

Information Technology Services

2017 Annual Report

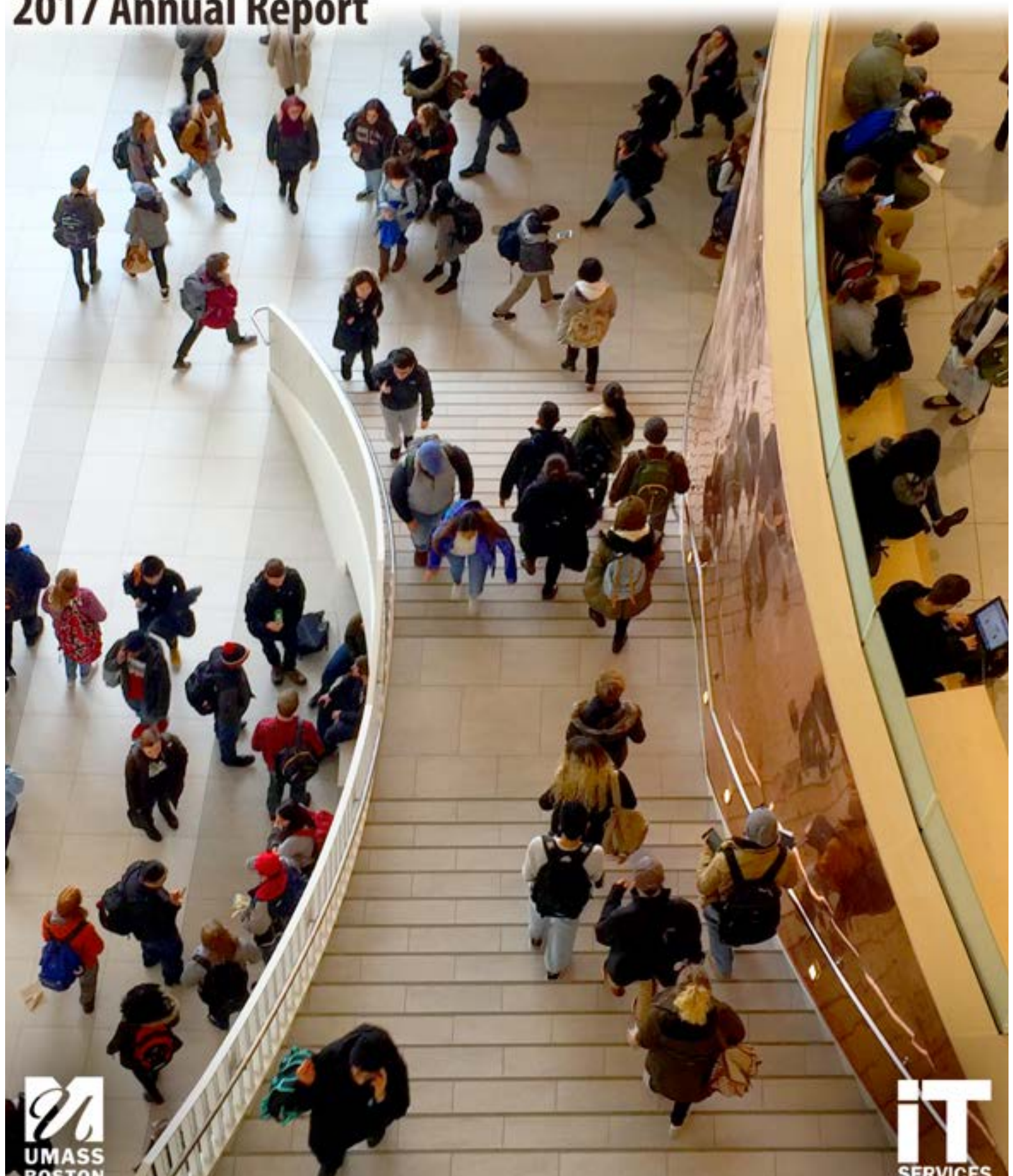


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*Cover photo by Shashi Poudel, class of 2019, IT Services student employee.
Shot for the 2017 IT Learning Commons Student Photography Project.*

CIO Welcome and Summary

I want to take this opportunity to thank you for your support and collaboration during the 2016/2017 academic year. As a unit, Information Technology Services (ITS) at the University of Massachusetts Boston has implemented significant enhancements 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.

Since my arrival two years ago, I have 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. The number one response I've received from you, our customers, is an appreciation of the people who comprise ITS.

This report summarizes the FY2017 academic year for ITS and our services. As you'll see, we've made significant progress across the board including continued support of Teaching and Learning, Research, Administration, and most importantly, our student customers. 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 ITS has been able to enable each constituent to achieve their objective(s).


Another key measure is your satisfaction with the services and service we offer. In this report you'll find the results of our Spring 2017 Community Satisfaction Survey (Appendices) and we'd like to express our appreciation to those of you who responded to your survey invitation by providing us your guidance. Compared to other campuses I've served, our ratings are quite positive and confirming. That said, we'll be using your feedback as we work to continually improve our contribution to you and UMass Boston. The table below shows the satisfaction level by various audience groups:

Overall Satisfaction with IT Services – FY 17

	Students	Faculty	Staff
Very Satisfied	18.75%	20.69%	27.43%
Somewhat Satisfied	45.83%	52.16%	47.49%
Satisfied – Total	64.58%	72.85%	74.92%
Neutral	27.78%	16.81%	15.3%
Acceptable [Satisfied + Neutral]	92.36%	89.66%	90.22%
Somewhat Dissatisfied	3.47%	7.33%	7.67%
Very Dissatisfied	4.17%	3.02%	2.06%

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

Sincerely,



Bob Weir, Vice Provost/CIO
Information Technology Services (ITS)
UMass Boston
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Healy Library Lower Level

ITS Organizational Overview

One of the goals for the new CIO, Bob Weir, hired in June 2015 was to reform processes within IT. The faculty, staff and students liked our ‘people’ but not our ‘processes’ – a line one will frequently hear from the CIO. To address this deficiency, two new positions were created – Assistant Vice-Provost for Client Services and Assistant Vice-Provost for Business Operations. A search for each of these positions resulted in the hiring of Barbara Goguen, a consultant for ITS in FY 16 and originally from MIT to head up Client Services; and Marsha Florio from Athletics who has an extensive knowledge of UMass Boston’s Operations and Processes. Two managers, Jim Wyse for Web Services and Terence Phalen for Program Management were promoted to Directors. Several positions within ITS have remained opened due to budget reasons, which hinder the department’s efficiency.

ITS is comprised of 104 staff members (20% Managerial) - across seven departments:

- Office of the CIO
- Application & Web Services
- Business Operations *¹
- Client Services *
- Communications and Infrastructure Services
- Educational Technology
- Research Computing

Praise for IT - AV & Classroom Technology

“I wanted to thank you for a wonderful Convocation program. Your hard work and concern for the University delivered a wonderful start to the 2016-17 academic year and provided an opportunity for us to reflect on our future as an academic community.”

-J. Keith Motley, PhD, Chancellor

Client Services, which has for the past 10 years has been combined with Educational Technology to offer a one-stop place for support, has been split. This move allows Client Services to enhance its customer service by implementing new processes around ITIL and ServiceNow—a service management system using ITIL standards. Computer Lab Operations was merged with Client Services to take advantage of technical operations and support, as well as providing better service for the student population, who are our most important customers.

A new department “Business Operations” has been created. Responsible for all budget, personnel, reports, contracts, space and asset management, the department is headed by Marsha Florio.

Several key open positions in Instructional Support, Desktop Support, Classroom Technology Support and Application Services remain open – all due to budget constraints. A couple of key positions in desktop support have been authorized by the “Vacancy Review Committee” to be filled and searches are underway.

Key personnel in the Application Services team have retired – Linda Perrotto who led Change Management for ITS, Carolyn Nelson a Business Systems Analyst, and Bob Caron who managed 25 Live and campus applications. Keith Pyle in Desktop Support/Client Services also retired after a 35-year journey with ITS. These retirees represent decades of institutional knowledge and will be missed.

Unit Goals and Achieved Initiatives for AY 2016-2017

Advance Student Success and Development

- Assisted the English department with the creation and setup of computers for the new Digital Studio/Lab. Sixteen iMacs were purchased and implemented in the newly created space allowing faculty to teach students writing for the digital world.

¹ * = Newly created departments

- Thirty computers in the Green Lab, funded by Undergraduate Student Government were upgraded allowing the faculty and students to conduct research and for teaching. Additional printing and scanning equipment was added to University Hall and on the Healey Library, 4th floor. Kiosks in McCormack and in the Campus Center outside the one-stop were made available for student use.
- The development of a ‘Support Catalog’ is underway. Basic information about ITS has been captured which allows us to build our ‘internal service catalog’. However additional work needs to be completed before a public facing service catalog is made available. The accompanying Service Level Agreements (SLAs) are not ready yet.
- Salesforce – a Customer Relationship Management system in partnership with Enrollment Management was implemented at the One-Stop, Financial Aid, Bursar, and Registrar’s office to help students in resolving issues at the One-Stop.
- As part of ‘Instructional Continuity’, the focus to have all faculty adopt Blackboard as the primary system to ensure teaching & learning resulted in about 70% of all courses using Blackboard.
- Several systems were piloted during the academic year:
 - ALLY – a system that ensures that content posted on Blackboard is accessible in multiple formats.
 - Eesysoft – a system that captures information on how Blackboard is being used by faculty and students
 - OER – an open education resource textbook in Biology and few other disciplines was used by faculty, savings our student’s valuable resources.
- Training and professional development workshops offered to faculty and staff were also offered to students. Training in designing and printing 3d objects, Blackboard, vendor demos and other events that students took advantage of.

Enrich and Expand Academic Programs and Research

- In Fall of 2016, we opened the MakerSpace Lab in collaboration with School for the Environment (SFE), Engineering Department and Computer Science. A service that is available to all faculty, staff & students, which allows for designing and printing objects in 3D by students working individually and in small groups. Integration with academic departments from the Sciences to Teacher Training have been successful. Plans for collaborating with our community partners is underway.
- The creation of the Virtual Engineering Lab environment allows Engineering students to access applications that were previously only available in the lab on campus.
- A Virtual Lab Environment was created to offer applications available in the general-purpose computer labs – such as SPSS, MatLab, Mathematica, SAS, STATA, etc. This allows our faculty and students access to resources from off-campus. These two services are particularly useful as access to the campus has been difficult with the ongoing construction.
- The usage of both GHPC (UMass shared cluster located in Holyoke at the MGHPCC) and local High-Performance Cluster (HPC) at UMass Boston continues to grow. The local HPC facilities are at capacity.
- Installed and configured two new GPU (Graphics Processing Unit) servers for researchers.

Praise for IT – UMass Boston MakerSpace

“That model is perfect! Exactly what we were hoping for. Looks amazing! Thank you so much for your efforts, it’s been a huge help.”

-Matthew Almeida

- Provided AV Support for all major university events including Graduate Studies Commencement, Undergraduate Commencement, Fall Convocation, IDEAS Boston, UMass Trustee Meeting and MGS Ballot Debates broadcast live on WBUR and others

Improve the Learning, Teaching, and Working Environment

- The creation of a separate Client Services department combined with the Computer Labs to enhance the customer service experience for all faculty, staff and students is underway. The foundation to sharing expertise and resources and enabling a more unified approach to supporting the community has been laid.
- To enhance customer service, the ITS staff have attended trainings on ITIL and Service Management. A Business Services catalog has been built in preparation for migration to ServiceNow platform for service management.
- The web team created an application for “Community Partnerships” to document the various engagements that faculty and staff have with the community, most notably with Boston Public Schools. The application was launched with great reviews in April 2017.
- Many improvements to classroom technology and AV equipment were made during the year – AV in eight classrooms were upgraded from Analog to Digital, which allows for newer laptops to connect via HDMI. Twenty-two aging projectors were also upgraded and the team assisted eight academic departments with upgrading AV their equipment during the year.
- The Classroom Technology team opened and now support fifty-five teaching spaces in University Hall for the start of the Fall 2016 semester.
- Expanded UMB TV Digital Signage System in University Hall and the ISC, adding digital signage to the video wall in the ISC and the TV Monitors outside of the Theater and Recital Hall.
- Research institutes located on the 10th floor of the library had been working on old technology. New CAT 6 cabling has been installed to offer the researchers faster access to data and the ability to move large amounts of data for collaboration with others across the state and the nation. The network enhancements also allow unified communications services to be deployed.
- The 11th annual conference on Teaching, Learning and Technology was hosted in collaboration with the Office for Faculty Development, Center for Innovative Teaching (CIT), Healey Library, CAPS and ITS. Over a hundred faculty and staff attended the event, which comprised of SpeedTalks by three prominent faculty, sixteen presentations by faculty were offered and six faculty members were recognized for their innovation in teaching.
- There were many upgrades to the UMass Boston website and related applications. As over 70% of the access to our site is via a mobile device, the entire UMass Boston Site was made ‘responsive’ (mobile first) – in that you can now easily navigate it on any device – phone, tablet or computer. The WISER system which students use to manage their information was also made ‘responsive’. The feedback from the community has been extremely positive.

Praise for IT – Client Services

“I made a call to the Service Desk for help on restoring and changing my password. The assistance was instant, clear, and effective. I appreciate this type of assistance and hope it continues at UMB. Thanks again.”

-Joe Schork

Praise for IT – Instructional Support

“Paula Thorsland is wonderful, knowledgeable, and helpful! Thank you for your help, Paula!”

- Kimberly D Buescher

Develop an Infrastructure Supportive of the Preceding Goals

- A number of applications for departments across campus were implemented or are under way:
 - Kronos Workforce Ready that allows the Athletics department to manage their student employee timekeeping
 - Maxient Student Conduct
 - A new library system – ALMA/PRIMO to replace the existing Voyager System
 - One-Card System under development with Student Affairs, and will allow faculty, staff and students to manage all transactions using a single card – access control, dining services, library services, printing services, etc.
- Unified Communication Program – a large and complex project that looks to take advantage of combining voice and data onto one cable/network. Phones, PBX and other systems are being upgraded and is expected to be completed in FY 18. VoIP enabled phones were deployed in Wheatley, McCormack, Healey Library, Quinn Administration and Service and Supply building.
- Another major upgrade completed is to the Telecom Billing System – Pinnacle. This system replaces the aging MySoft application.
- Installed and deployed EMC/Syncplicity, the newly adopted storage platform which adds much needed data storage and file sharing services in a secure environment. EMC's Isilon, VNX and Syncplicity modules are deployed to meet the needs of the campus community.
- An extensive upgrade to the wireless network hardware and software for the entire campus was completed allowing for a better experience for our students, faculty, and staff. The Eduroam wireless network, used for seamless access to wireless services at other campuses, was also enhanced. Recent survey results have shown a significant improvement in the wireless service, with over 60% of the faculty, staff and students satisfied with the service.
- Extensive upgrade to the network infrastructure was also completed allowing both the wired and wireless network to achieve an uptime of over 99%. The network distribution layer was upgraded and load balancing systems were installed on servers to achieve better performance.
- Security systems across the board were also enhanced – a new perimeter firewall and a new remote access VPN (Virtual Private Network) appliance was installed to provide greater security to data residing on campus. Training during Cyber Security Awareness Month (October) and an ongoing phishing awareness campaign were completed.
- A new 100kw UPS (uninterruptible power supply) system was installed in the data center to help achieve 99.99% uptime.

Praise for IT – AV & Classroom Technology

"You are completely amazing. I am so glad you work here! It is a huge benefit to this university to have you! Thank you for all you do."

- Hannah Sevian

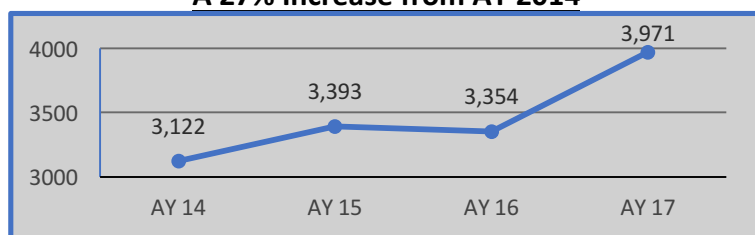
Significant Strengths and Major Achievements

Teaching & Learning

With advancements, in both tools and pedagogies, coupled with the growth in both our online and face-to-face courses where students look for 24 x 7 x 365 access, the role of Instructional Support has become critical. Significant advancements have been made to offer a Blackboard course shell for every course listed in WISER – 2,700 in all impacting ALL of our 18,000 students, offering them a single point of access for all their academic content. Classroom readings, library reserve material, class lectures recorded, assignments completed and graded online are all wrapped together in Blackboard. Investment in Pearson’s 24 x 7 x 375 support allow faculty and students to have questions answered by a ‘live’ person.

As a result of extensive outreach at every level, 70% of all faculty today use Blackboard. The goal for the coming year is to get the adoption rate to increase as students look to having all their course content in one place.

**Four Year Trend - Adoption of Courses using Blackboard
A 27% Increase from AY 2014**



The library has discontinued using Docutek, an eReserves system, and have moved towards hosting such content on Blackboard. This saved financial resources and made content more ADA accessible.

One of the modules within Blackboard is the “Course Evaluation” tool. This could not have come at a better time, as ITS reviews options for automating this process. Today we use the (manual) scantron paper-based system to complete course evaluations. However, with the Blackboard tool now available for each course, academic departments such as CNHS, CEHD, MGS and several departments in CSM are adopting the “Course Evaluation” tool.

Working in close collaboration with Office for Faculty Development (OFD), Center for Innovative Teaching (CIT), CAPS, Healey Library and members from CSM and COSMIC, we hosted the 11th Annual Conference on Teaching, Learning & Technology. Attended by about a hundred faculty, the event featured “Speed Talks”, Technology Demonstrations, sessions on using technology to enhance T&L, etc. Six faculty were also recognized for their leadership in Online, Community based and Face-to-Face teaching.

Innovation is part of the growth of any organization and the instructional support team is reviewing and piloting two products that can make a significant difference to our campus. The two products are:

Ally – a system that ensure that documents uploaded to Blackboard are accessible to students in a number of formats, such as audio and braille files

Eesyssoft – detailed analysis of how Blackboard is being used by Faculty and Students.

Praise for IT – Instructional Support

“I have consistently found Peter Tofuri in particular, and others of your staff to be incredibly responsive and helpful. For example, just yesterday morning, I emailed Peter about a student who was ill and has an incomplete and I was hoping that she could have extended access to the course shell for 2 nursing courses. He emailed back immediately and took care of this. This is just one example of many times that Peter has promptly assisted me. I understand the volume of demands that your department faces and appreciate the strong commitment to assisting faculty and students.”

- Judy Healey Walsh

Zoom an affordable online synchronous communication tool has been gaining popularity. With just 65 licenses available, the faculty have embraced this tool in place of Blackboard Collaborate. Faculty from CNHS and CEHD are heavy users of the application and the plan is to expand adoption.

The MakerSpace Lab

The MakerSpace lab opened in October of 2016, has witnessed a tremendous growth, both in terms of equipment and foot traffic, but also with faculty bringing their classes in for their students to work on projects. The lab has been a true collaboration between ITS, SFE, Engineering and Computer Science. Faculty and staff in each of these departments have embraced this service and have given their own time in promoting this service for the benefit of the UMass Boston community.

A makerspace is a collaborative work space for *making, learning, exploring and sharing* using 3D printers, 3D scanners, design software and other tools and apps. This space is open to all students, faculty & staff at *no cost* located in the Science Building. Entrepreneurs from the VDC and community members from the Aquarium also use these services. The MakerSpace lab offers 3D Scanner, 3D printers, soldering irons and other equipment that the Engineering Department also uses. Additionally, Prof. Craig Yu has donated Virtual Reality (VR) equipment which is also available to all faculty, students and staff.

MakerSpace also helps to prepare those who need the critical 21st century skills in the fields of science, technology, engineering and math (STEM). They provide hands on learning, help with critical thinking skills and even boost self-confidence. Some of the skills that are learned in a makerspace pertain to electronics, 3d printing, 3D modeling, coding, robotics, drones, etc. Makerspace plays a critical role in fostering entrepreneurship and are being utilized as incubators and accelerators for business startups.

Virtual Reality

Virtual reality (VR) is a computer-generated environment that lets you experience a different reality. A VR headset fits around your head and over your eyes, and visually separates you from whatever space you're physically occupying. Images are fed to your eyes from two small lenses. Through VR you can virtually hike the Grand Canyon, tour the Louvre, experience a movie as if you are part of it, and immerse yourself in a video game without leaving your office.

A new service that is presently integrated into the MakerSpace Lab is the new Virtual Reality (VR) service. Prof. Craig Yu from Computer Science has donated all the equipment – Alienware gaming systems, HTC Vive, Oculus and other googles allow our faculty, staff and students to experience Virtual Reality. In late FY 17, we were able to invest in academic content, Google Cardboard, and other peripherals to enhance the VR experience, which faculty can use as part of their course work.

The VR environment is home to the Gaming Club and Prof. Yu has also contributed some of his students to assist others use the equipment.

Wireless

To enhance the overall student, faculty, and staff computing experience, Information Technology Services expanded the wireless infrastructure to provide fuller coverage, and improve wireless services in those areas identified as high user traffic areas. The upgrade consisted of replacing existing wireless access

Praise for IT – AV & Classroom Technology

“Thank you so much for assigning us a Zoom account to use this year. Since this is a new contract for the university, I wanted to let you know how much we use it and in what ways. We've used it for informational webinars about the Higher Education Program, interviews, bringing students into classes who are home sick, committee members to participate in dissertation proposal hearings/defenses, advising, and virtual class meetings.”

- Amy Collinsworth

points with newer models and adding access points to “dead spots” and providing the campus with industry standard, ubiquitous, and secure wireless network services to discourage the use of rogue systems. As part of this plan, the university's back-end infrastructure core network equipment was upgraded to support the next generation Access Points and network switches were upgraded to accommodate the expansion in the Science building. CIS staff replaced over 400 wireless access points (Model 39xx) and added 75 new APs.

Cyber Security Training

To better educate and protect our students, staff, and faculty, the IT Security Team established a Security Training Education and Awareness (SETA) initiative year-round that started with the annual October Cyber Security Awareness Month. The team offered informal education on phishing, using passphrases, understanding ransomware, and other general questions from the UMB community by tabling in high traffic areas of the Campus Center. Customized departmental trainings and a partnership with OLLI for their tech-focused Social Media Day held more formalized sessions for education. The IT Security Team also launched several self-phishing campaigns throughout the year using various email methods to further educate the UMB community on the dangers of phishing, offering free training modules to those who fell for the phish.



Network Security

The next generation of firewalls reside at critical points within our network – the perimeter and the boundary between the wireless networks on campus. Additional features within the next generation firewalls have been leveraged to better protect the University. On the perimeter, the Intrusion Prevention System (IPS) and Anti-Virus/Anti-Bot (AV/AB) functionally have been deployed and is consistently updated. The IPS, used in conjunction with the Anti-Virus/Anti-Bot functionality provide adequate advanced protection from various threats to the University. The next generation firewalls located between the campus wired and wireless networks also leverages the IPS and AV/AB functionality to protect the University. In addition to these features, Wildfire is deployed to further scan files for malicious content. Also, dynamic block lists have been created to block “known-bad” IP addresses. These lists are constantly being updated by a reputable third-party cybersecurity organization.

Classroom Technology

AV Services opened and supported twenty-five new teaching spaces in University Hall for the start of the Fall 2016 semester. Upgraded the Audio Visual Systems in eight Classrooms from analog to digital technology so they could support laptop HDMI connectivity. Replaced twenty-two aging LCD Projectors and upgraded twenty-four wall plates.

The team provided project management and AV support for eight AV Installations for various UMass Boston Academic departments. Expanded the UMass Boston TV Digital Signage System in University Hall and the Integrated Sciences Complex (ISC) adding digital signage to the video wall in the ISC and the TV Monitors outside of the Theater and Recital Hall.

Praise for IT – Instructional Support

“Many thanks again. I had a really great time working on my Blackboard courses – really!”

- John M. Steinberg

AV Services also provided AV Support for all major university events including UMass Boston Graduate Studies Commencement, Undergraduate Commencement, Fall Convocation, IDEAS Boston, UMass Trustee Meeting and MGS Ballot Debates broadcast live on WBUR.

Research Computing

The Research Computing department has continued to train new users for both local and MGHPC shared compute resources, more than doubling our use of the MGHPC. We have significantly expanded our local 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. ITS 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.

Application & Web Services

Unified Communications Program continues with significant progress, including Voice-Over IP, PBX Replacement, Voicemail Upgrades, Pinnacle Telecommunications Billing System, 1,100 SIP phones deployed to Quinn, McCormack, Wheatley, ISC, and University Hall, ACD, and E911 projects. Conversion of University website to “mobile ready” responsive design completed and launch of new responsive, redesigned Human Resources web site. This is a critical project as about 25% of all traffic to UMass Boston is now viewed and accessed via a mobile device. Making content easy to access and view on mobile devices will enhance the experience of prospective & current students.

Web Access by Mobile Devices – FY 17

Total Visits	2,062,994	24.40% of all Visits
Unique Visitors	1,030,547	25.84% of all Unique Visitors
Total Web Pages Viewed	5,158,597	17.53% of all Pages Viewed

Salesforce implementation of Case Management for The One Stop, Financial Aid, Bursar’s and Registrar’s Office completed.

Launch of the “Engage” web application for the Office of Community Partnerships to facilitate cross organizational partnerships within the University and the Community. Over 2,100 web request work orders completed.

Qualtrics, an online enterprise survey tool was rolled out to the campus community. Several academic and administrative departments are using this tool as it is easy to use and ensures that the data is secure in the cloud.

Upcoming Projects

There are several promising projects underway that will come to fruition in FY 18. These are:

- Wide spread implementation and availability of VDI (Virtual Desktop Infrastructure).
- ServiceNow – a system that allows ITS to enhance customer service by streamlining workflow processes. Popular modules that will be implemented are “Service Catalog”, “Change Management”, “Incident Management” and “Knowledge Management”. Rollout may start in October.
- Salesforce – a system that allows for personalization of service. This system has been implemented at the “One-Stop” and is under consideration for “Academic Support” allowing advisors to better serve our students.

Praise for IT – Research Computing

“Early this week, Jeff Dusenberry brilliantly solved a long-standing problem with one of our servers. Around here, we have to make due with our limited resources and solve problems in creative ways. While we have been coordinating with Jeff (and others in IT) on these servers for a long time, I think Jeff went above and beyond this time. He took our problem seriously, extensively researched it, and then solved it.”

- John M. Steinberg

Beyond IT: Collaboration and Outreach

Internal Partnerships

ITS has forged collaborations with other campuses, participating in the first annual “Academic Innovation” Conference hosted by the president’s office; as well as the second annual “Five Campus technology” conference hosted by the Lowell campus. Several presentations were led by the ITS Staff in various disciplines – such as Accessibility, Salesforce, Blackboard Template, Voicethread, OER, MakerSpace, etc. These collaborations have allowed ITS to share technology with other campuses which allows us to enhance teaching and learning for our faculty and students.

ITS is also working very closely with Enrollment Management, CAPS, Academic Support on the deployment of Salesforce as a way to provide personalized service to the community.

ITS remains engaged with a number of internal audits conducted by the President’s Office. The data center, desktop/laptop & AV equipment property, HR and Finance audits are still ongoing.

We depend on UITS for many of our services and have forged an excellent working relationship with them. Major projects such as iDM, the two-factor authentication and enhancements in the ERP system, have progressed well and on time.

UMass Online is another entity we work with closely. This year they have played a critical role in rolling out an essential component of instructional continuity where every course in WISER has a Blackboard shell.

Praise for IT – AV & Classroom Technology

“A quick note to thank you for all of your work and efforts for our commencement ceremonies, Thanks for all of your help.”

- Joyce Morgan

External Partnerships

The Application and Web Services team have played a crucial role in the development of a database that the Community Outreach office can use to collect data on collaborations that faculty, staff and students have with external organizations.

The new MakerSpace Lab has been a hub for external collaborations. The Boston Public School and the City of Cambridge are two large communities we working with to form a partnership. A number of programs under CSM – such as Student Success, McNair Program, Tech Savvy programs have brought their students in to spend a few hours to be exposed to some of these new technologies. Future collaborations with programs such as Camp Shriver, Latino Students, etc. are being discussed.

Praise for IT – AV & Classroom Technology

“Thank you again. We reviewed the video again and it looks great. We are thrilled with the final product. Thank you again very much for the time you committed to this video, it shows. We are grateful to have such good university partners.”

- Geoff Combs

Student Recognition

The backbone for tier I service to our students, faculty & staff, our student employees support everything from classrooms to computer labs to Blackboard and teaching tools. In April the CIO Office hosted a Student Recognition Event honoring each and every student that works for ITS. Each student received a certificate in recognition for their exceptional work.

UMass Boston Peers’ Institutions: Comparative Technology Costs as Benchmarks

The University of Massachusetts Boston has identified seven institutions as peers (data for University of Maryland Baltimore County were not available) for comparison purposes and used as benchmarks in the UMass President’s Office Performance Measurement System (PMS). **IPEDS** 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:

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 Massachusetts Lowell, approximately \$10,500, taking a 3rd position compared to its seven peer institutions.

FY 2016 UMB 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 Expenses
University of Louisville (494)	20,592	\$8,068	\$1,905	\$4,616	\$14,589
University of Illinois Chicago (340)	25,747	\$6,819	\$2,302	\$2,633	\$11,754
UMass Boston (525)	17,030	\$3,130	\$2,450	\$4,974	\$10,554
UMass Lowell (454)	17,191	\$3,403	\$3,201	\$3,848	\$10,452
University of Missouri—Kansas City (599)	16,685	\$3,323	\$1,773	\$3,552	\$8,648
University of Nevada, Reno (445)	16,681	\$3,030	\$2,613	\$2,799	\$8,442
University of Memphis (588)	20,379	\$1,965	\$3,994	\$1,790	\$7,749
Cleveland State University (649)	15,038	\$2,471	\$1,718	\$2,938	\$7,127

Among our peer institutions we find that the expense on Information technology for UMass Boston is at the higher end, with only University of Louisville and University of Illinois Chicago spending more than the Boston campus. UMass Lowell's expenditure in technology services is at par with the Boston campus; however, the Lowell campus is more advanced in infrastructure and technology services and has half as many staff as the Boston campus does serving about the same number of students. Productivity and streamlining the UMass Boston business processes is said to help even the playing field.

Information Technology Expenses Estimation per FTE Six-Year Trends						
Fiscal Year						
University Name	2011	2012	2013	2014	2015	2016
University of Louisville (494)	\$9,178	\$9,162	\$10,754	\$10,909	\$12,767	\$14,589
University of Illinois at Chicago (340)	\$7,325	\$7,746	\$9,195	\$9,993	\$11,329	\$11,754
Univ. of Massachusetts Boston (525)	\$7,530	\$7,701	\$7,856	\$8,772	\$9,729	\$10,554
Univ. of Massachusetts Lowell (454)	\$7,577	\$8,557	\$8,271	\$9,315	\$10,076	\$10,452
Univ. of Missouri-Kansas City (599)	\$6,197	\$7,308	\$7,082	\$7,566	\$7,821	\$8,648
University of Nevada-Reno (445)	\$7,964	\$7,770	\$8,350	\$8,119	\$8,651	\$8,442
University of Memphis (588)	\$6,826	\$7,993	\$7,555	\$7,907	\$7,403	\$7,749
Cleveland State University (649)	\$6,378	\$5,891	\$6,477	\$6,205	\$6,472	\$7,127

The trend shows that both Boston and Lowell have made significant investments in technology – a growth of about 40% from 2011 to 2016; however not as much as University of Louisville and Illinois @ Chicago which has increased investment by about 60%. University of Nevada, Cleveland State and University of Memphis have seen the slowest growth ranging between 6% and 13%

The more advanced institutions (higher rankings) have made an investment in business processes based on ITIL standards; have a fairly flat organizational structure; a strategic plan; and a governance council. The number of staff working at these institutions is about the same level as UMass Boston. In some cases, higher.

FY 18 ITS Strategic Goals

Although we align our ITS Goals with those of the university, it is important that we recognize the top 10 issues identified by Educause – all based on ONE ultimate goal – **Student Success**.

With the advance in tools that use technology, especially in systems such as predictive analytics that faculty, advisors and administrations can use to identify when a student is at risk well before the student drops out or fail, is critical to the success of the university.

Educause Top 10 IT Issues

1. *Information Security*: Developing a holistic, agile approach to reduce institutional exposure to information security threats.
2. *Student Success and Completion*: Effectively applying data and predictive analytics to improve student success and completion.
3. *Data-Informed Decision Making*: Ensuring that business intelligence, reporting, and analytics are relevant, convenient, and used by administrators, faculty, and students.
4. *Strategic Leadership*: Repositioning or reinforcing the role of IT leadership as a strategic partner with institutional leadership.
5. *Sustainable Funding*: Developing IT funding models that sustain core services, support innovation, and facilitate growth.
6. *Data Management and Governance*: Improving the management of institutional data through data standards, integration, protection, and governance.
7. *Higher Education Affordability*: Prioritizing IT investments and resources in the context of increasing demand and limited resources.
8. *Sustainable Staffing*: Ensuring adequate staffing capacity and staff retention as budgets shrink or remain flat and as external competition grows.
9. *Next-Gen Enterprise IT*: Developing and implementing enterprise IT applications, architectures, and sourcing strategies to achieve agility, scalability, cost-effectiveness, and effective analytics.
10. *Digital Transformation of Learning*: Collaborating with faculty and academic leadership to apply technology to teaching and learning in ways that reflect innovations in pedagogy and the institutional mission.

2017-2018 ITS Goals

The list below blends the ITS Goals with the Top 10 issues identified by Educause

ITS Goals matching the following UMass Boston Strategic Goals: Advance Student Success and Development, Student Success and Completion, Data-Informed Decision Making

- Define and publish a support catalogue for all IT services *
- Events/Outreach Efforts: Vendor demos, training and other outreach activities
- Offer One-Drive service to UMass Boston users *
- Enhance / improve VDI services so students and classes can access software resources from off-campus. Migrate Virtual Computer Lab offerings to VDI.
- Establish ITS Student employment program that facilitates professional development and cross-training of various technical skills to provide student employees with diverse work experience.
- Improve the accessibility of content within the Blackboard learning management system by implementing Blackboard ALLY.
- Increase student awareness of high performance computing for research projects.

- Development of Salesforce PASS Predictive Analytics for Student Success for Academic Advising
- Continue to upgrade the technology in our classrooms from analog to digital to support emerging technology requirements.
- Expand upon the usage and deployment of the Echo360 Classroom Capture system to support course review and or delivery to remote populations.
- Foster increased awareness and usage of our Interactive TV Distance Learning classrooms to support remote student populations to generate additional revenue.
- Increase equipment offerings in AV Offices across the campus to better meet the needs of our faculty, students and staff.
- Continue to expand the deployment of the Zoom Desktop Meeting Tool.

ITS Goals matching the following UMass Boston Strategic Goals: Enrich and Expand Academic Programs And Research

- Design & implement a professional development course for students to get experience in MakerSpace systems.
- Continue to improve the quality of online education through refinement and implementation of OSCQR standards including badging and collaboration with SUNY.
- Facilitate research with compute- and storage-intensive requirements through appropriate training and systems support.
- Work with departments and centers to create informational on-line videos for marketing and student support needs.
- Continue to upgrade and expand the Digital Signage System to market events, programs and courses.

ITS Goals matching the following UMass Boston Strategic Goals: Improve The Learning, Teaching, And Working Environment, Digital Transformation of Learning

- In collaboration with CAPS, support the increasing number of online courses making possible additional fully online degree programs.
- Contribute to the spread of pedagogies such as active learning throughout the campus through opportunities such as assuming a leadership role in the TEAL Fellows program and Steelcase grant, and collaboration with the Office of Faculty Development.
- Develop a training system to increase adoption of Blackboard and make it easier for Faculty to adopt Blackboard.
- Play a key role in the projects related to the REAB program. Collaborate on the design, implementation and ongoing support of new technology equipped teaching and learning spaces on the 1st floor of Wheatley as part of REAB.
- Roll out EMC's Syncplicity system to allow for seamless document storage and collaboration. Proceed with project to replace Xythos Document Management with EMC Storage and Syncplicity file administration.
- Implement the ALMA / Primo Library system to move to a SOTALIS (State of the Art Library Information System) and completely replace the 1999 Voyager Library system.
- Launch the "Engage" web application, soft launched in mid-2017 to all University and Client Partnership entities, provide training and support, assist Office of Community Partnerships.

ITS Goals matching the following UMass Boston Strategic Goals: Establish A Financial Resources Model Consistent with The University's Vision Statement, Sustainable Funding, Higher Education Affordability, Sustainable Staffing

- Engage Office of Community Partnerships web application, phases II and III.

- Identify opportunities to lower the cost of education with free textbooks and other open educational resources.
- Utilize AV Monitoring systems to better track equipment usage and repairs to reduce support and energy costs.

ITS Goals matching the following UMass Boston Strategic Goals: Develop an Infrastructure Supportive of the Preceding Goals, Information Security, Strategic Leadership, Data Management and Governance, Next-Gen Enterprise IT

- Increase and enhance Wireless Coverage. *
- Installation and configuration of Checkpoint Firewall/VPN/Packet Shaper appliance, Juniper border routers. *
- Implement ServiceNow Phase I: Service Catalog and Incident tracking.
- Roll out Syncplicity, EMC Isilon, and EMC VNX solution and develop as a service.
- Deploy Multi Factor Authentication – Duo to HR and VPN systems.
- Implementation of a Contact or Call Center for Enrollment Management and Service Desk - Pilot new call center technology that will enable location independence for Service Desk staffing and provide metrics facilitating improved scheduling and resource allocation.
- Implementation of an automated call routing system at the switchboard. *
- Selection and implementation of a NAC (Network Access Control) System. *
- Develop systems, processes and protocols to support students in the new residence halls.
- Offer cyber security training throughout the year, with special emphasis on Cyber Security Awareness Month – October. *
- Perform at least partial technology refresh of local high performance compute facilities.
- Increase capacity of research computing backup servers to allow backups of large research datasets.
- Support the implementation of the new Library System Alma & Primo.
- Continuation of Unified Communications Program, including deployment of SIP Phones, implementation of Pinnacle Billing System, Automated Call Distribution, and E911.
- Implementation of OneCard (Beacon) in preparation for Residence Hall and expanded capabilities for student population – A Student Affairs sponsored project.
- Review and revise student printing service to be more streamlined and to work with the Beacon OneCard.
- Continued web redesign activities with all Academic and Administration Departments.
- Upgrade the “Active Directory” system that allows for managing client computers across the enterprise.
- Review and revise our approach to administering and expanding the use of Kace 1000 as a mission critical IT tool.
- Develop reporting for system utilization and capacity planning for the virtual environment.
- Migration of VStart storage to EMC VNX platform.
- Consolidation and virtualization of web server footprint to VStart.
- Develop reporting for system utilization and capacity planning for the virtual environment.
- Decommissioning of the GIS environment.
- Replace Lyris with O365 Groups.
- Migrate License server to a new server.
- Add Certificates to departmental accounts.
- Deploy read only Domain Controller in Shrewsbury.
- Start the migration of network infrastructure to Utility Corridor and Roadway Relocation (UCRR).
- Stabilize current routing configuration.
- Move Wireless NAT to the border.

- Move CJ from current AirFiber to Dark Fiber and build a BDF.
- Implementation of F5 load balancing for Syncplicity.
- Migrate and upgrade perimeter Firewall Management Consoles.
- Internal Firewalls (Palo Alto) Consolidation (Pending funding).
- Implement Anti-Malware strategy for Virtual Machines and Kiosks.
- Selection and implementation of a NAC (Network Access Control) System

Addressing ITS Weaknesses: Improving Efficiency and Effectiveness

As evidenced by our recent Community Satisfaction Survey, ITS has been able to sustain our services to the overall satisfaction of our constituent communities. This attests to the commitment of the staff and management, including student employees, who comprise ITS. That said, the majority of initiatives to improve both our services and our effectiveness/efficiency have been on hold for the bulk of the FY2017 Academic Year. This is due to several factors, all related to resources.

One factor is that the majority of improvements in IT services require incremental operational investment to be realized. Along with the balance of the campus, the budget reductions in FY2017 (and projected reductions going into FY2018) either diminished or eliminated improvement initiatives. In order to sustain existing services, the ongoing costs of those services have top priority leaving little or no operational funds to improve services and improve ITS effectiveness and efficiency.

The most important asset in ITS is our management and staff and their recruitment, continual professional development (including technical training), and retention. While significant progress was made in this area in FY2016, we were unable to sustain these investments going forward. In addition to ensuring our staff are technically current in a rapidly changing discipline, this is particularly important in retention. In Boston's very competitive IT labor market, IT professionals focus on ensuring their skills are kept current and keep expanding with their employer's help.

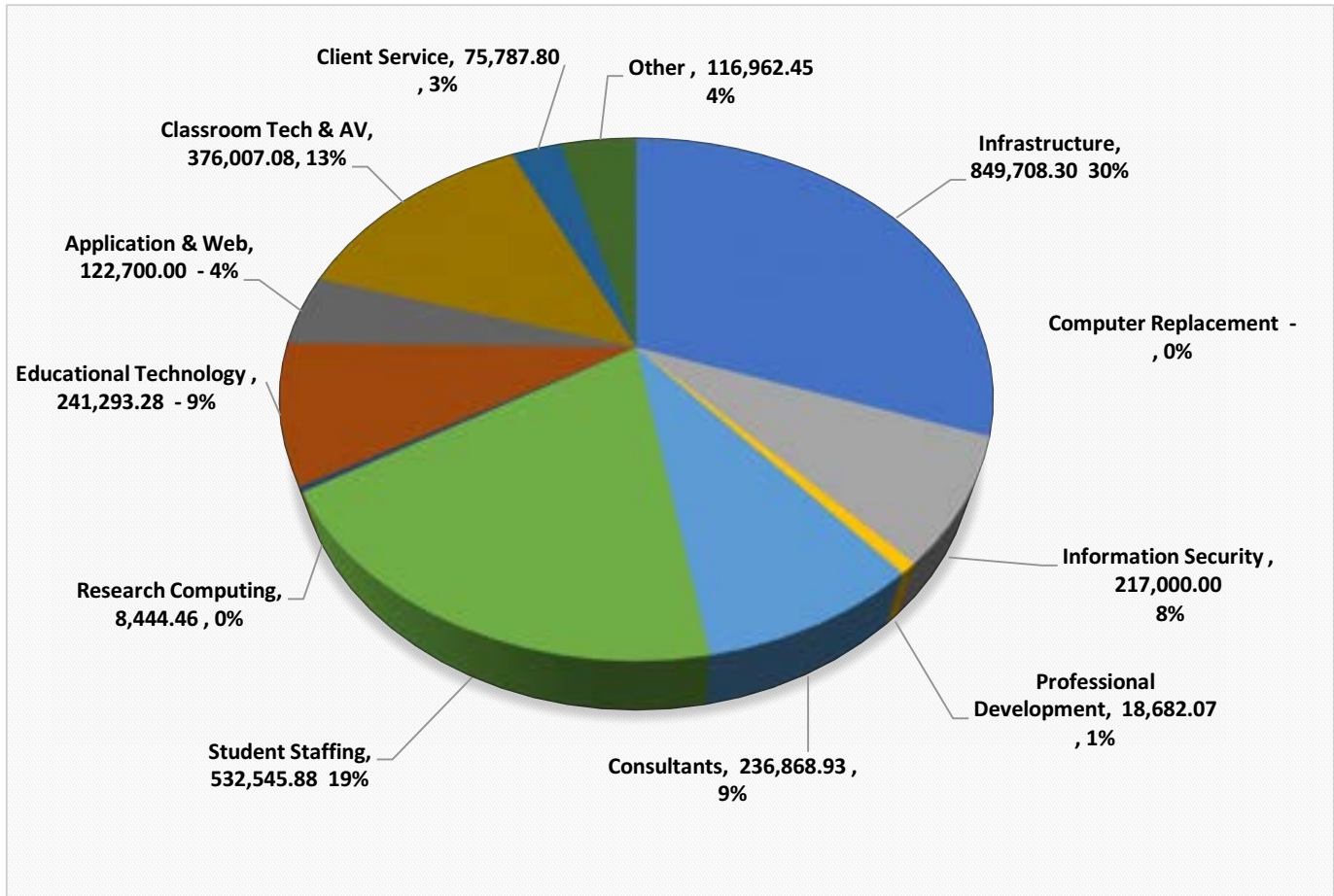
Lastly, there are a number of foundational resource management issues which we have been unable to address in FY2017. These include the lack funded replacement of technology components (including customer workstations) as they, inevitably, become obsolete, the lack of a mechanism to address contractually committed annual 'cost of doing business' increases from our suppliers, and expansion of the physical campus without a matching expansion in ITS service capabilities. The net effect of these issues is that ITS management and staff must continually 'scramble' to support our service commitments leaving little time and resources to focus on improving our services or our ability to provide those services.

ITS management and staff are looking forward to the stabilization of UMass Boston resources which will allow us, while continuing to provide ever improving services, to improve our efficiency and effectiveness.

Appendixes

ITS 2016-2017 Expenditures

The 2016-2017 operating budget for ITS was approximately \$ 2,796,000 as displayed in the graph below. The 'Other' category include: Telephone recharges, printing, mailing, office supplies, and small equipment



Infrastructure	\$849,708	30%
Student Staffing	\$532,545	19%
Classroom & AV Technologies	\$376,007	13%
Educational Technology	\$241,293	9%
Consultants	\$236,868	9%
Information Security	\$217,000	8%
Application & Web Services	\$122,700	4%
Other [Telephone, copying]	\$116,962	4%
Client Services	\$75,787	3%
Professional Development	\$18,682	1%
Research Computing	\$8,444	0.5%

Robert Weir – Vice Provost/CIO

Salina Allen-Sharpp, Executive Assistant
Christine Boseman, Administrative Assistant

Linda Modiste - Assistant Vice Provost Application Services

VACANT, Manager, Application Administration

- VACANT, Application Administrator
- Jeeva Arthur, Database Developer
- Bhavesh Shah, Database Administrator
- Peter Tierney, Application Software Administrator

Terence Phalen, Director IT Program Management

- Haranjal Kaur, Business Systems Analyst II
- Anthony Manibusan, Application Administrator II
- Tom McClelland, Business Systems Analyst II
- Lisa Moriarty, Business Systems Analyst
- Linda Perrotto, Change Management Lead
- Mary Ryan, Business Systems Analyst II

Jim Wyse, Director IT Web Services

- Lisa Berelson, Senior Web Designer/Developer
- Jonathan Crawford, Web Designer/Developer
- Kevin Gerich, Web Designer/Developer
- Lisa Link, Senior Web Designer/Developer
- Peter Tattlebaum, Web Designer/Developer

Mikhail Nitko, Manager CRM Program

Wil Khouri - Assistant Vice Provost Communications and Infrastructure Services

James Soule, Manager of IT Operations

- Kurt Charlton, Operations Technician
- Carmine DiFilippo, Technical Specialist II
- Damon Lassiter, Telecom Network Manager
- Johnny Luk, Operations Technician
- James Morrison, Operations Analyst
- Robert Siebert, Staff Assistant
- John Tansey, Operations Technician
- Ruth Tremblay, Clerk IV

Brian Forbes, Manager Systems and Networking

- Azadeh Aslani, Senior Network Engineer
- Marla Filoso, Systems Administrator
- Donald Foye, Senior Network Engineer
- Yuk Fung, Enterprise System Administrator
- Scott Gilbert, Senior Network Engineer
- Leonard Kroll, Linux/GIS Systems Administrator
- Daniel McDonald, Linux Web and HPC Administrator
- Jamil Moosavifard, Senior Systems Administrator
- Ellinor President, EDP Programmer IV
- Chhorda Rorth, Enterprise System Administrator

Dianne Kroll, Manager Telecom Users Services

- VACANT, Telecommunications Assistant
- Sereynita Altarejos, Administrative Assistant II
- Eduardo Luciano, Buyer II
- Mimoza Papargjir, Administrative Assistant I

Information Security & Project MGR

- David Bonczar, Senior Information Security Specialist
- David Gorfine, Infrastructure Project Manager
- Alison Murray, Senior Information Security Engineer

Barbara Goguen- Assistant Vice Provost Client Services

Raymond Tse, Manager, IT Desktop and IT User Services

- VACANT, Desktop Support Consultant
- VACANT, Desktop Support Consultant
- VACANT, Desktop Support Consultant
- Andrew Arcadipane, Desktop Applications Support Consultant
- Scott Devillafane, Service Center Technician
- Hung Nguyen, Desktop Application Support Consultant
- Quan Nguyen, Desktop/OS Windows Consultant
- Tam Nguyen, Desktop Application Support Consultant
- Daniel Okoh, Desktop Repair Technician
- David Schultz, Desktop Support Consultant

VACANT, Manager Lab Operations

- VACANT, PC Systems Manager
- VACANT, IT Lab Operations Student Supervisor
- Dann Brown, EDP Programmer III
- Ananta Sinha, Supervisor, Comp Op System and Services
- Henry Lay, Mobile/iOS/Virtual Lab Supervisor
- Binh Ly, ITLC Systems Specialist
- Matt McCubbin, IT Accessibility Coordinator
- David Ford, GRC Senior Specialist

Peter Adams, Supervisor IT Service Desk

- Christine Carpenito, IT Service Desk Support Consultant
- Rocky Haggard, Software Support Specialist
- David Wilson, EDP Programmer III

Apurva Mehta - Associate CIO

John Mazarella, Manager, Training, Communication, and Marketing

- Angela Carretta, Administrative Assistant I
- Katherine Ananis, Software Trainer

Gene Shwalb, Manager, E-Learning and Instructional Support

- VACANT, Assistant Manager Online Instructional Support
- Ellen Foust, Instructional Designer
- Irene Yukhananov, Senior Instructional Designer
- Linda Sudlesky, Instructional Design/Sync Online Learning Specialist
- Kalindi Mehta, Senior Learning Management System Administrator
- Jouliana Bosneva, Instructional Designer
- Paula Thorsland, Senior Instructional Designer
- Peter Tofuri, Jr, Learning Management System Administrator
- Rrezarta Hyseni, Senior Instructional Designer
- Theresa Nelson-Miller, Instructional Technologist

John Jessoe, Manager, Classroom Technology and AV Services

- VACANT, Classroom Technologist – EDP Systems Analyst I
- Jeffrey Wade, Chief Audio Visual Engineer
- Lauren Nogueira, EDP Systems Analyst I
- Mark O'Sullivan, Associate Production Coordinator
- Michael DiFilippo, EDP Systems Analyst I
- Richard Fish, Instructional Media Specialist
- Rosa Oculto, Instructional Media Specialist
- Stephen Siteman, Instructional Media Specialist
- Vivian Tran, Instructional Media Specialist
- Zack Ronald, EDP Systems Analyst III

- Alexandrine Policar, Special Projects Ed Tech and Learning Commons

Marsha Florio - Assistant Vice Provost Business Operation

- Jiuan Mo, Business Manager
- Eleanor Brown, Assistant Business Manager

Jeffrey Dusenberry - Director Research Computing

- Runcong Chen, Research Computing Associate

Information Technology Services (ITS) FY 17 Satisfaction Survey – Highlights – Summary Report

There have been three significant changes in the way the FY 17 ITS Satisfaction Survey has been designed and implemented.

For the past six years, the ITS satisfaction survey was conducted using the MISO (Measuring Higher Education Library & IT Services) instrument, jointly with the library. This is the first year (FY 17), where the management of the survey has been moved from MISO to Institutional Research (IR) – a department with significant experience in designing and administering surveys within UMass Boston. The instrument was developed internally, administered and analyzed by the IR staff. The process worked very well, the IR staff were extremely helpful and accommodating. An area of concern was the low response rate; especially among the students; however, extending the deadline and sending additional reminders brought the response rate up to an acceptable level.

The second significant change was the move from a four-point to a five-point scale. This was deemed necessary as other UMass Campuses as well as the President's Office had data based on a five-point scale. Because of this change, a true comparison or 'trend analysis' cannot be completed or done, it should be kept in mind that the scale has changed.

The third change incorporated was to allow members of the ITS Staff to participate in the survey. It was decided that input from the ITS staff members would be very valuable.

Overall Observations:

1. A high-level of satisfaction among all three audiences on the services that ITS provides. Faculty & Staff had the highest level of satisfaction; while the students who depend so heavily technology were slightly less enthusiastic. The percentage of respondents across all three segments who said they were 'unsatisfied' was very small – less than 10%. A trend that has continued since FY 14.
2. Investment in wireless services has clearly paid off, results show a big improvement – both in performance and availability. Although it remains a pain point among all three sectors, the dissatisfaction level has dropped to between 18% - 25%.
3. The one area that faculty listed needing improvements is the 'technology in the classroom'. As new buildings have come online, much of the attention has been shifted there, resulting in existing classrooms being neglected & the lack of funding to replace older equipment.
4. Email and other services offered by the ITS staff all get very high scores in satisfaction levels – services include: Instructional Support, the Service Desk, Desktop Support, Web Services, ERP Support, etc.
5. The one pain point students list besides Wireless, is 'Student Printing' with about 16% of the students looking to see improvements.
6. The difference in the satisfaction level for Blackboard among Faculty and Students is vast. Students have embraced the system, probably because they are familiar with learning management systems from their high-schools. However, Faculty have expressed their dissatisfaction with using Blackboard and find it difficult and often time-consuming to use.

Overall Satisfaction with IT Services – FY 17

	Students	Faculty	Staff
Very Satisfied	18.75%	20.69%	27.43%
Somewhat Satisfied	45.83%	52.16%	47.49%
Satisfied – Total	64.58%	72.85%	74.92%
Neutral	27.78%	16.81%	15.3%
Acceptable [Satisfied + Neutral]	92.36%	89.66%	90.22%
Somewhat Dissatisfied	3.47%	7.33%	7.67%
Very Dissatisfied	4.17%	3.02%	2.06%

Highlight of the survey results: Faculty

The survey was sent to 1,253 faculty with 253 (21%) completing the survey.

Overall 72.9% of the faculty said that they were satisfied or very satisfied with IT Services; while 16.8% were neutral and 10.3% were unsatisfied.

The top three services faculty use are: Blackboard, Wi-Fi & Wisser System.

The top three services faculty have been satisfied with are: email Services (84.48%), Instructional Support (79.67%), & the Wisser System (78%)

What is the one service you would like to see improved? - The top three services the faculty listed were: Technology in the Classroom (19.5%), Wi-Fi (17.6%) and Blackboard (15.6%)

Service	Satisfied %	Neutral %	Acceptable % Satisfied + Neutral	Dissatisfied %
Instructional Support has been available	80.8	16	96.8	3.2
Instructional Support has met my needs	79.2	16	95.2	5.2
Blackboard has been available	91.8	6.3	98.1	2.0
Blackboard is easy to use	62.1	22.3	84.4	15.6
Blackboard has met my needs	68.2	17.8	86.0	13.9
Technology in the classroom has met my needs	65.0	18.7	83.7	15.3
Wireless has been available	66.0	15.5	81.5	18.5
Wireless has been reliable	54.2	20.4	74.6	25.4

Highlight of the survey results: Students

The survey was sent to 1,200 students with 171 (14%) completing the survey.

64.6% of the students said that they were satisfied or very satisfied with IT Services; while 27.8% were neutral and 7.7% were dissatisfied. The top three services students use are: Wi-Fi, Blackboard & Wisser System. The top three services students have been satisfied with are: Blackboard (77.1%), Service Desk (79.2%) & Computer Labs (68.35%). What is the one service you would like to see improved - The top three services the students listed were: Wi-Fi (37.3%), WISER (18.7%) and Printing Services (15.7%)

Service	Satisfied %	Neutral %	Acceptable % Satisfied + Neutral	Dissatisfied %
Blackboard has been available	86.5	12.0	98.5	1.6
Blackboard is easy to use	78.2	16.5	94.7	5.3
Blackboard has met my needs	77.3	14.4	91.7	8.4
WISER has been available	84.0	11.8	95.8	4.2
WISER is easy to use	57.0	22.5	79.5	20.4
Computer Labs has met my needs	68.3	25.6	93.9	6.1
Printing Services has been available	71.3	17.8	89.1	10.9
Print Services is easy to use	72.0	19.0	91.0	9.0
Printing Services has met my needs	74.3	17.8	92.1	8.0
Wireless has been available	69.3	17.7	87.0	12.9
Wireless has been reliable	69.6	20.2	89.8	20.2
Email Services	72.1	19.6	91.7	8.4
Services Desk (Helpdesk)	79.2	16.9	96.1	3.9

One of our peer institutions is UMass Lowell. They conducted a similar satisfaction survey of their students in FY 17. Listed below are the comparative results, showing that both campuses have similar satisfaction levels for IT Services.

Overall Satisfaction with IT Services - Students

	UMass Boston	UMass Lowell
Somewhat Satisfied	45.83%	37.75%
Satisfied	18.75%	26.14%
Total Satisfied	64.58%	63.89%
Neutral	27.78%	29.48%
Acceptable [Satisfied + Neutral]	92.36%	93.37%
Dissatisfied	4.17%	1.69%
Somewhat Dissatisfied	3.47%	4.93%
Total Dissatisfied	7.64%	6.62%

Highlight of the survey results: Staff

The survey was sent to 1,673 staff with 397 (24%) completing the survey.

74.9% of the staff said that they were satisfied or very satisfied with IT Services; while 15.3% were neutral and 9.8% were dissatisfied.

The top three services staff use are: Wi-Fi, ERP Systems (HR, Finance, etc.) & the Service Desk.

The top three services staff have been satisfied with are: Email Services (85.58%), Desktop Support (76.39%) & the Service Desk (75.61%)

What is the one service you would like to see improved - The top three services the staff listed were: Wi-Fi (21.80%), Service Desk (21.80%) & Desktop Support (13.91%).

Service	Satisfied %	Neutral %	Acceptable% Satisfied + Neutral	Dissatisfied %
ERP (HR, Fin, Procurement) has been available	78.78	16.98	95.76	4.24
Email Services	85.58	10.29	95.87	4.12
Desktop Services	76.39	14.81	91.2	8.80
Services Desk (Helpdesk)	75.61	14.63	90.24	9.76
Wireless has been available	65.91	17.80	83.71	16.29
Wireless has been reliable	55.89	21.29	77.18	22.81

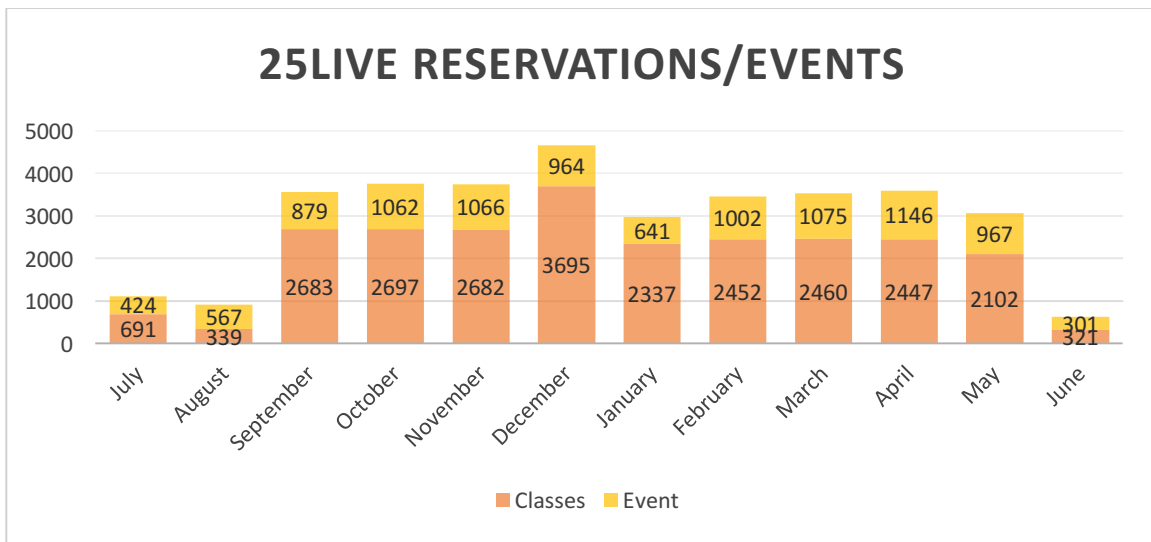
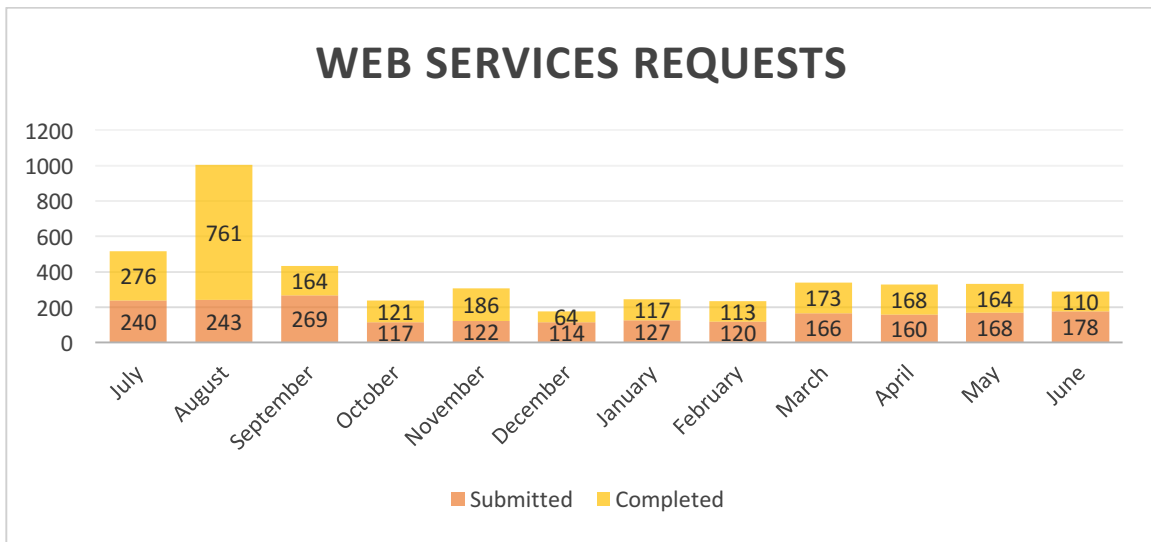
Results of the Investments Made

Comparing AY 17 to AY 16 survey results, we have successfully made major investments in the following services:

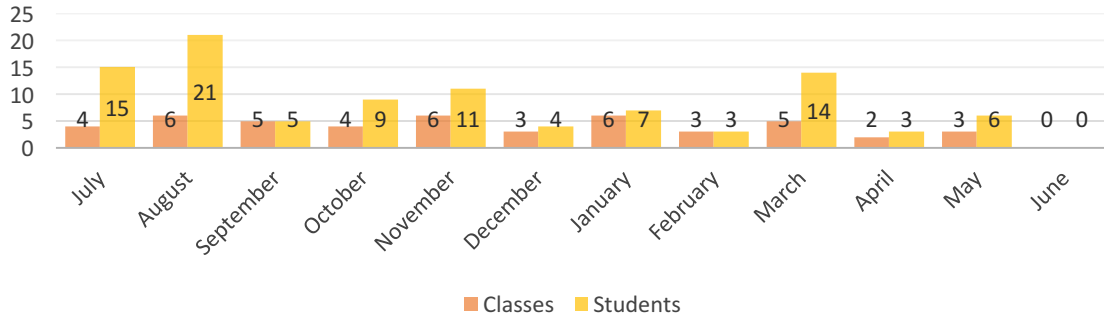
1. Wireless Services have improved significantly. Over 1,000 access points were replaced or tuned & 75 new ones installed, the wireless infrastructure was redesigned from the ground up – all leading to improved performance and availability across campus.
2. Help Desk / Service Desk services to our students, faculty and staff have shown a steady improvement as a result of significant investment in staffing (full-time and student), training and documentation. Beginning in FY 12, the satisfaction level for helpdesk service jumped from 54.8% to 87.55% and has remained fairly steady since then.
3. Desktop Services has also seen an improvement in the satisfaction level. This can be attributed to the investment made in technologies such Bomgar, Kace and motivated staff. The staff have taken on the imaging and implementation of computers as part of the ‘Replace’ program.

Graphical Representation of Services Provided Per IT Service Area

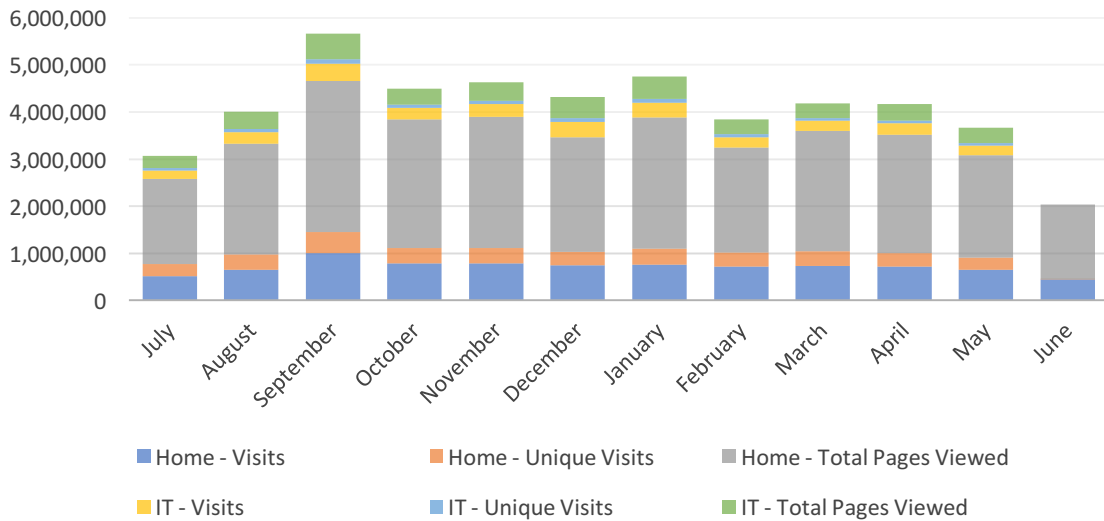
Application Services



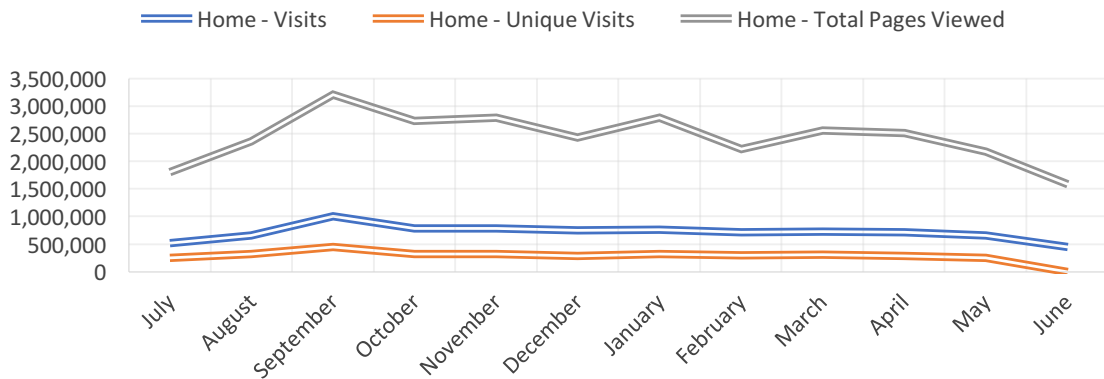
PEOPLESFT APPLICATION TRAINING [BUYWAYS/DOCUMENT IMAGING]



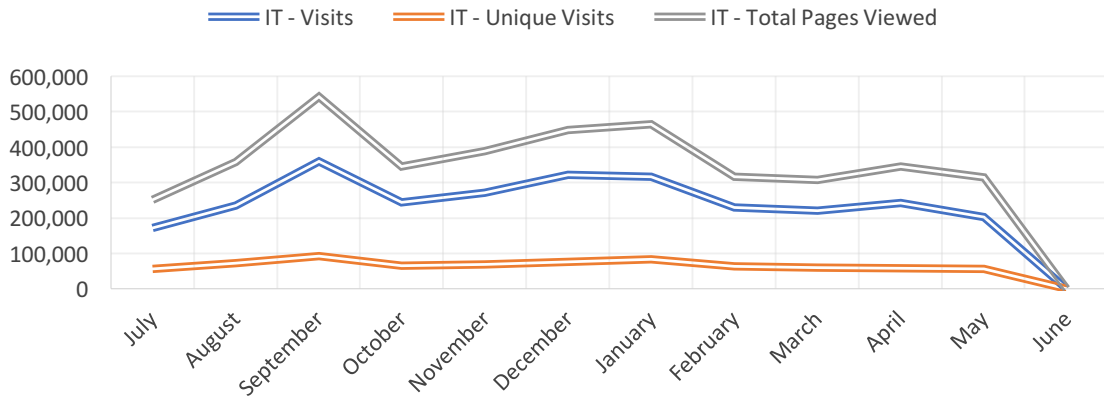
UMASS BOSTON & IT WEBSITE



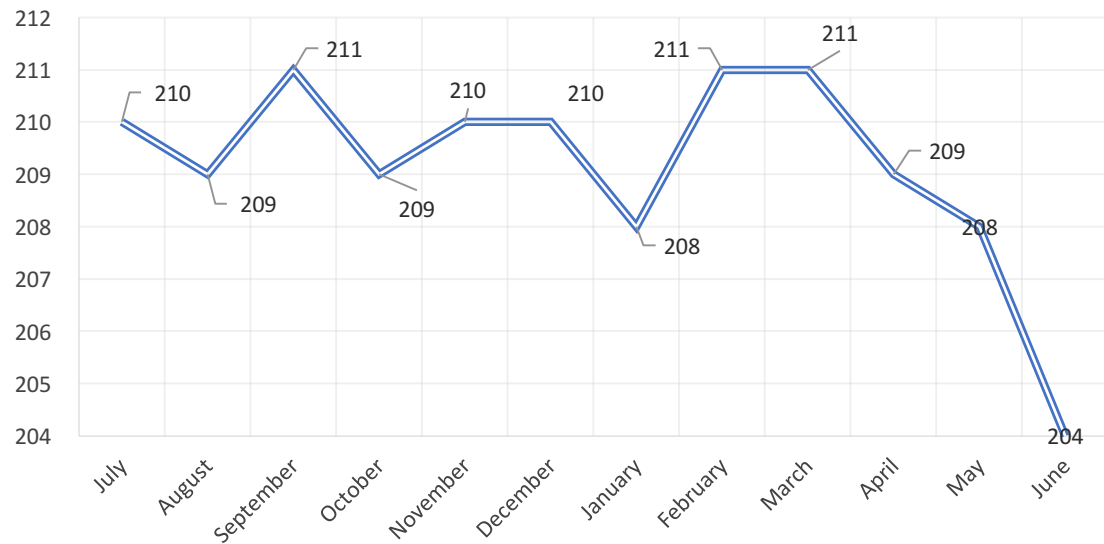
HOME WEBSITE (www.umb.edu)



IT WEBSITE (www.umb.edu/it)



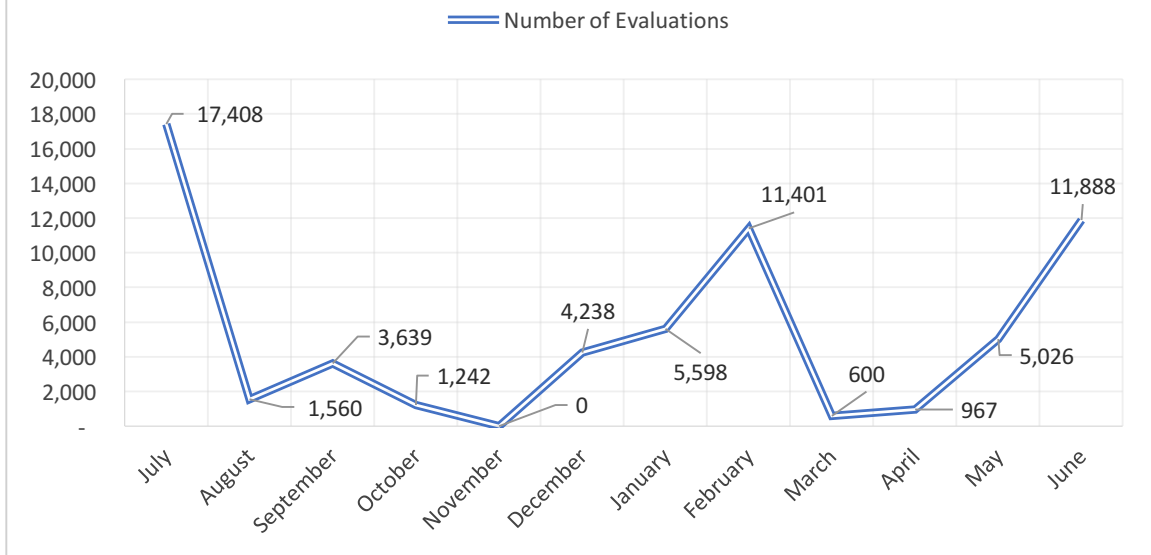
VISITED BY # COUNTRIES



WWW.UMB.EDU - VISITED TOP 3 COUNTRIES

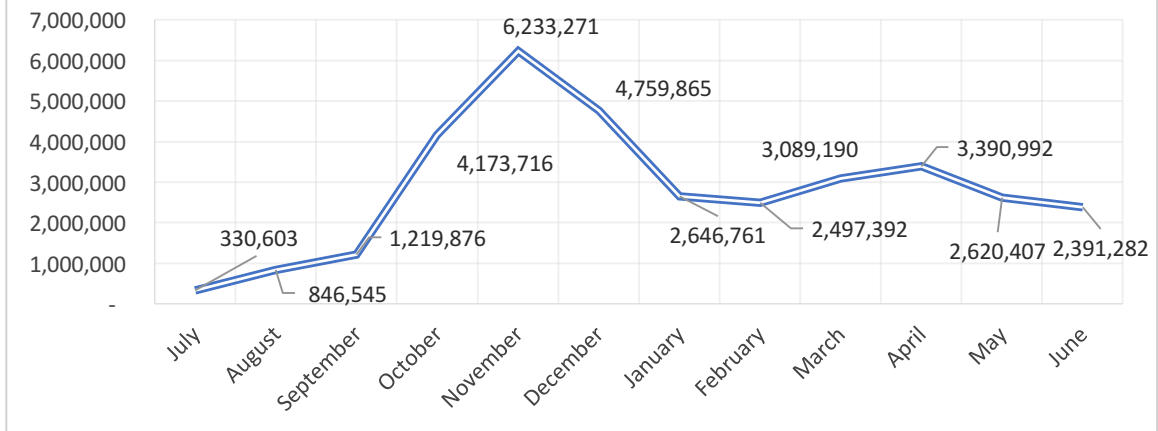
Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.
US	US	US	US	US	US	US	US	US	US	US	US
India	India	India	India	India	India	India	India	India	India	India	India
China	China	Canada	Canada	Canada	China	China	UK	Canada	Canada	Canada	Canada

SCANTRON COURSE EVALUATIONS

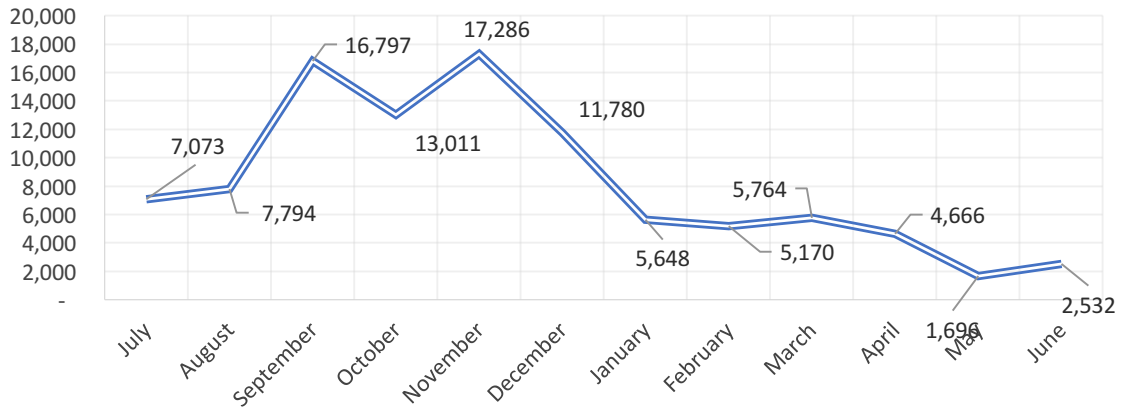


Communication and Infrastructure

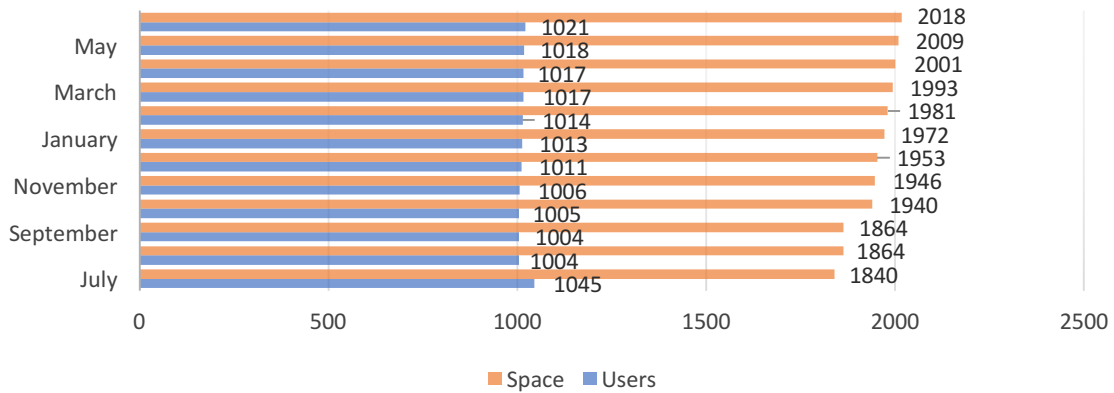
TOTAL SPAM CAPTURED



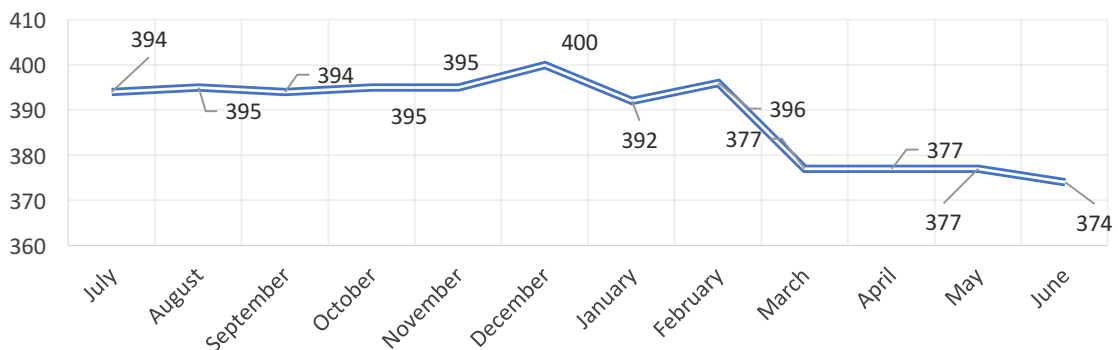
TOTAL VIRUSES CAUGHT



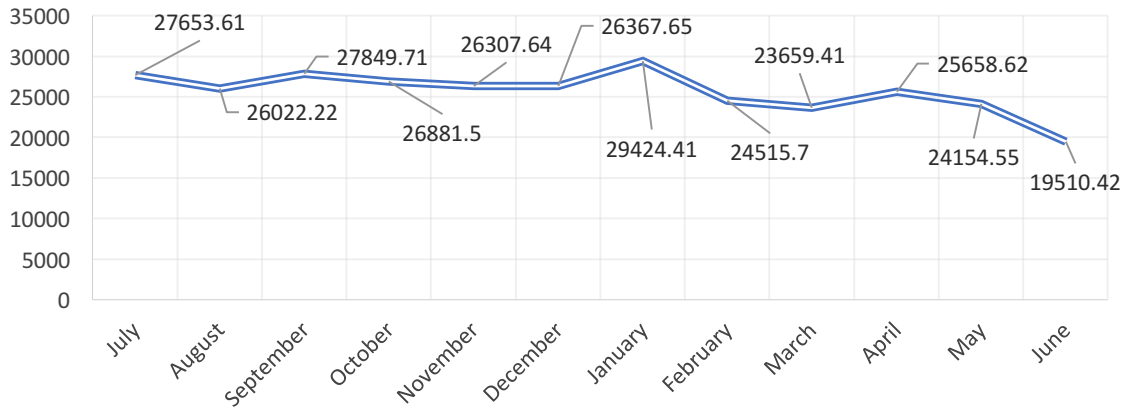
XYTHOS USERS/SPACE



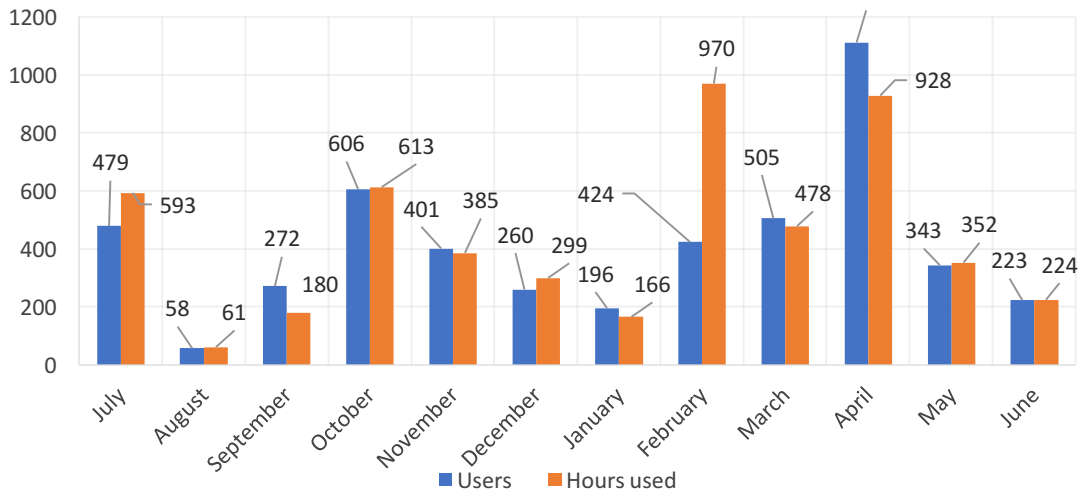
CELLPHONES | IPHONES | SMARTPHONES IN SERVICE



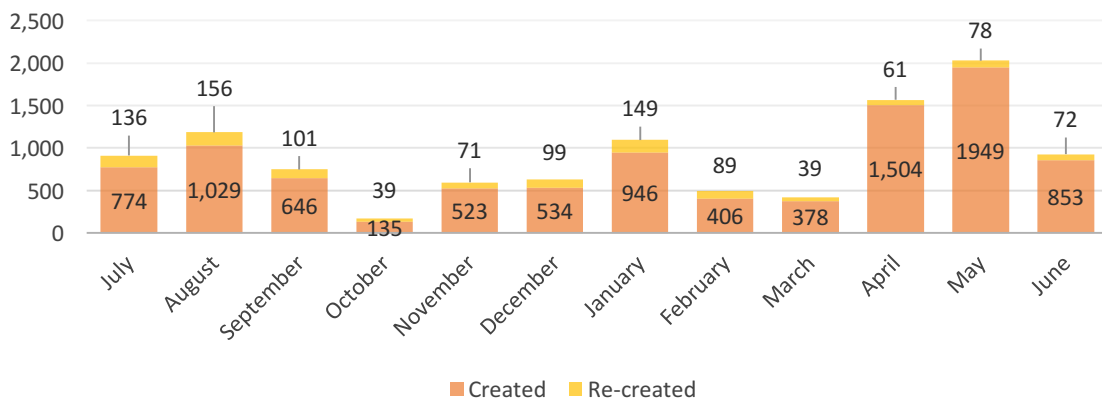
WIRELESS PHONE BILL



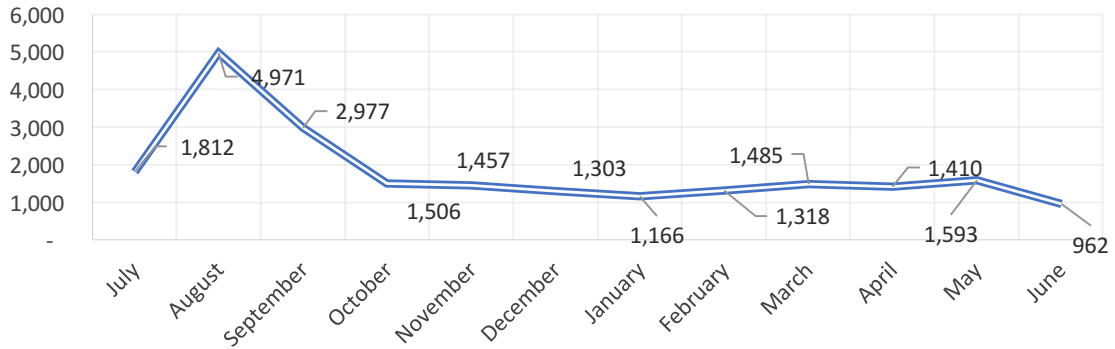
VIRTUAL COMPUTER LAB



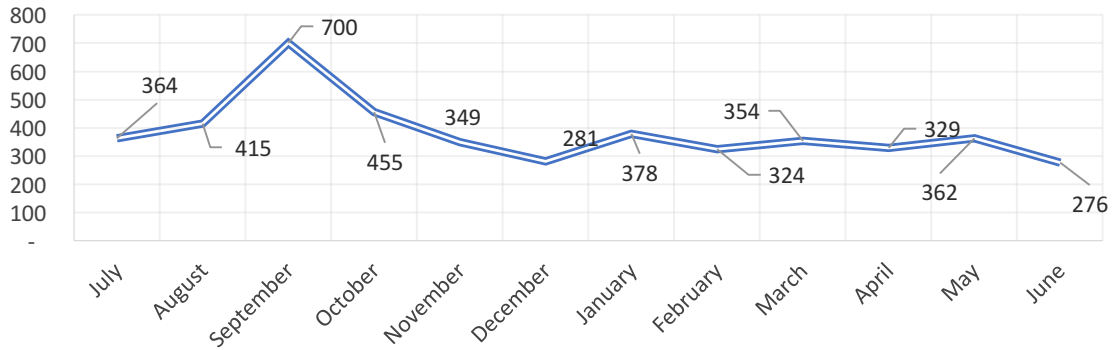
STUDENT EMAIL ACCOUNT



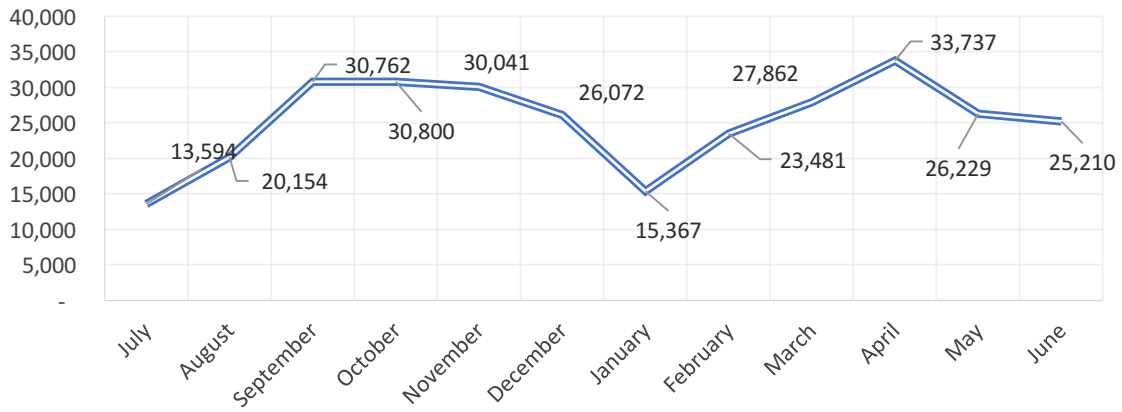
IT SERVICE DESK CALLS ANSWERED & WALK-INS



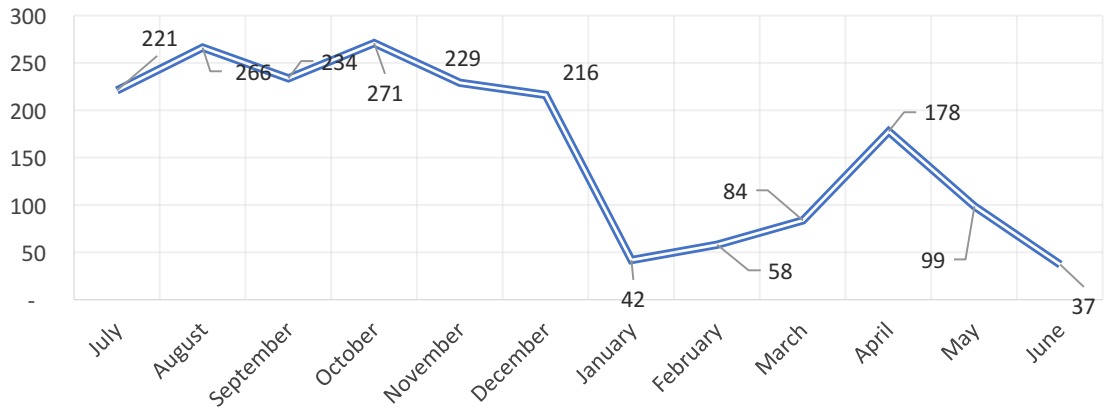
EMAIL RECEIVED / HANDLED AT THE SERVICE DESK



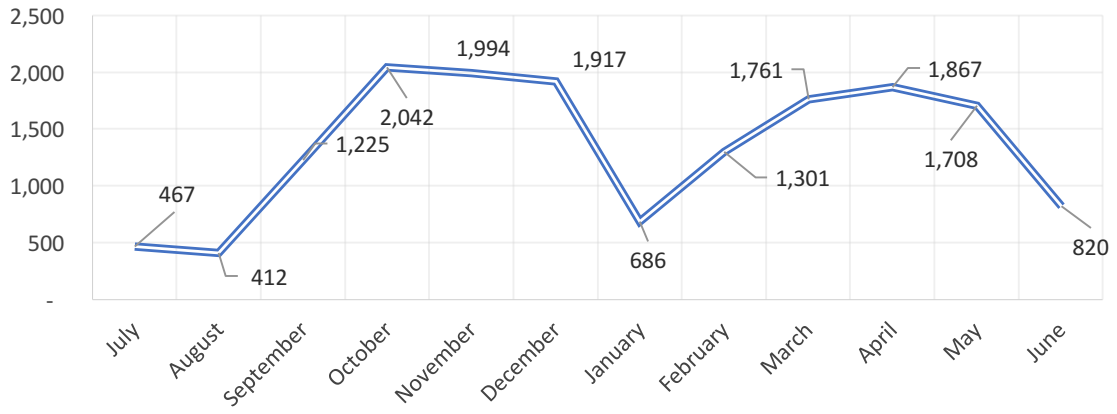
COMPUTER LAB USERS



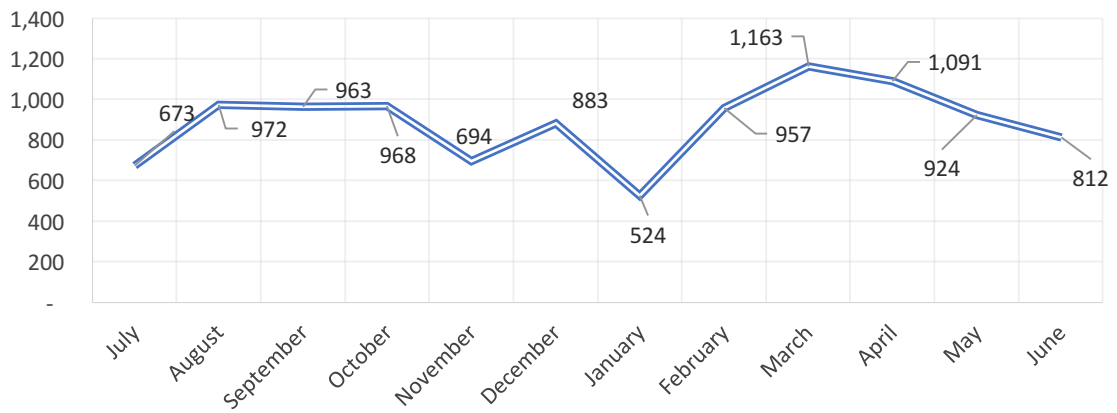
ADAPTIVE LAB USERS



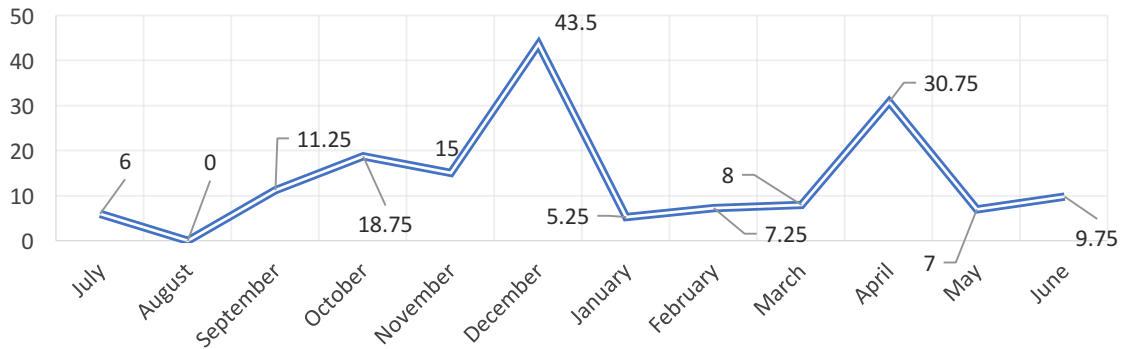
GRADUATE RESEARCH CENTER USERS



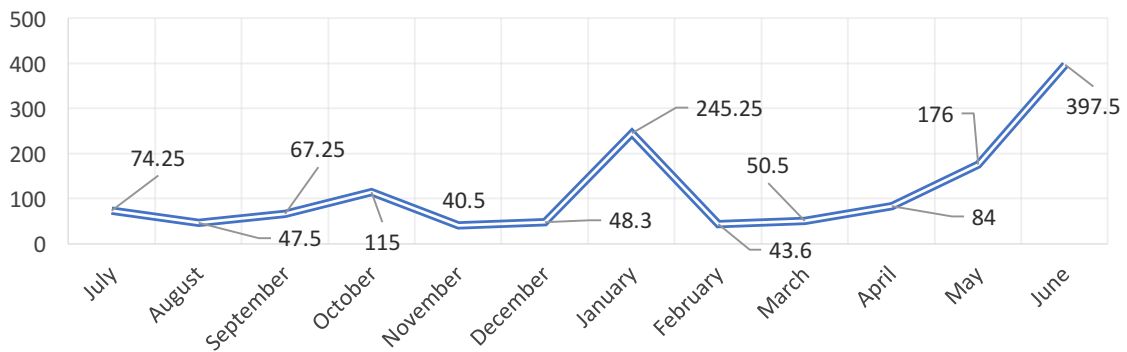
CLASS HOURS IN THE LABS



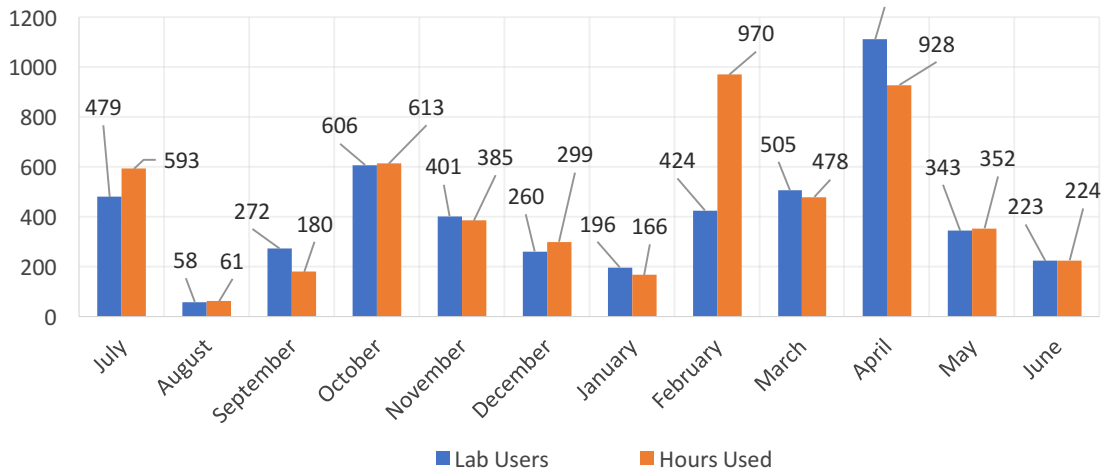
MOBILE CLASSROOM HOURLY USAGE (IPADS)

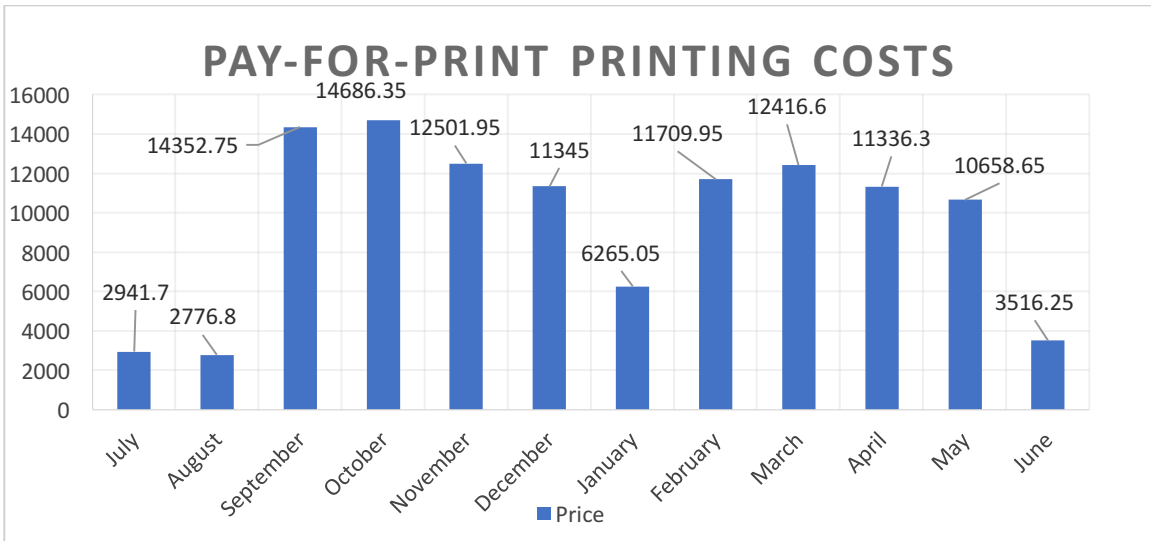


MOBILE CLASSROOM HOURLY USAGE (LAPTOPS)

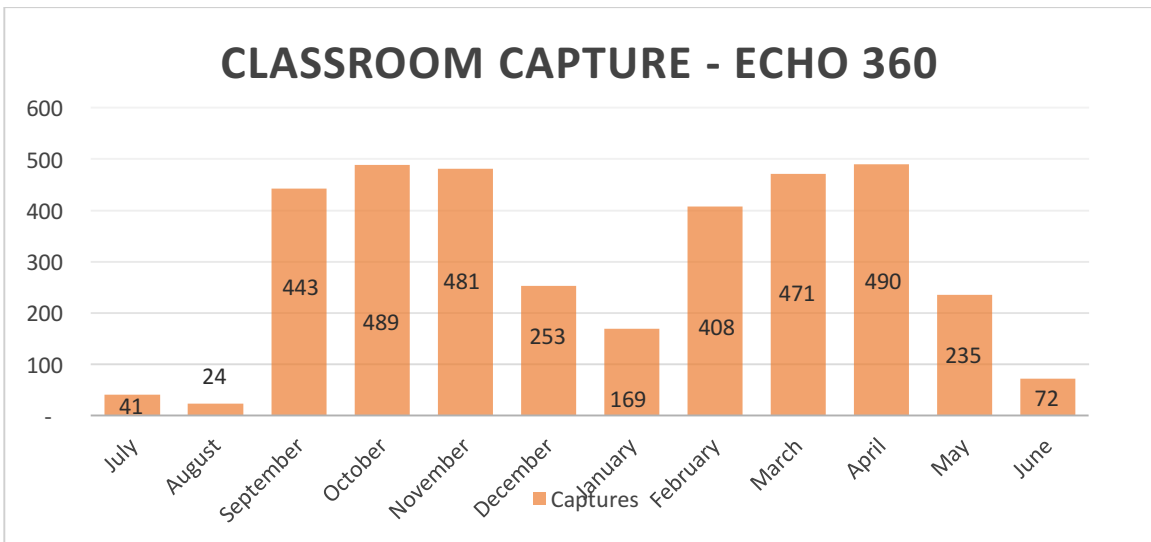
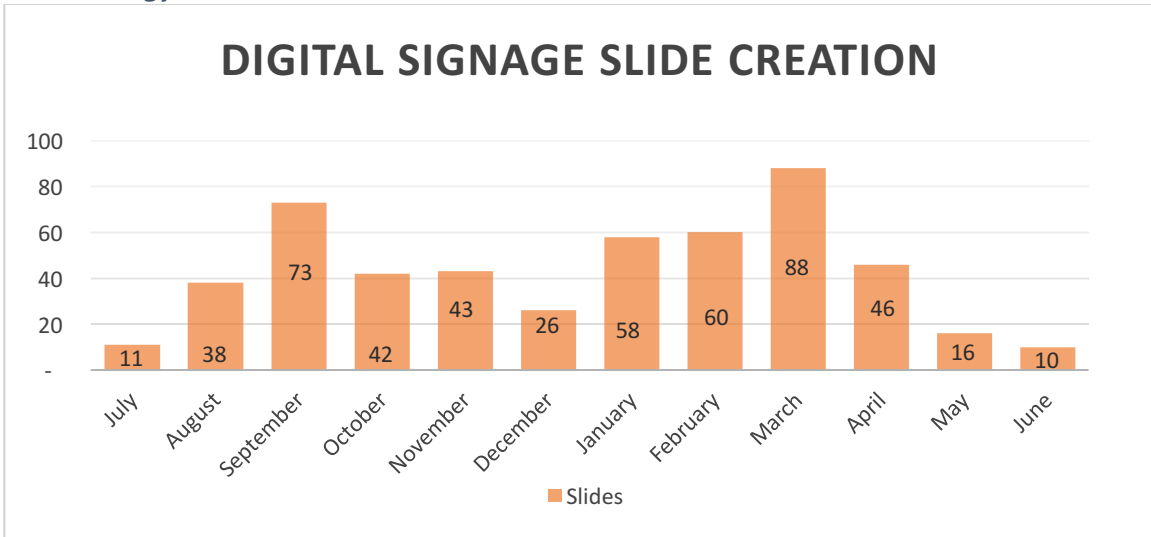


VIRTUAL COMPUTER LAB

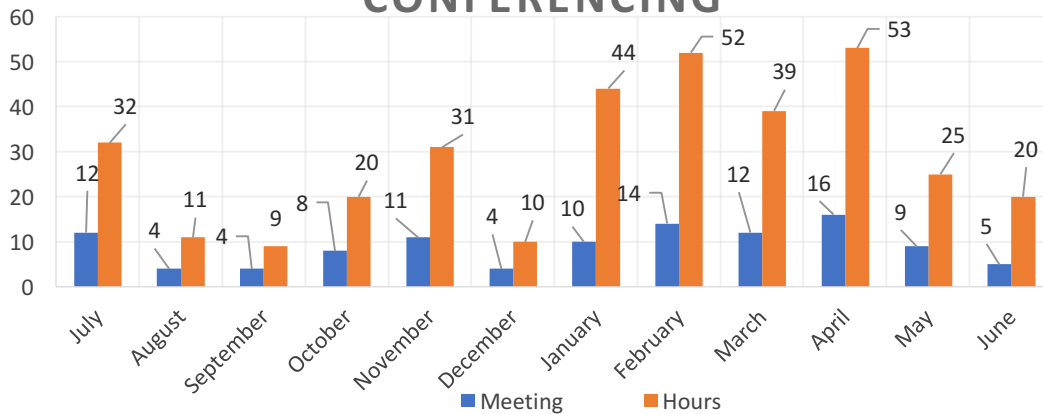




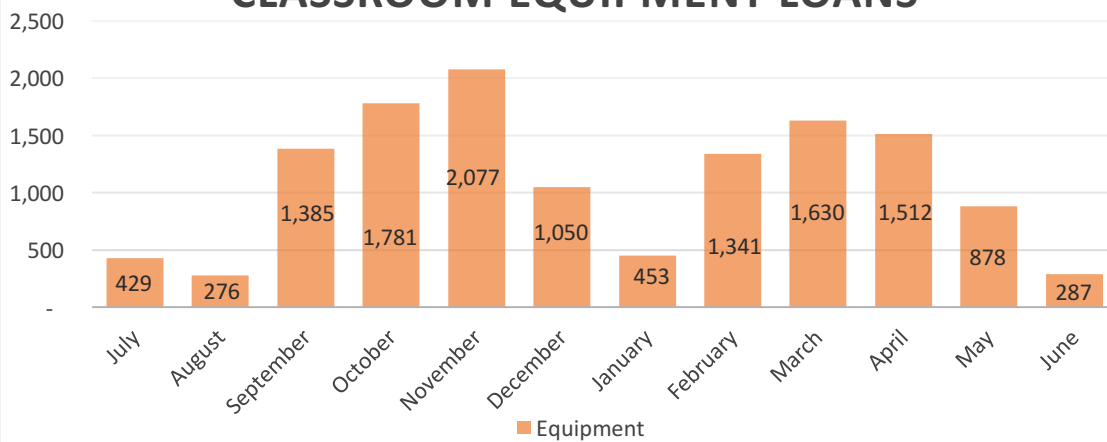
Educational Technology



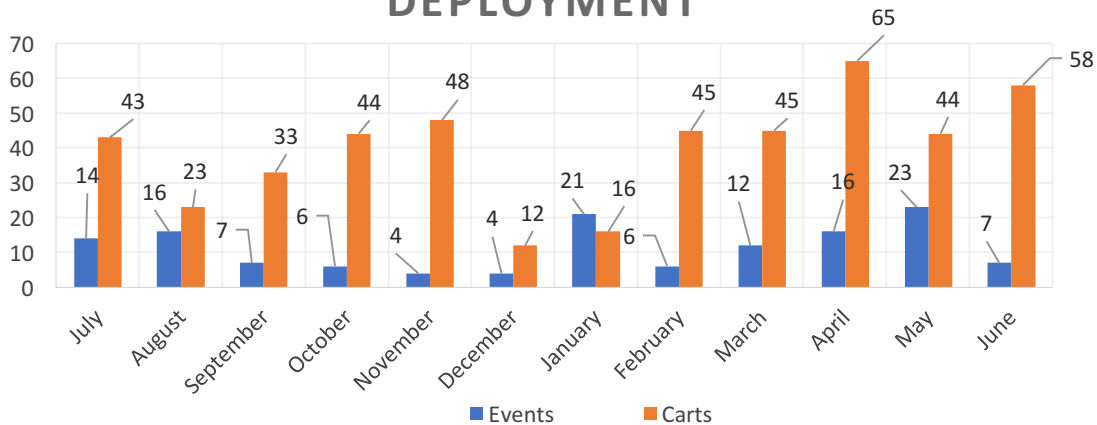
VIDEO, SKYPE AND WEBEX CONFERENCING



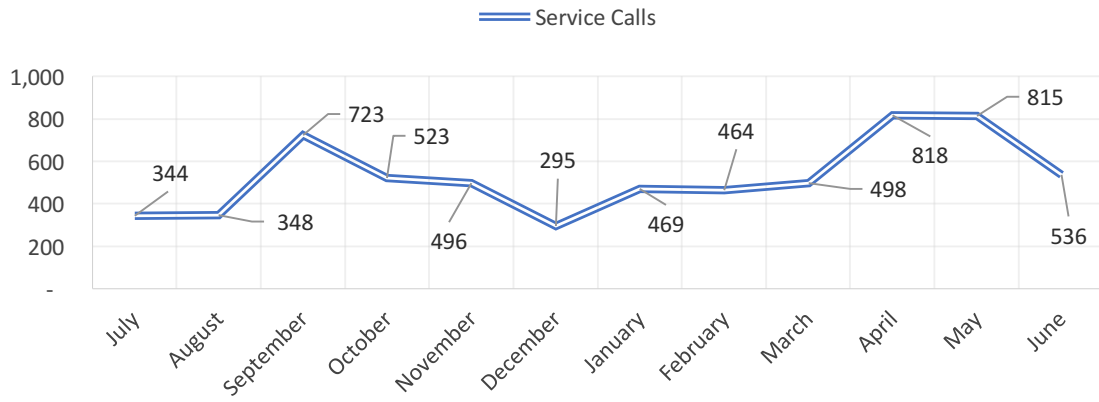
CLASSROOM EQUIPMENT LOANS



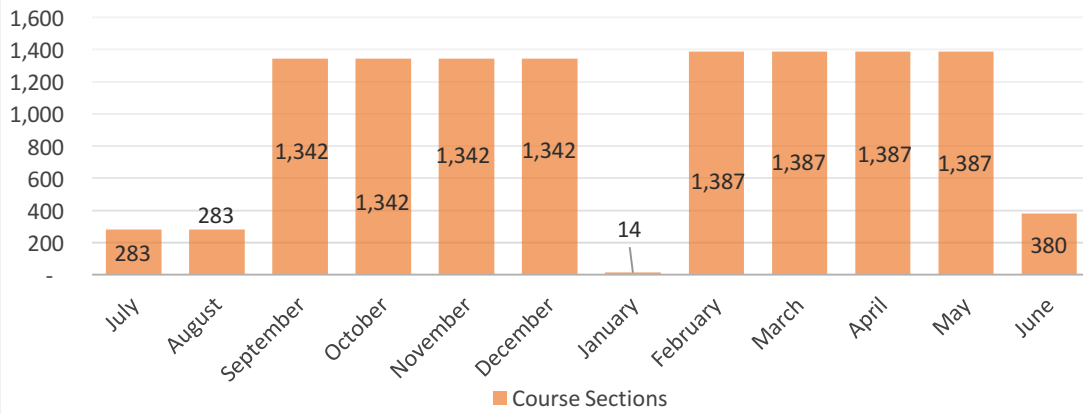
CLASSROOM SPECIAL EVENTS SUPPORTED/LAPTOP IPAD CART DEPLOYMENT



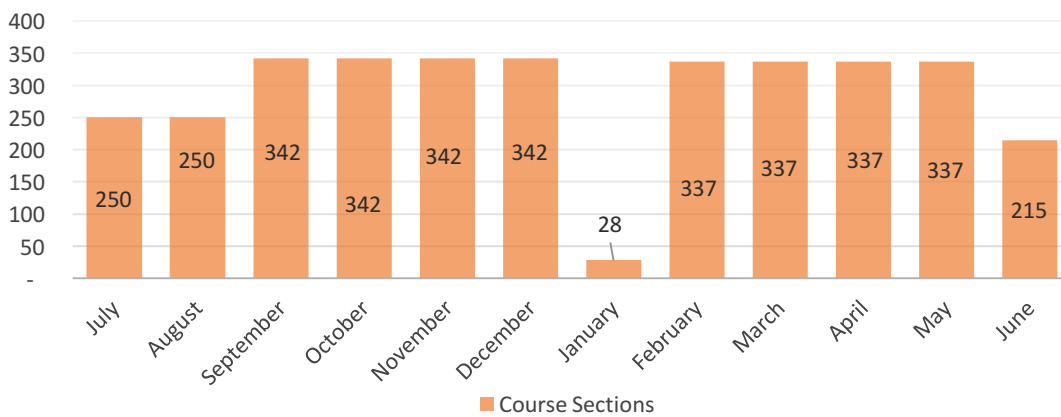
AV SERVICES SERVICE CALLS



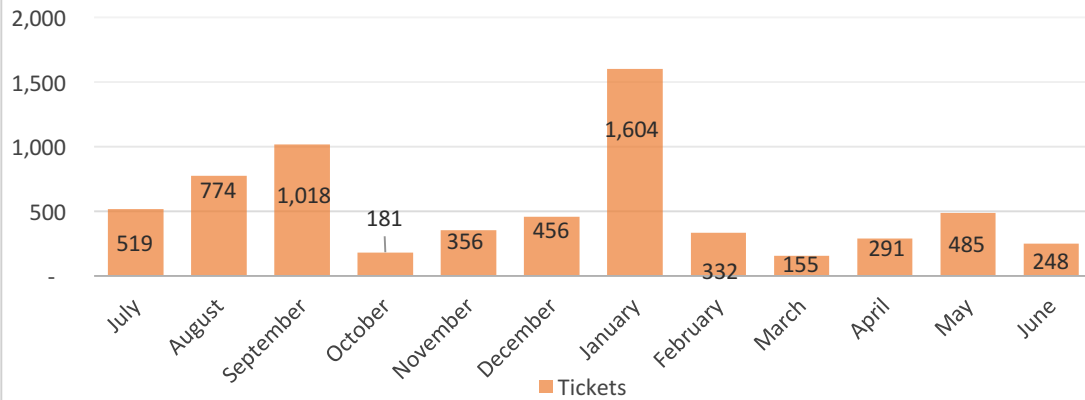
BLACKBOARD LEARN WEB-ENHANCED COURSE SECTIONS



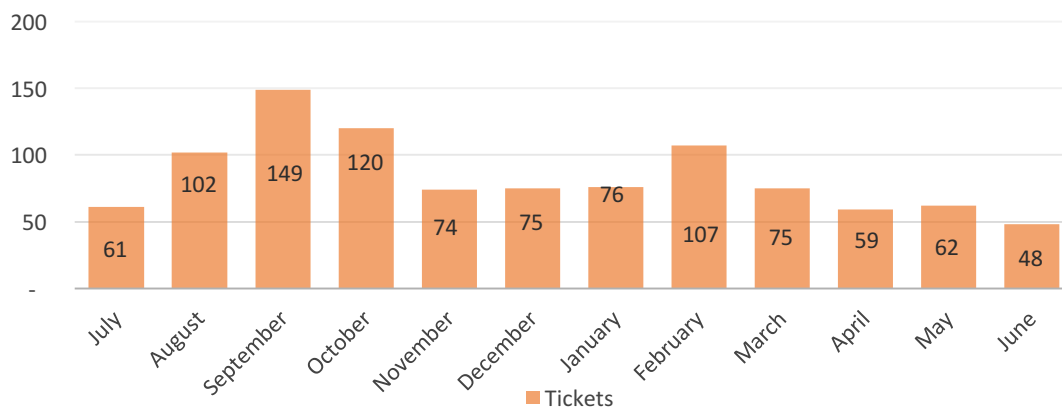
BLACKBOARD LEARN ONLINE COURSE SECTIONS



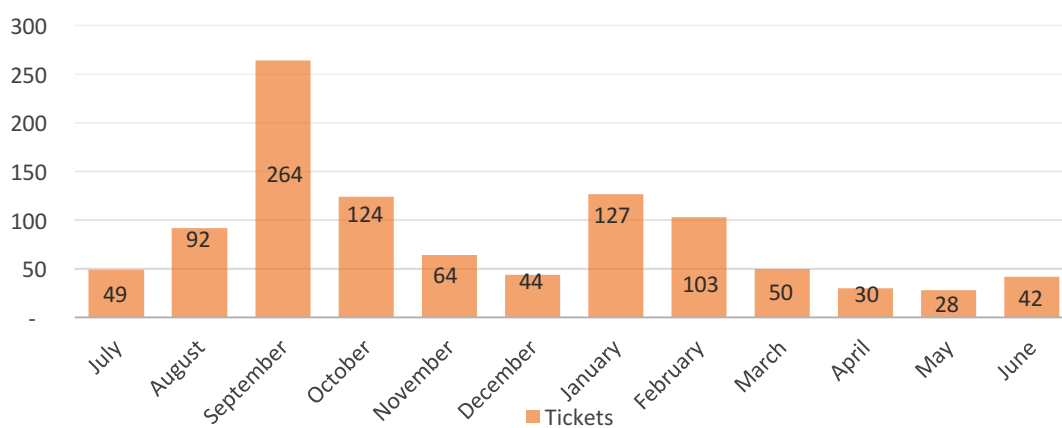
TICKETS - BLACKBOARD LMS ADMINISTRATION



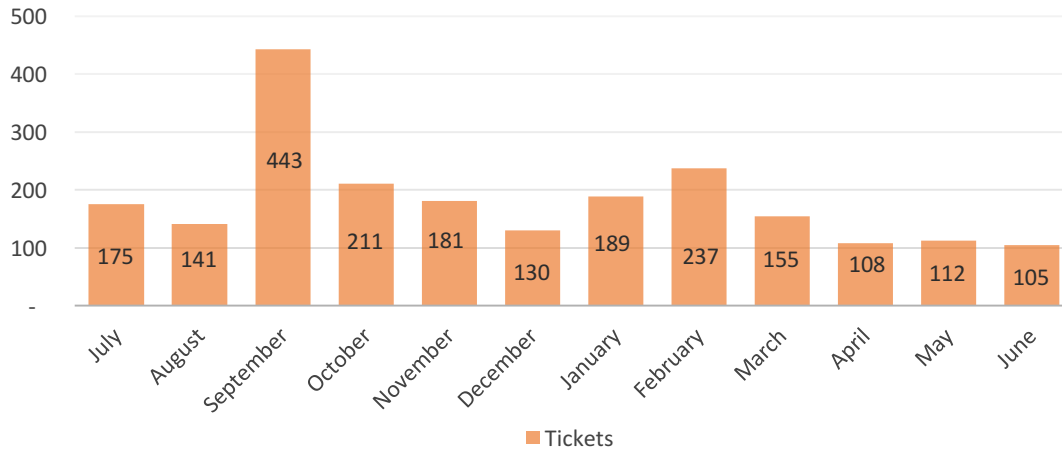
TICKETS - BLACKBOARD INSTRUCTIONAL DESIGN



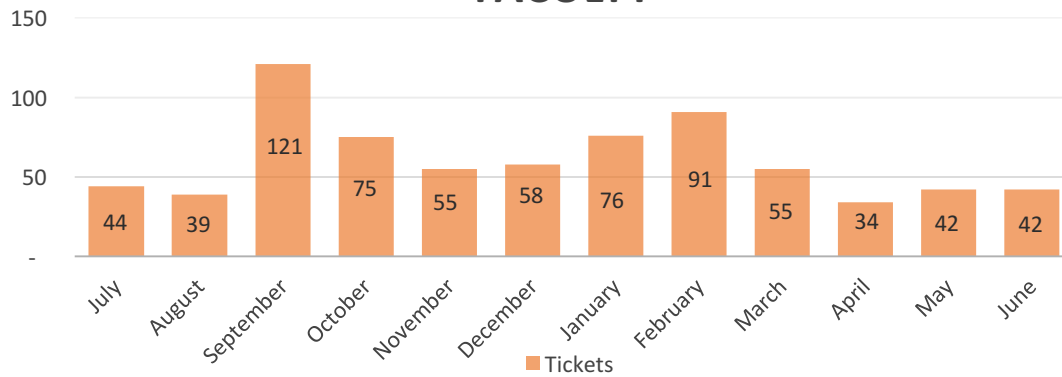
TICKETS - OTHER ELEARNING TOOLS



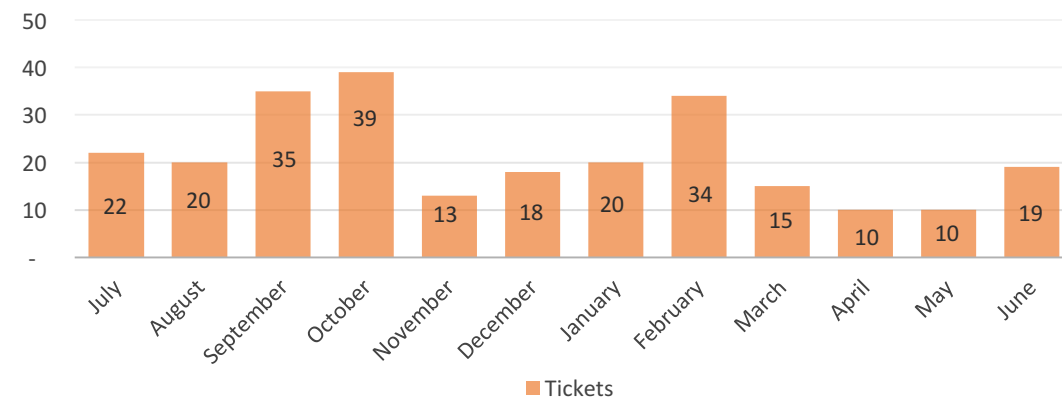
TICKETS - PEARSON EMBANET 24/7 STUDENT

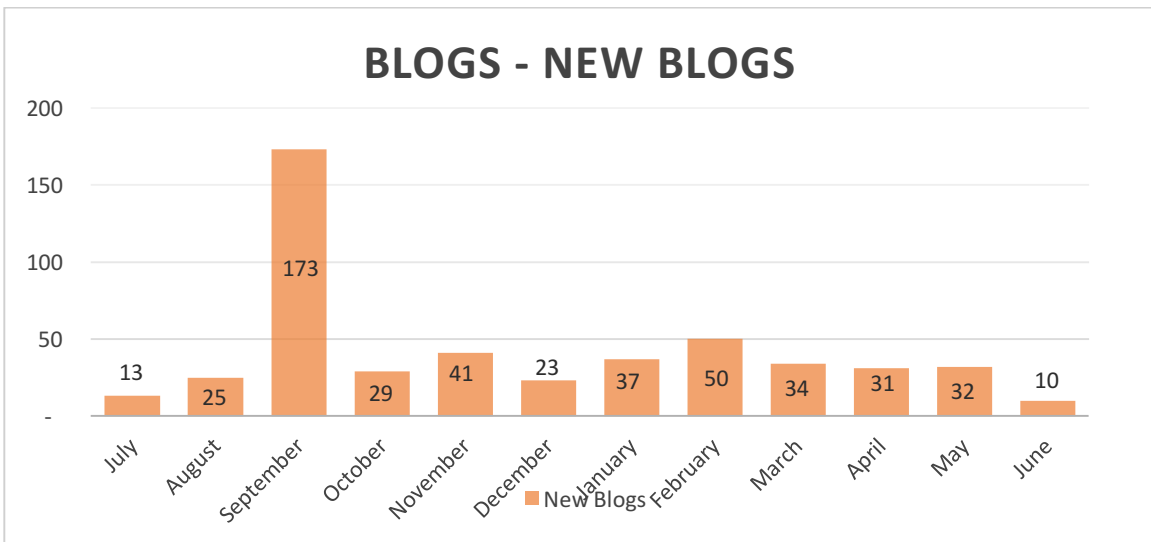
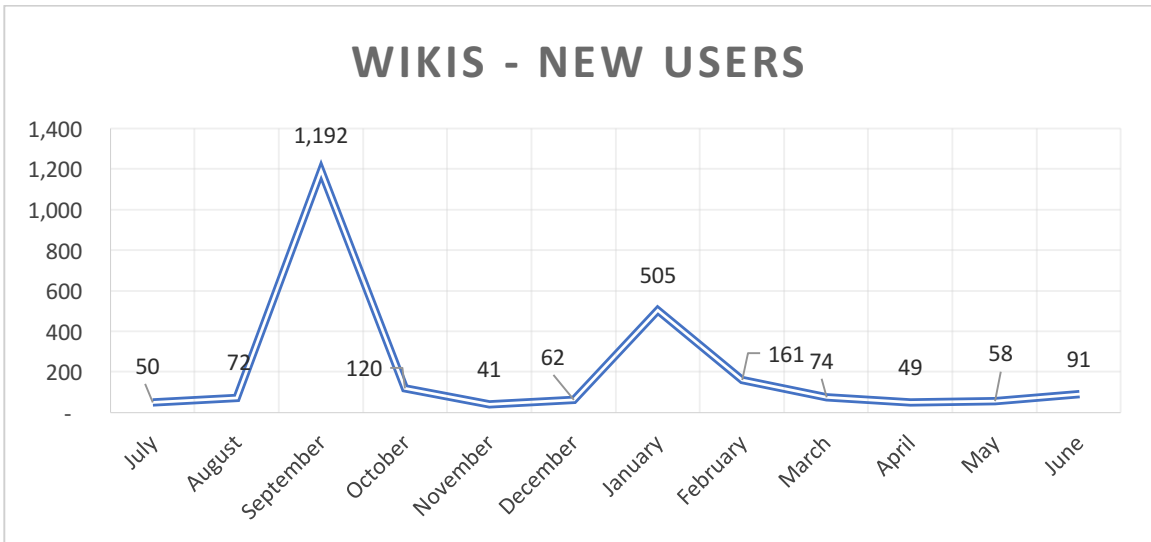
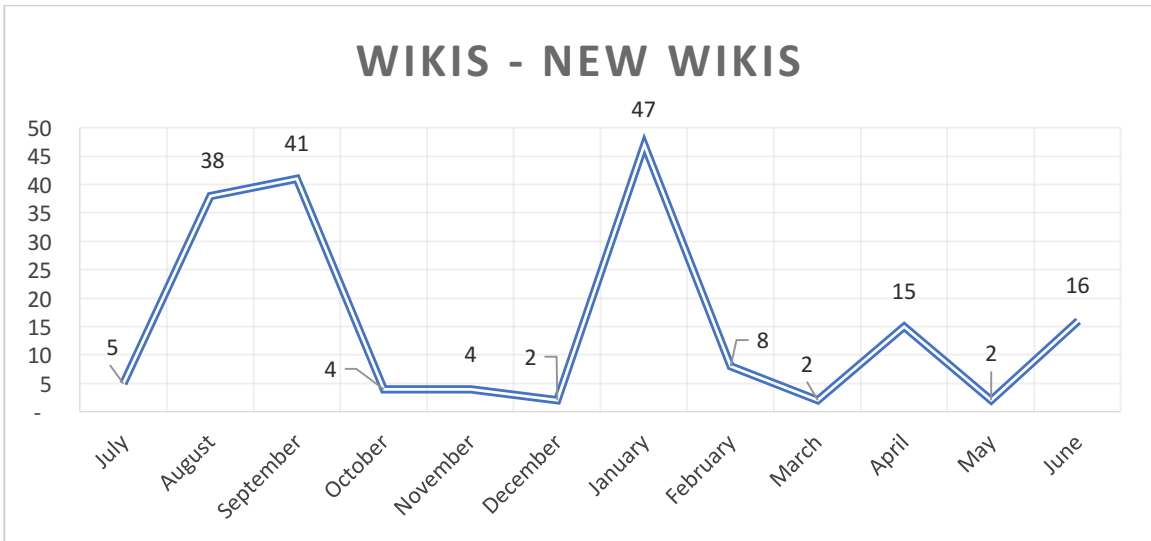


TICKETS - PEARSON EMBANET 24/7 FACULTY

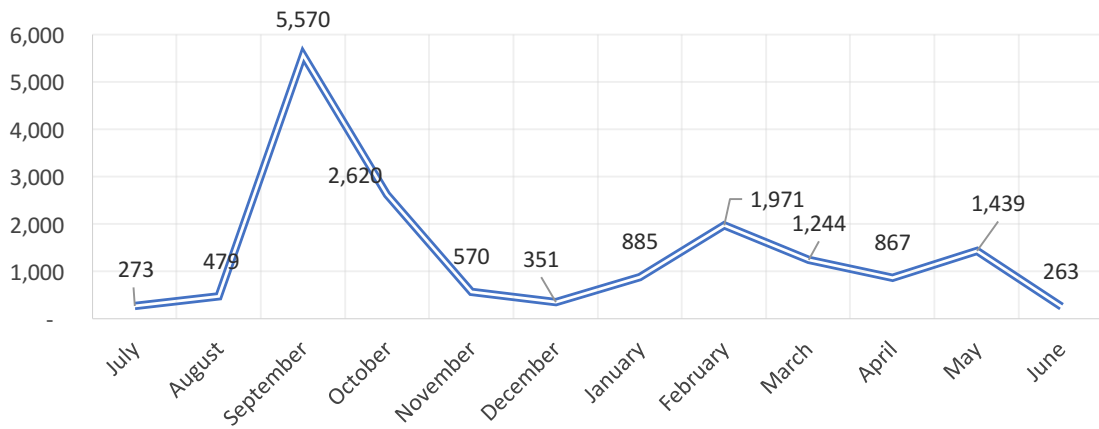


TICKETS - PEARSON EMBANET 24/7 ESCALATED

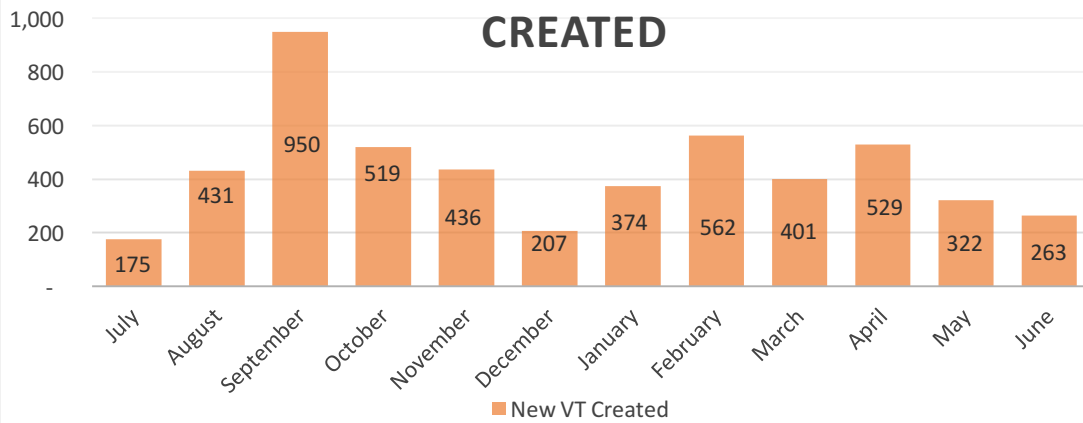




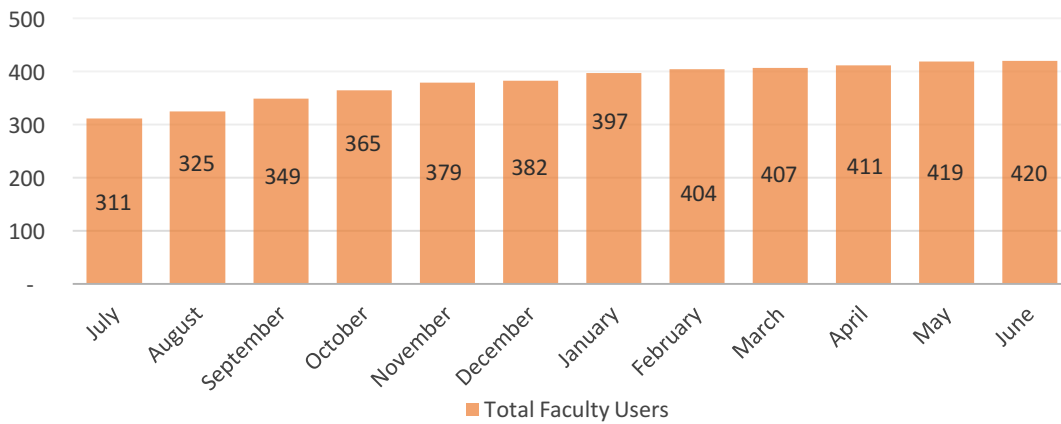
ATOMIC LEARNING VIEWS



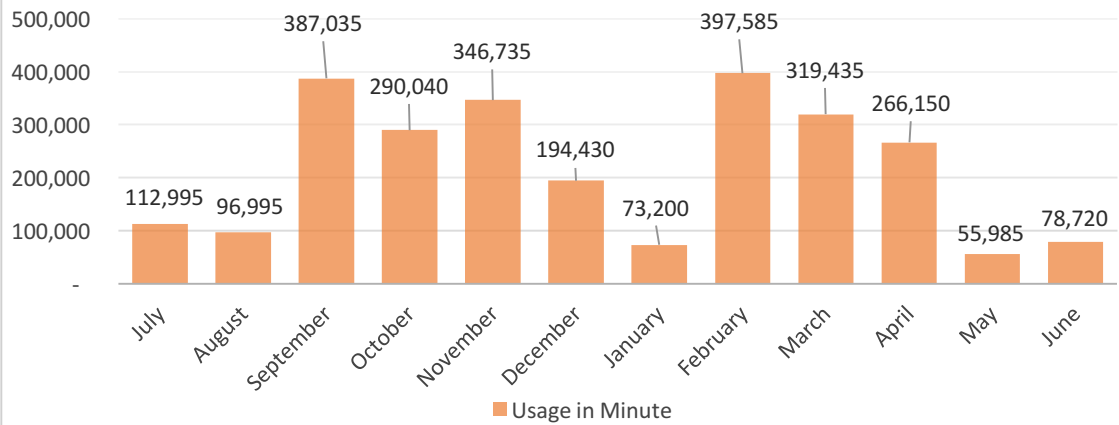
VOICE THREAD - NEW VOICETHREAD CREATED



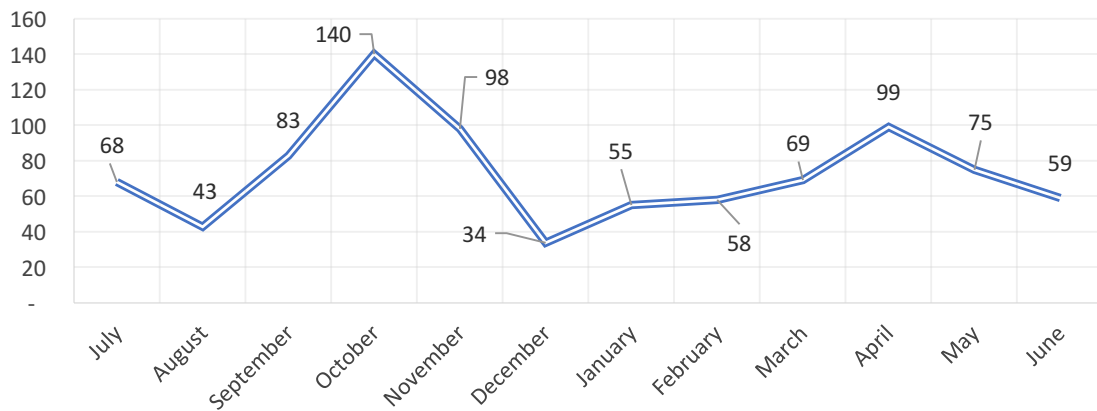
VOICE THREAD - TOTAL FACULTY USERS



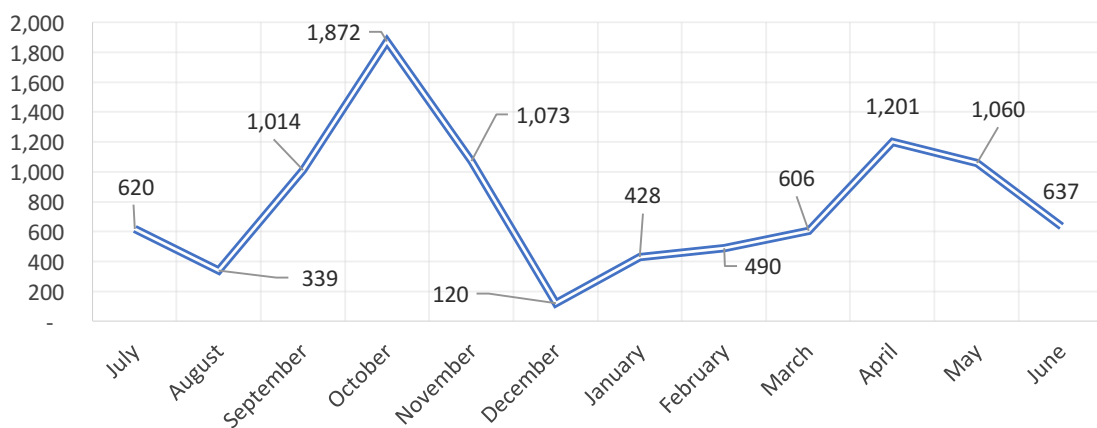
VOICE THREAD - USAGE IN MINUTES



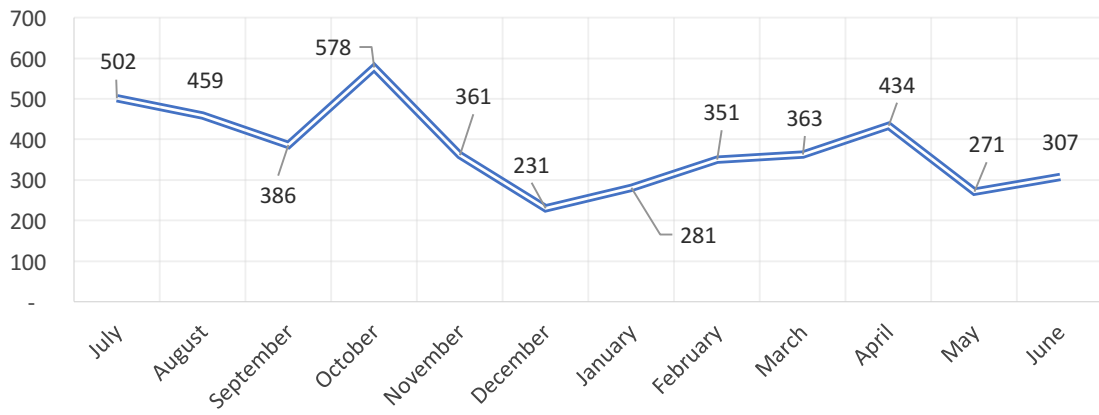
IT TRAINING - EVENTS HELD



IT TRAINING - PARTICIPANTS ATTENDED

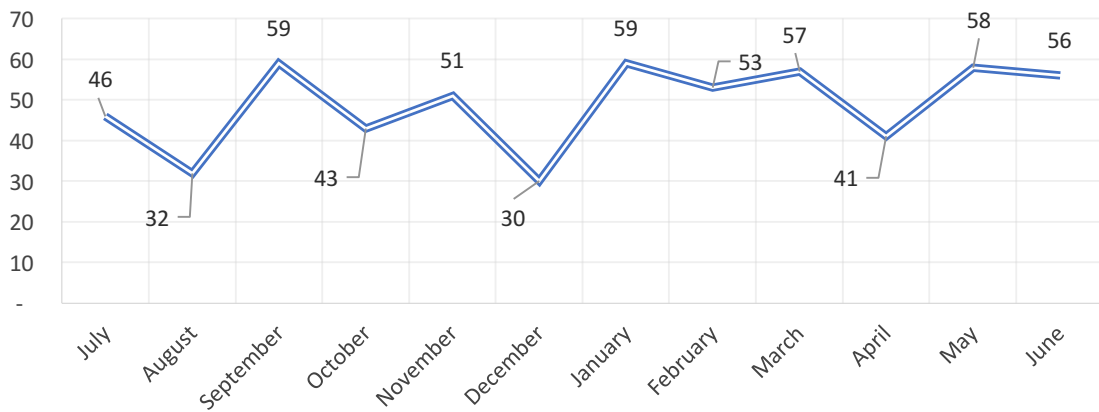


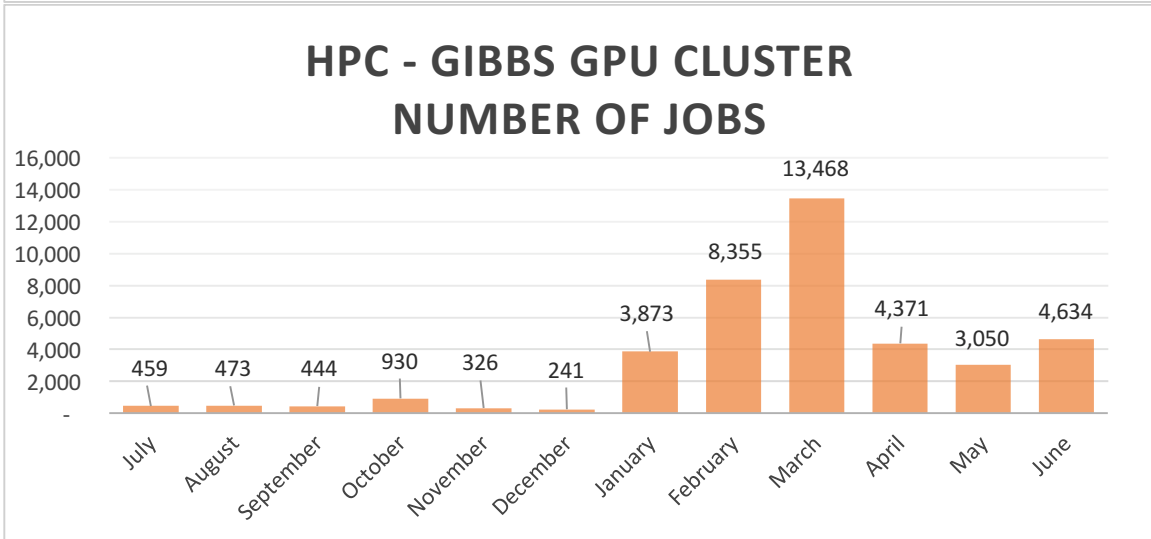
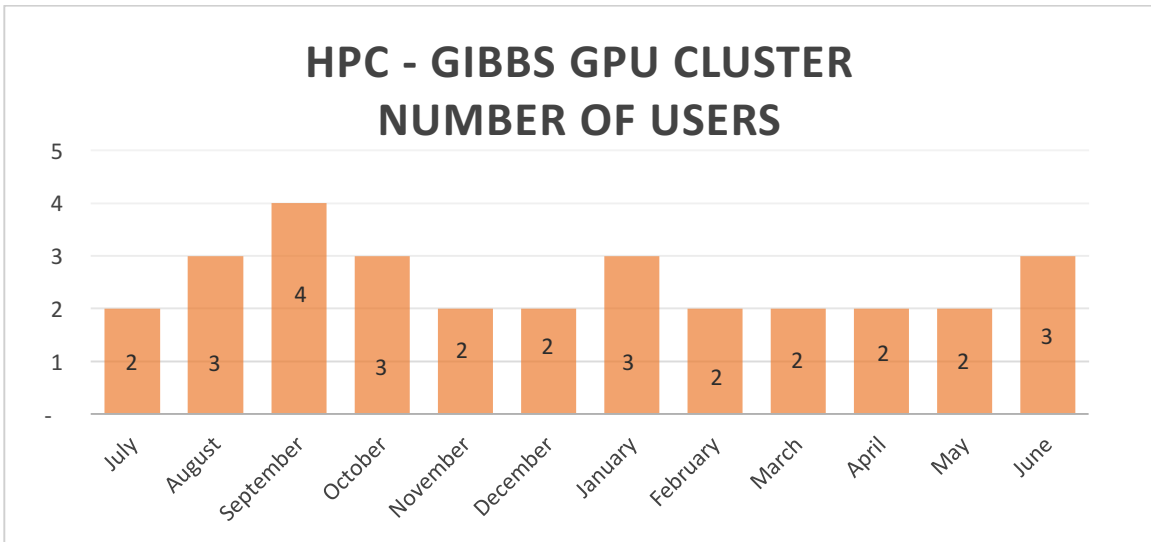
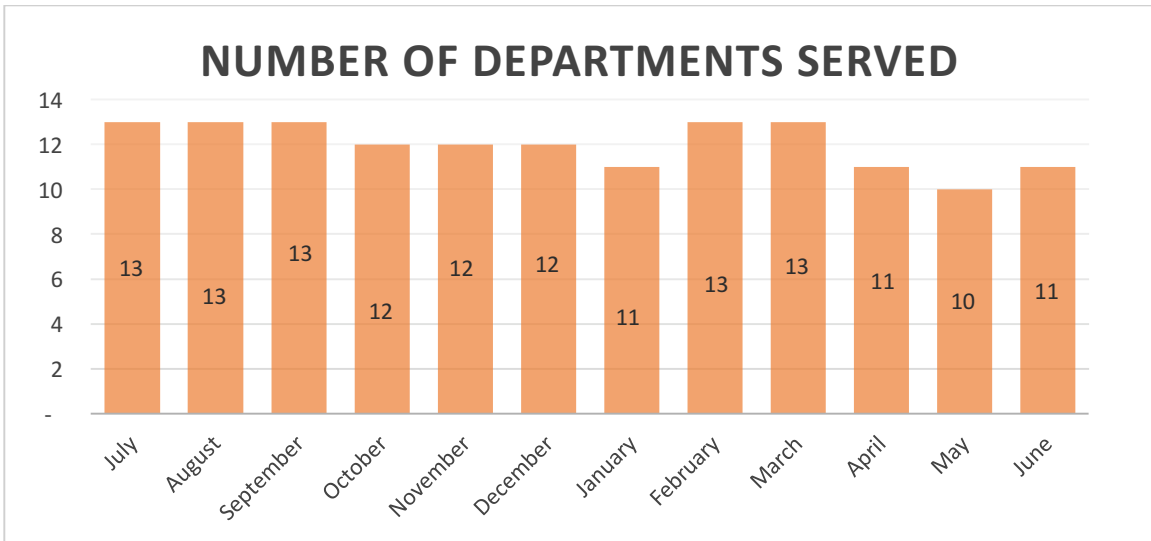
IT TRAINING - CLIENT ASSISTED

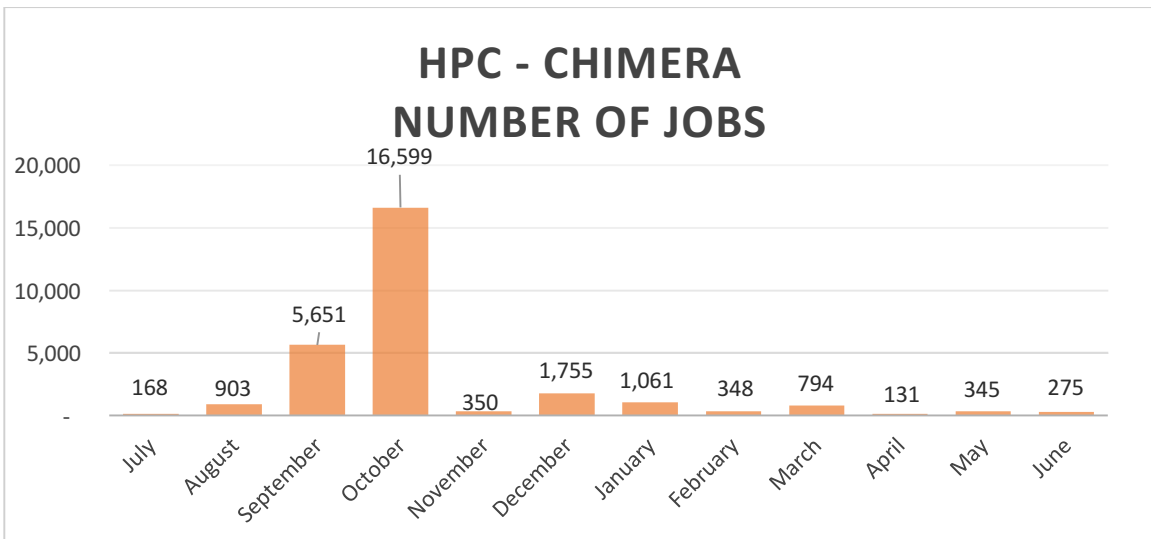
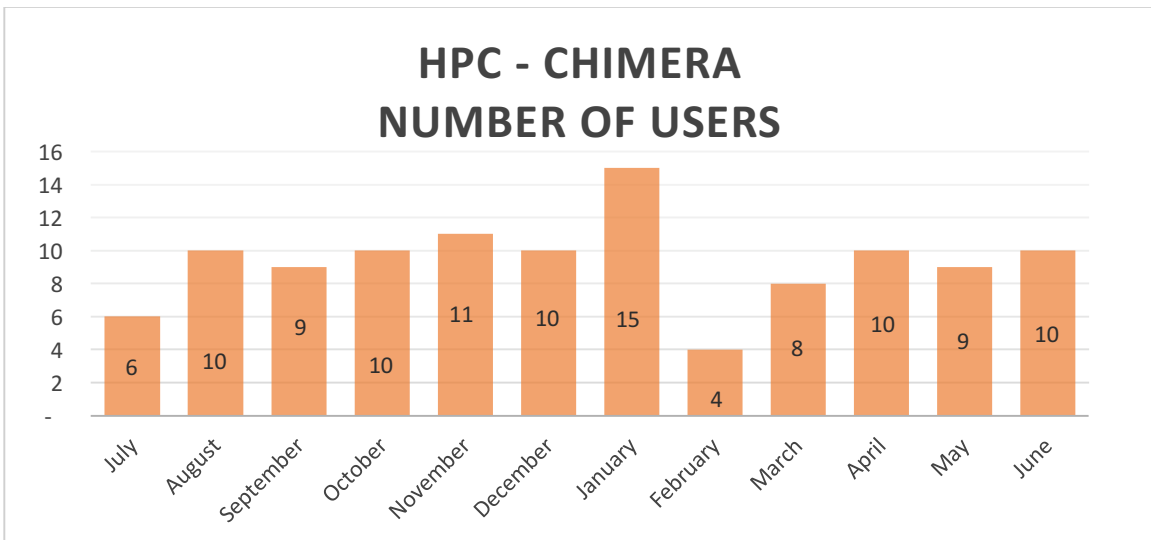
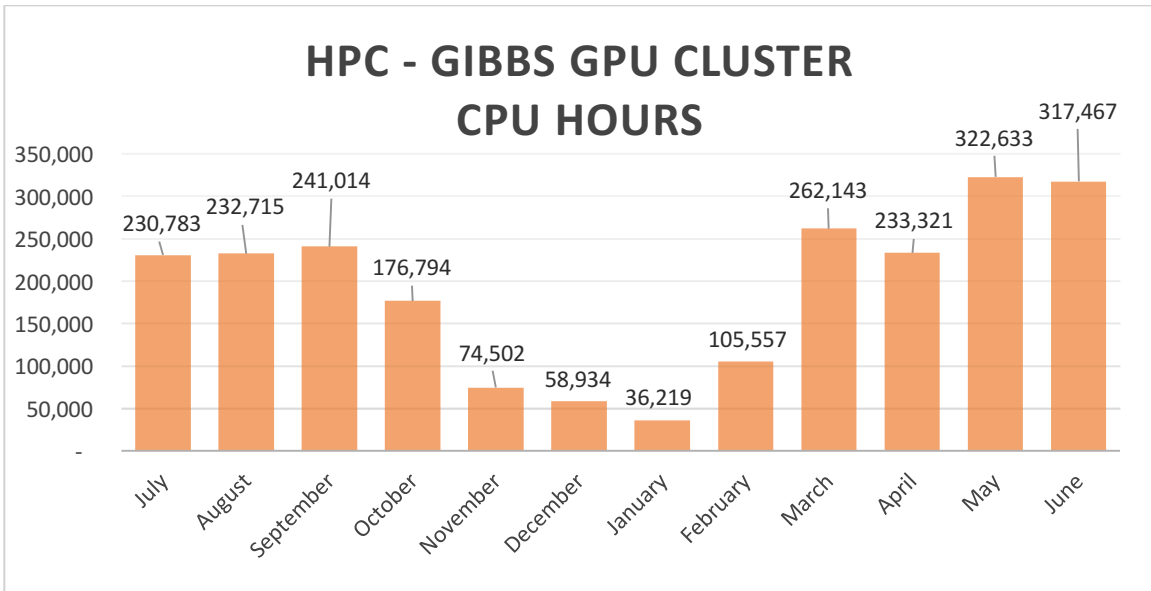


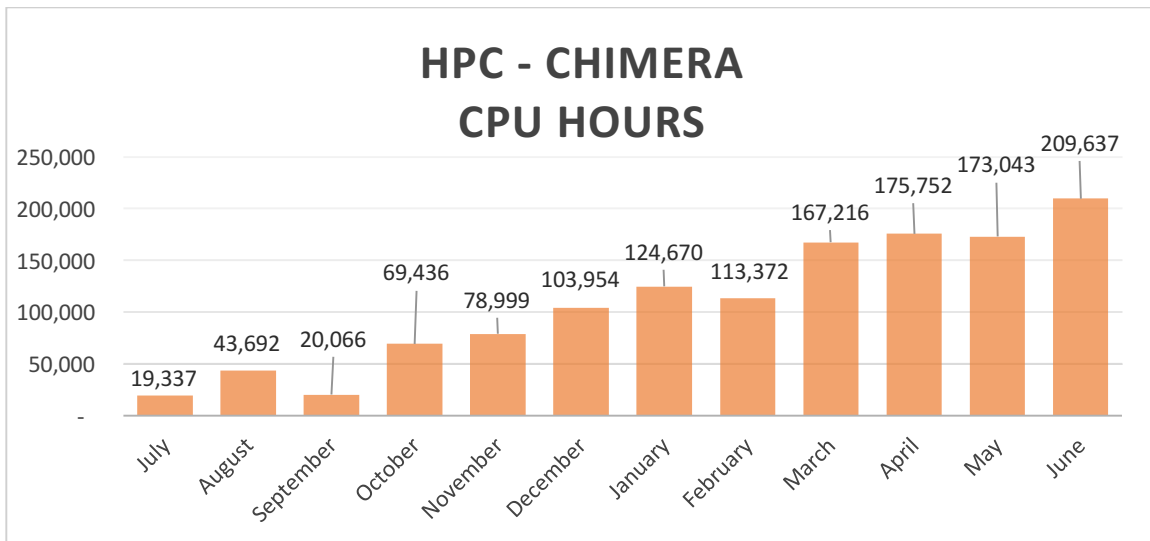
Research Computing

CONSULTATIONS/PROJECTS









Acknowledgements

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