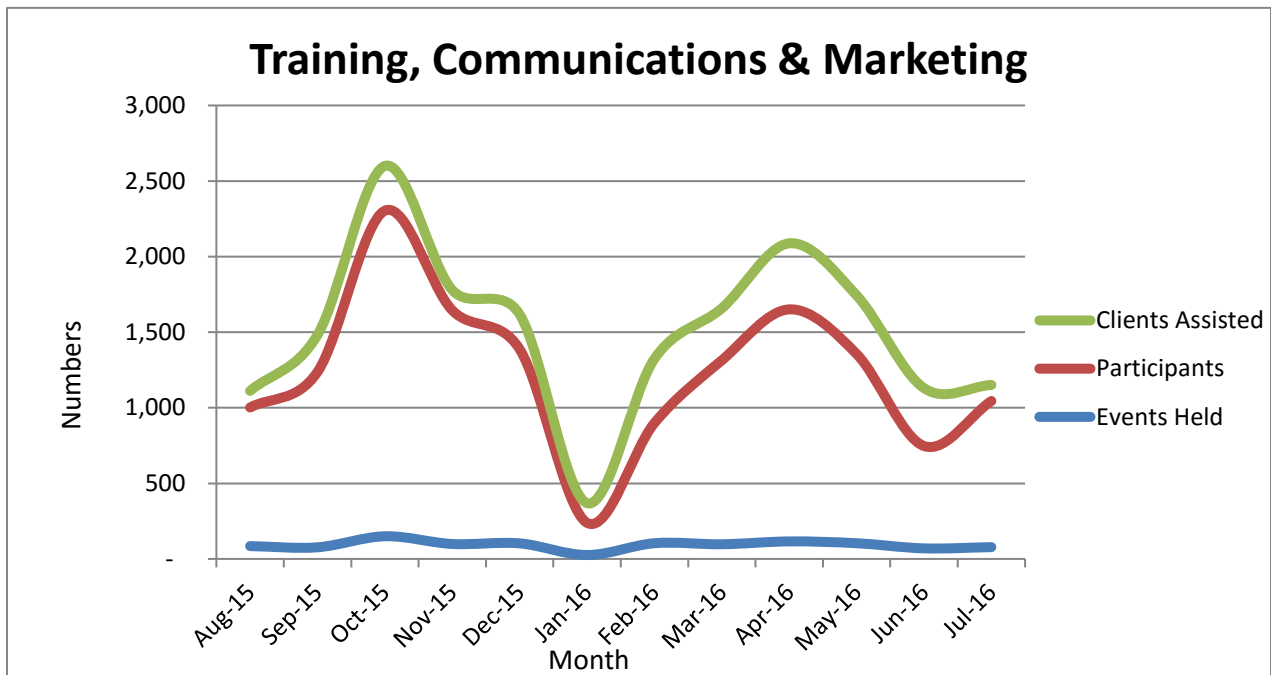






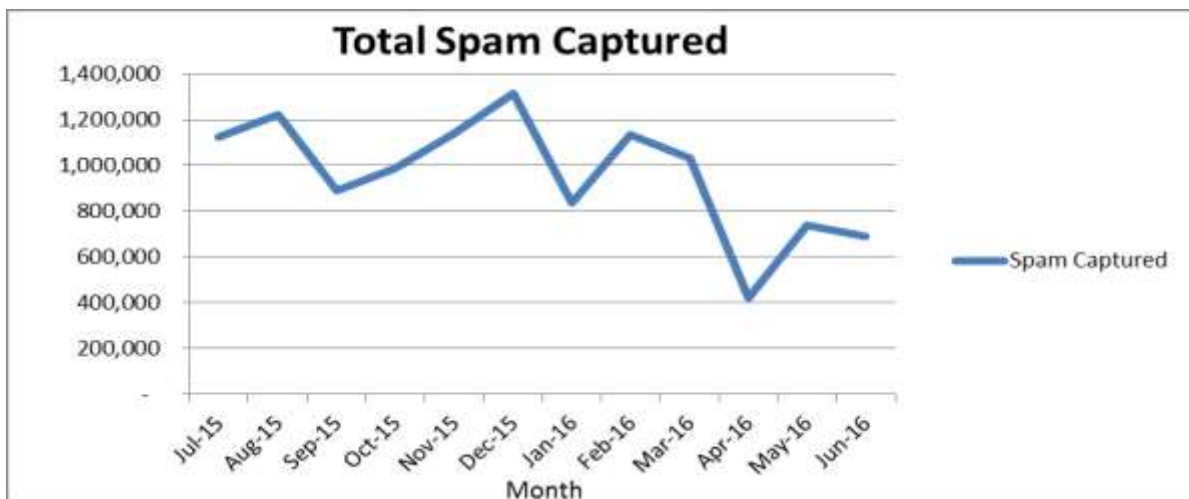


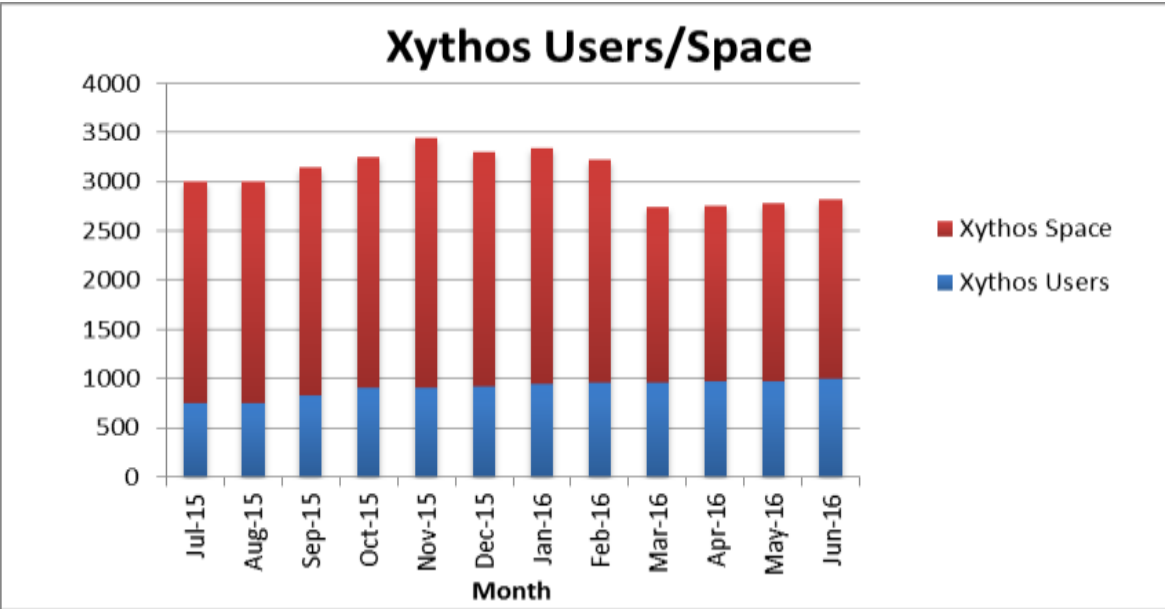
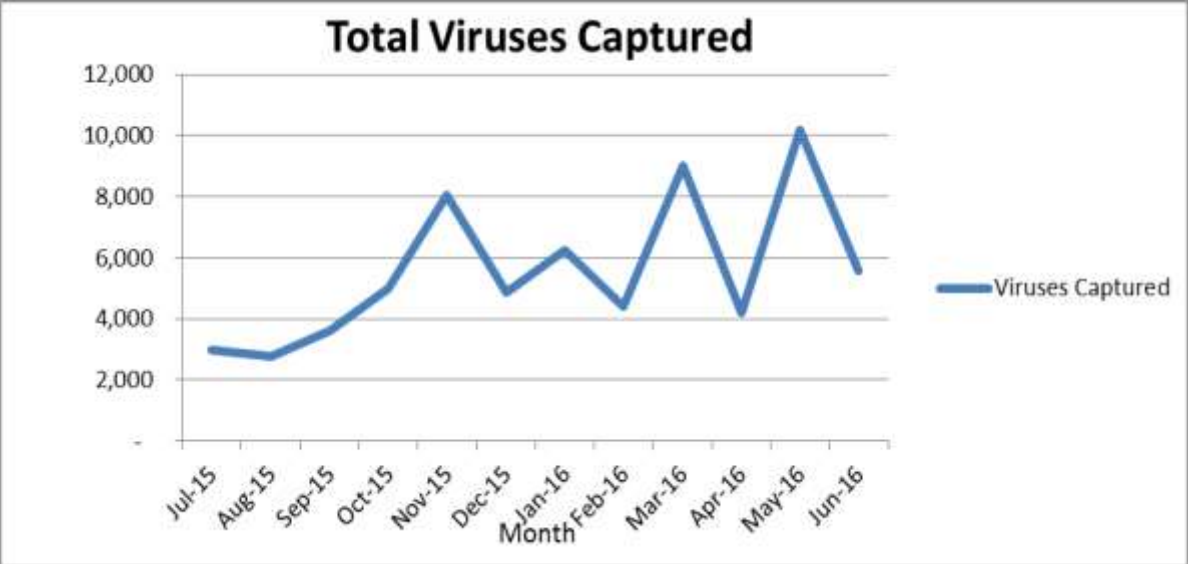


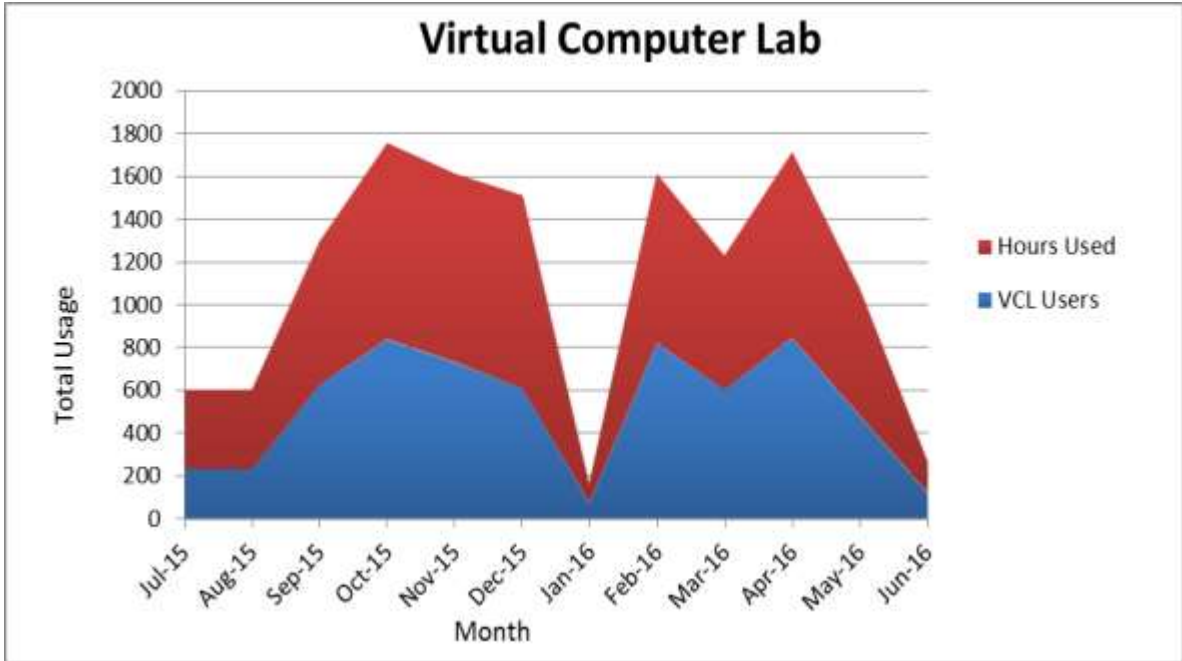


iii. Communication and Infrastructure Services

The Communication and Infrastructure Services group comprises of four different units: Operations, systems and communications, security, and telecommunications.

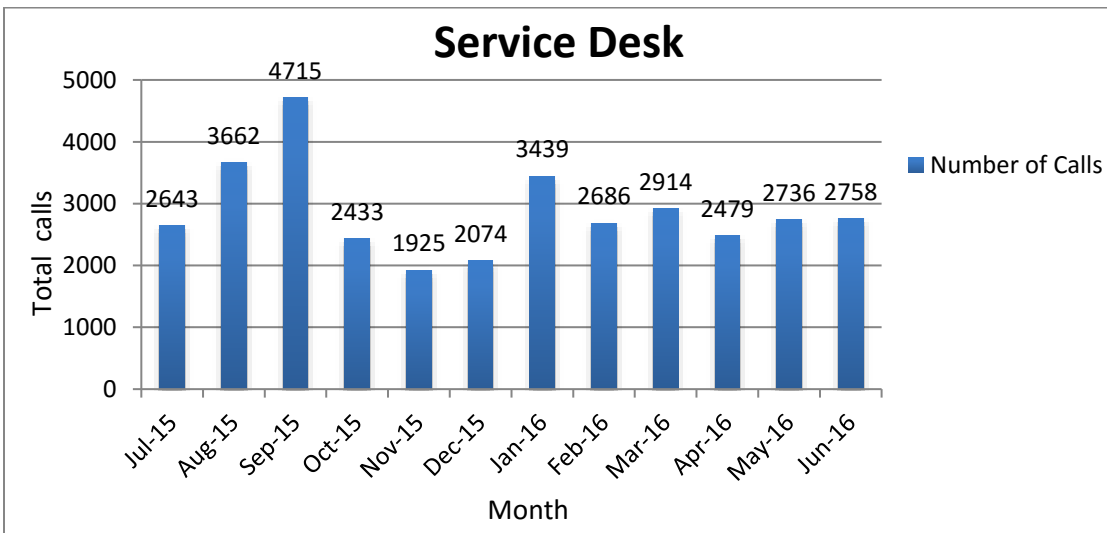


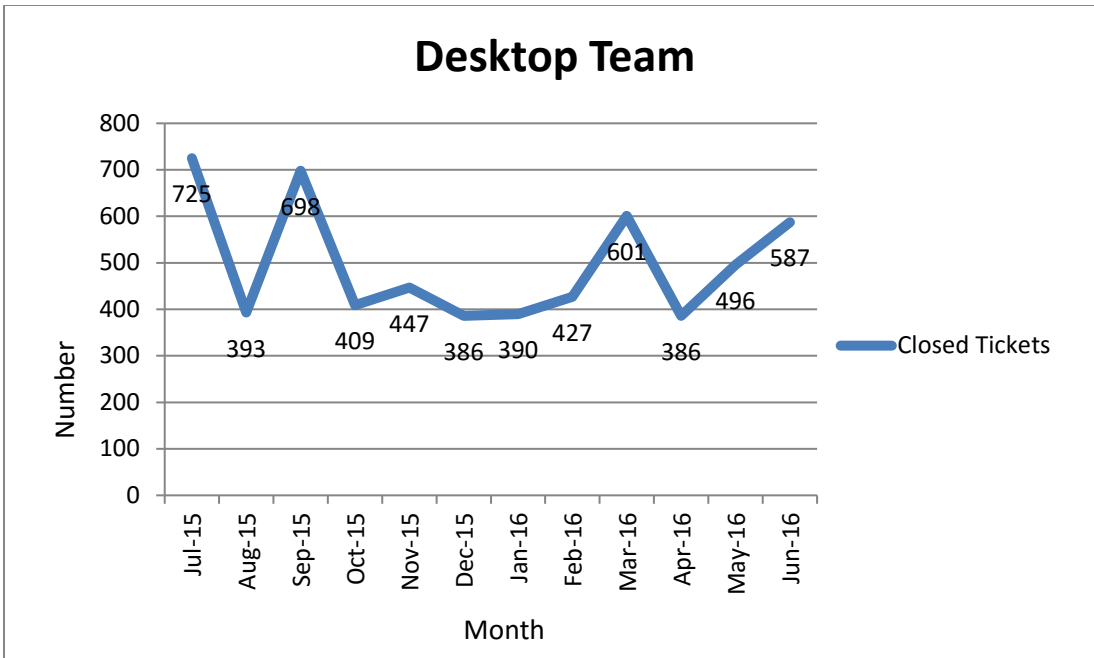




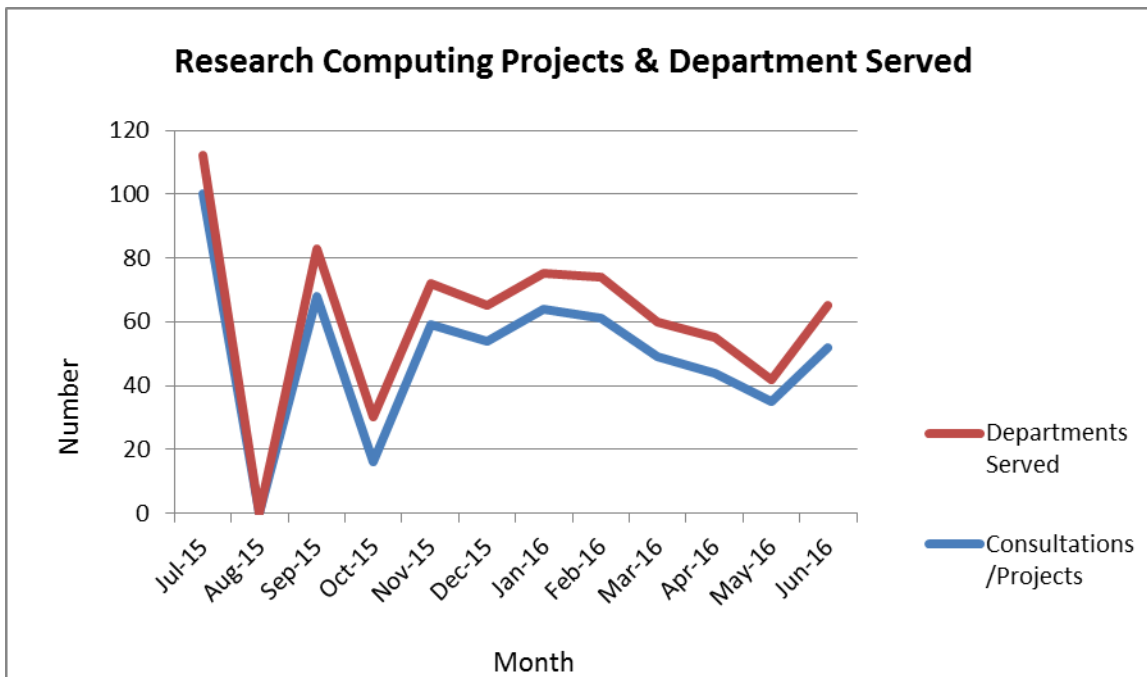
iv. Client Services Group

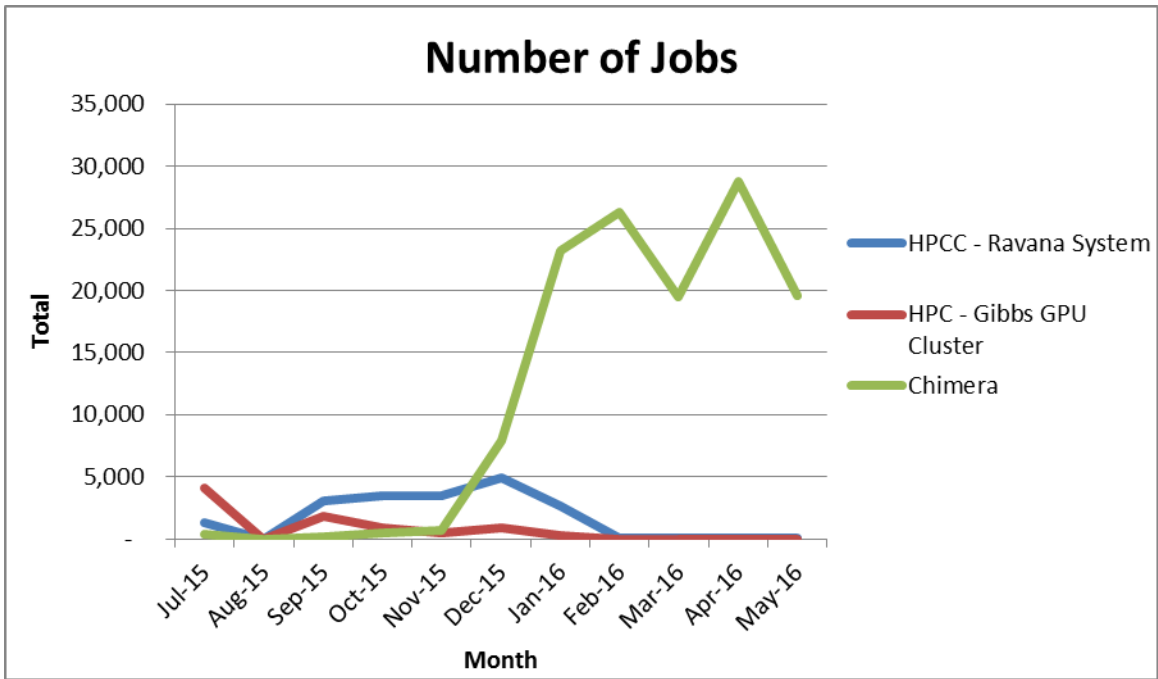
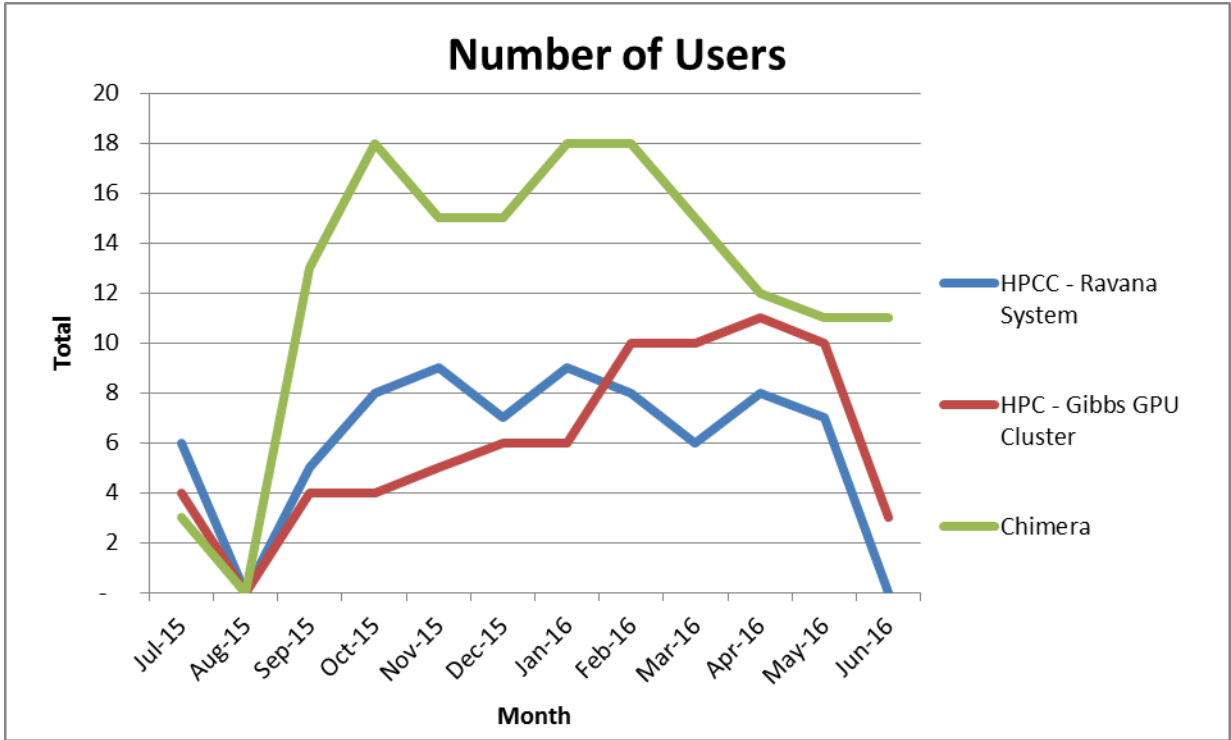
The Client Services comprises of three units or groups: Desktop, Educational Technology Operations, and Service Desk.

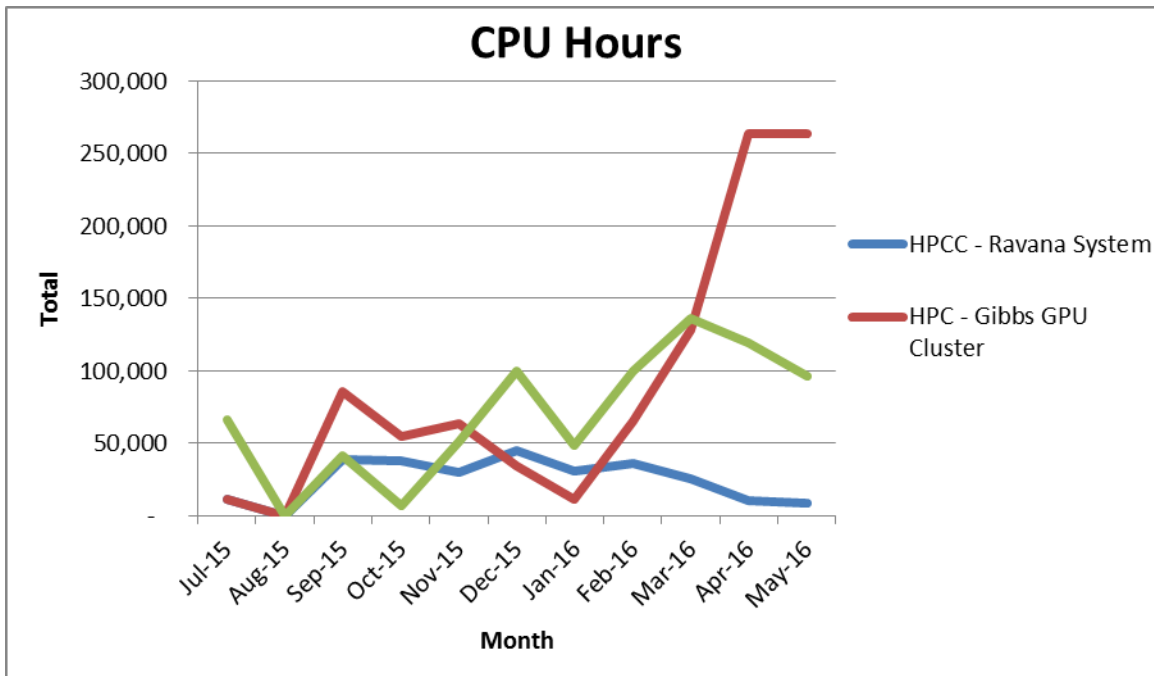




v. Research Computing Group







d. 2016 MISO Survey Highlights

Since 2012, the Information Technology Services Division (ITSD) has used the Measuring Information Service Outcomes (MISO) survey model to assess the satisfaction of the UMass Boston community (faculty, students, and staff) on technological and library services received on and off campus, understand their needs, and the areas for improvement. The results of the 2016 MISO survey are summarized below:

Audience	Population Size	Sample Size	Completed Responses	Response Rate
Faculty	1,247	1,247	405	32.5%
Students	13,173	1,500	436	29.1%
Staff	1,529	696	255	36.6%

A. Faculty Respondents Breakdown

Below is the breakdown of the descriptive data of the faculty who participated in the survey as well as their insights of technological services at the University. When applicable, the five most important categories of each question were considered using the Mean as a delimiter. Of the faculty who answered the survey:

- Fifty four percent (54%) are female while forty six (46%) are male. The highest number of the respondents twelve percent (12%) was hired in 2015.
- Forty six percent (46%) of the faculty are forty nine years old or younger.
- Six percent (6%) are of Hispanic, Latino, or Spanish origin.

- Forty seven percent (47%) of the faculty are non-tenure track or adjunct, twenty one percent (21%) are tenure track, and thirty two percent (32%) are tenured faculty.
- The highest number of the faculty forty percent (40%) teach in the Liberal Arts department follow by sixteen (16%) who are in the Math and Science.
- Seventy-four percent (74%) of the faculty are considered a full-time employee at UMass Boston for at least nine months of the current academic year.

How important are these services to you?⁴

Library	Information Technology
Access to online resources from off-campus (3.81)	Performance of wireless access (3.86)
Availability of electrical outlets in the library (3.54)	Availability of wireless access (3.85)
Overall library services (3.45)	WISER Self Service (3.73)
Library databases (e.g. JSTOR) (3.44)	E-Mail Services (3.69)
Public computers in the library (3.24)	Overall computing services (3.68)

How informed do you feel you are about the following?

Question	Not Informed	Somewhat Informed	Informed	Very Informed
Available technology services	4.98%	44.78%	41.79%	8.46%
Available library services	5.26%	46.62%	41.10%	7.02%
Current issues regarding information security	11.97%	47.13%	33.67%	7.23%
Data backup solutions	25.69%	48.38%	21.20%	4.74%

How satisfied are you with the following resources?

Library	Information Technology
Library circulation services (95.05%)	Email Services (90.74%)
Overall Library services (94.55%)	IT Helpdesk (89.30%)
Library research instruction for academic courses (92.41%)	Instructional technology support (Blackboard, etc) (88.27%)
Library databases (e.g. JSTOR) (90.85%)	Course management system (87.88%)

⁴ A four-point scale was used in the questions

Ease of finding physical materials in the library (90.37%)	Overall computing service (87.73%)
--	------------------------------------

How dissatisfied are you with the following resources?

Library	Information Technology
Physical library collection (22.82%)	Wireless - performance (48.77%)
Library e-book collections (15.00%)	Wireless – availability (40.89%)
Access to online resources Off-Campus (12.95%)	Desktop/laptop computer replacement (31.40%)
Availability of electrical outlets in the library (12.17%)	Technology in meeting spaces/classrooms (23.70%)
Public computers in the library (11.64%)	Web conferencing (e.g. Skype, Adobe Connect (18.85%))

How strongly do you disagree or agree with the following statements with regard to the I.T. Helpdesk staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	1.60%	4.79%	19.41%	74.20%
Knowledgeable	1.85%	8.99%	31.48%	57.67%
Reliable	3.19%	8.24%	31.91%	56.65%
Responsive	4.76%	9.52%	27.51%	58.20%

How strongly do you disagree or agree with the following statements with regard to the library circulation desk?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	1.02%	1.36%	14.58%	83.05%
Knowledgeable	0.71%	4.59%	16.96%	77.74%
Reliable	0.00%	2.51%	19.00%	78.49%
Responsive	0.35%	2.46%	16.90%	80.28%

How strongly do you disagree or agree with the following statements with regard to the library reference staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	0.36%	1.82%	13.45%	84.36%
Knowledgeable	0.00%	3.72%	14.87%	81.41%
Reliable	0.75%	2.25%	14.23%	82.77%
Responsive	0.74%	2.22%	14.81%	82.22%

How strongly do you disagree or agree with the following statements with regard to the instructional technology (Blackboard, etc.) staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	0.91%	2.74%	12.46%	83.89%
Knowledgeable	2.40%	6.29%	17.37%	73.95%
Reliable	2.99%	4.79%	17.37%	74.85%
Responsive	2.39%	6.57%	17.31%	73.73%

How strongly do you disagree or agree with the following statements with regard to the archives/special collections staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	0.78%	3.10%	12.40%	83.72%
Knowledgeable	0.79%	2.38%	13.49%	83.33%
Reliable	1.64%	2.46%	14.75%	81.15%
Responsive	1.60%	2.40%	16.00%	80.00%

How strongly do you disagree or agree with the following statements with regard to the Classroom Technology (Media Services) staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	2.28%	3.58%	18.89%	75.24%
Knowledgeable	2.30%	6.89%	24.92%	65.90%
Reliable	2.62%	7.87%	23.93%	65.57%
Responsive	2.97%	6.93%	21.45%	68.65%

How strongly do you disagree or agree with the following statements with regard to the WISER, HR, support staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	2.33%	8.91%	28.68%	60.08%
Knowledgeable	2.71%	9.30%	29.84%	58.14%
Reliable	4.63%	13.13%	27.41%	54.83%
Responsive	5.49%	11.76%	26.67%	56.08%

B . Students Respondents Breakdown

Here are the descriptive data of the four hundred thirty six students who participated in the MISO survey:

- Sixty three percent (63%) of the students are female and thirty seven percent (37%) are male.
- Fifty nine percent (59%) of the students are twenty three years old or older.
- The highest percentage of the students’ respondents twenty five percent (25%) are enrolled in the Liberal Arts academic division follow by twenty two percent (22%) in Math and Science.
- Fifteen percent (15%) are of Hispanic, Latino, or Spanish origin.
- Sixteen percent (16%) are international students.
- The highest percentage of students thirty two percent (32%) are expected to graduate in 2017.
- The majority of the students believe that the ability to access scholarly materials from anywhere contribute more to the achievement of their academic goals than the technology used in courses and classrooms.

How important are these services to you?⁵

Library	Information Technology
Access to online resources from off-campus (3.9)	eMail Services (3.9)
Library databases (e.g. JSTOR) (3.77)	Overall computing services (3.88)
Overall library services (3.71)	Performance of wireless access (3.88)
Library e-book collections catalog (3.35)	Availability of wireless access (3.86)
Library Circulation Services (3.18)	WISER, HR, etc. (3.83)

How satisfied are you with the following resources?

Library	Information Technology
---------	------------------------

⁵ A four-point scale was used in the questions

Library circulation services (95.31%)	Email Services (95.07%)
Library databases (e.g. JSTOR) (92.90%)	IT Helpdesk Schedule (93.27%)
Library e-book collection (92.37%)	IT Help Desk (93.27%)
Physical Library Collection (91.27%)	Course management system (87.88%)
Public Computers in the library (90.83%)	Overall computing service (87.73%)

How dissatisfied are you with the following resources?

Library	Information Technology
Availability of electrical outlets in the library (18.80%)	Wireless Performance on campus (45.94%)
Ease of finding physical materials in the library (9.54%)	Availability of wireless on campus (35.89%)
Access to online resources Off-Campus (9.36%)	Campus Printers (19.84%)
Public computers in the library (9.17%)	Overall Computing Service (9.91%)
Physical library collections (8.72%)	Blackboard (9.88%)

How informed do you feel you are about the following?

	Not informed	Somewhat informed	Informed	Very informed
Available technology services	8.53%	47.47%	37.79%	6.22%
Available library services	10.85%	43.42%	41.11%	4.62%
Current issues regarding information security	15.47%	41.57%	37.41%	5.54%

How strongly do you disagree or agree with the following statements with regard to the computing helpdesk staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	1.86%	2.48%	20.43%	75.23%
Knowledgeable	1.25%	3.44%	21.56%	73.75%
Reliable	1.25%	4.67%	23.99%	70.09%
Responsive	1.56%	2.81%	22.50%	73.13%

How strongly do you disagree or agree with the following statements with regard to the library circulation desk?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	1.51%	2.42%	15.11%	80.97%
Knowledgeable	1.25%	2.49%	16.82%	79.44%
Reliable	0.95%	2.21%	19.56%	77.29%
Responsive	0.94%	2.51%	16.93%	79.62%

How strongly do you disagree or agree with the following statements with regard to the library reference staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	0.67%	2.35%	15.10%	81.88%
Knowledgeable	0.34%	2.01%	15.10%	82.55%
Reliable	0.68%	2.36%	17.23%	79.73%
Responsive	0.68%	1.69%	15.25%	82.37%

Do you personally own the following devices?

	Yes	No
Desktop computer	40.70%	59.30%
Laptop/Notebook computer	95.61%	4.39%
Smart phone (e.g. Android, iPhone, Windows phone)	97.00%	3.00%
Tablet (e.g. iPad, Galaxy, Kindle Fire)	57.64%	42.36%

C. Staff Respondents Breakdown

The descriptive data breakdown of the two hundred fifty five staff who responded to the survey are outlined below:

- Eighty one percent (81%) of the staff who participated in the survey are full-time employee of the University of Massachusetts Boston for at least nine months of the current academic year. Sixty seven percent (67%) are female and thirty two percent (32%) are male.
- Forty four percent (44%) of the staff respondents are less than forty five years old while seventeen percent (17%) are sixty years old or older.
- Ninety one percent (91%) of the staff are not of Hispanic, Latino, or Spanish origin.
- Forty seven percent (47%) of the staff work as administrative or academic support; twenty six percent (26%) are considered themselves as technical or professional; twenty one percent (21%) work as supervisor or management; six percent (6%) work as service or facility support.
- The highest percentage of the staff thirteen percent (13%) was hired in 2015 and nine percent (9%) in 2013 and 2014.

How important are these services to you?⁶

Information Technology
Email Services (3.85)

⁶ A four-point scale was used in the questions

Overall Computing Service (3.80)
The time it takes to resolve your desktop/laptop computing problems (3.78)
Performance of wireless access on campus (3.76)
Availability of wireless access on campus (3.71)

How satisfied are you with the following resources?

Information Technology
Email Services (96.81%)
ERP (WISER, HR, etc.) (95.26%)
Overall computing service (94.86%)
IT HelpDesk schedule (91.67%)
IT HelpDesk (90.50%)

How dissatisfied are you with the following resources?

Information Technology
Performance of wireless access on campus (42.86%)
Availability of wireless access on campus (35.00%)
Desktop/laptop computer replacement (15.43%)
The time it takes to resolve your desktop/laptop computing problems (13.14%)
Technology in meeting spaces/classrooms (11.37%)

How informed do you feel you are about the following?

	Not informed	Somewhat informed	Informed	Very informed
Available technology services	6.95%	46.72%	40.15%	6.18%
Current issues regarding information security	9.27%	42.86%	41.70%	6.18%

Data backup solutions	29.73%	41.70%	24.32%	4.25%
-----------------------	--------	--------	--------	-------

How strongly do you disagree or agree with the following statements with regard to the computing helpdesk staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	1.67%	3.77%	22.18%	72.38%
Knowledgeable	2.48%	5.79%	27.27%	64.46%
Reliable	2.89%	6.61%	30.17%	60.33%
Responsive	1.56%	2.81%	22.50%	73.13%

How strongly do you disagree or agree with the following statements with regard to the telephone support staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	0.00%	3.45%	28.74%	67.82%
Knowledgeable	1.71%	5.71%	28.57%	64.00%
Reliable	1.73%	8.09%	24.86%	65.32%
Responsive	2.86%	8.00%	24.57%	64.57%

How strongly do you disagree or agree with the following statements with regard to the Web services staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	0.63%	2.52%	25.79%	71.07%
Knowledgeable	1.24%	1.86%	21.74%	75.16%
Reliable	1.27%	3.80%	23.42%	71.52%
Responsive	2.50%	3.13%	25.63%	68.75%

How strongly do you disagree or agree with the following statements with regard to the ERP (WISER, HR, etc.) support staff?

	Disagree	Somewhat disagree	Somewhat agree	Agree
Friendly	0.75%	5.26%	27.82%	66.17%
Knowledgeable	1.50%	6.77%	24.81%	66.92%
Reliable	2.99%	5.97%	29.85%	61.19%
Responsive	2.99%	5.97%	32.09%	58.96%

Do you personally own the following devices?

	Yes	No
Desktop computer	53.01%	46.99%
Laptop/Notebook computer	82.21%	17.79%
Smart phone (e.g. Android, iPhone, Windows phone)	91.30%	8.70%
Tablet (e.g. iPad, Galaxy, Kindle Fire)	64.14%	35.86%

e. MISO survey Analysis: Importance and Satisfaction of IT Services

For the past six years, ITSD has used the Measuring Information Service Outcomes (MISO), a national survey model for IT and library organizations. ITSD and the Healey Library use the survey to assess the satisfaction of the UMass Boston community (faculty, students, and staff) on technological services received on and off campus, understand their needs, and the areas for improvement. This year survey has shown an increase in the response rate namely 32 % of 1,247 for faculty, 29% of 13,173 for students, and 37% of 1,529 for staff.

The importance and satisfaction of IT services differ by the type of constituents. However, the results show that the top three important IT services for all three groups are eMail Services, Overall computing services, and Performance of wireless access. On the satisfaction level, faculty and are more satisfied with Email Services (90.74%), IT Helpdesk (89.30%), and Instructional technology support (Blackboard 88.27%) while students and staff provide a satisfaction score higher than ninety percent (90%) for email services, IT Helpdesk Schedule, and IT Help Desk. Email Services has received the highest satisfaction score for all IT services among all three groups. Although the results of this year have shown significant increase in customer satisfaction but all three groups are more dissatisfied the performance and availability of wireless as well as campus printers. With an increase in students’ enrollment, the demand for wireless and printing services on campus continues to grow. In response, ITSD has initiated a complete reengineering and redeployment of campus wireless services to assure 100% coverage with signal strength and capability appropriate to each internal space on campus. This project will be complete for the start of Fall 2016 classes. ITSD is also modernizing and expanding the student printing service.

f. Training and Professional Development

The ITSD staff is committed in improved their knowledge for professional and personal growth. During the AY 2015-2016, ITSD management and staff participated in the following professional development activities:

- | | |
|---|---|
| CollegeNet Annual Conference | ServiceNow Administration |
| CollegeNet Series 25 User Group | ServiceNow Knowledge 16 Annual Conference |
| SalesForce Dreamforce Annual Conference | SalesForce HigherEd Summit 16 |
| Helpdesk Institute (HDI) Training | Windows 10 OS Training |

ITIL – Training
NetApp Training
ComptTIA Security+
Educause – Annual Conference
AAEBL Conference/ePortfolio's
Online Learning
OpenEd Annual Conference

Windows 10 Server OS
CheckPoint FW Blade Training
Secure World IT Security Conference
eLearning Consortium Blended Learning Conference
Blackboard World Annual Conference
Blackboard User Group

g. Acknowledgements

This report was compiled and prepared by Alexandrine Policar with contributions and contents provided by the CIO office, IT directors, and managers. A heartfelt thank you to Apurva Mehta for reviewing and editing the document and also to the following individuals for their collaboration:

Apurva Mehta, Associate CIO, ITSD
Linda Modiste, Assistant Vice Provost, IT Application Services
Will Khouri, Assistant Vice Provost, IT Communications and Infrastructure Services
Jeff Dusenbury, IT Director Research Computing
Peter Adams, Manager, IT Service Desk
John Jessoe, Manager, IT AV & Classroom Technology
James Hughes, Associate Provost for Institutional Research, Assessment and Planning
Salina Allen-sharpp, Executive Assistant to the Vice Provost and CIO
Brian Forbes, Manager IT Systems and Network
Kalinda Mehta, IT Blackboard Administration
Raymond Tse, Manager, IT Desktop Support
Ananta Sinha, IT Educational Technology Operations
John Mazarella, Manager, Training, Communications and Marketing
Gene Swalb, Manager, IT Manager e-Learning
Alexandrine Policar – IT –Educational Technology – Special Projects