



GUANGDONG TECHNION

Department of Information Technology
广东以色列理工学院信息技术部



Biennial Report

Academic Years 2017/18 & 2018/19



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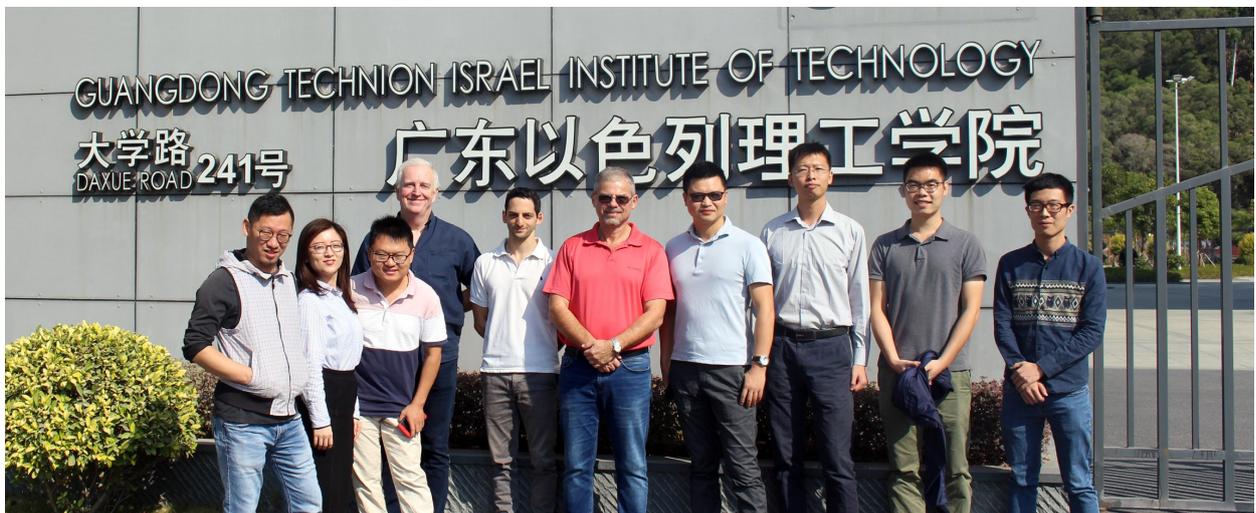


RESEARCH BUILDING

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Welcome



Time moves fast. It's been more than two years now since the establishment of the Department of Information Technology (IT Department) in our newly established Sino-Israeli University. Throughout the course of 2017/18 and 2018/19, and despite obstacles due to the transition of the north campus turnkey project, remarkable achievements in both infrastructure and business systems were made. These achievements marked milestones in the digital strategy helping, not only to fulfil increasing business needs, but more importantly in enhancing administrative efficiency in line with the University's growth.

In the past two years, we strived to build our IT infrastructure from the fundamental campus networks – internet connectivity, secured wireless network, cable network, access control system, security CCTV - to the server farm which is now serving a range of infrastructure systems and business applications. Our follow-me print system simplifies the workflow minimizing printed waste and protecting confidential documents, enhancing the user experience. Within the GTIIT community, Microsoft Office 365 global version now offers a strategic suite of online communication and collaboration tools.

Business applications are fundamental to the efficiency of the University operations and are the keys to digitalization. Apart from several departmental-level systems, the enablement of Oracle Cloud ERP with Core HR, Payroll, Absence, Finance and Supply Chain modules as our core administrative system providing a consolidated interface for online workflows for users. The ability to capture professional services data provides for centralized monitoring and reporting which can assist the decision-making processes at management and director levels. Following this success, a new project for developing a Student Lifecycle Management (SLCM) system is now in the process of evaluation; this system will provide a holistic and data-informed approach that focuses on the entire student journey - from admissions through alumni - to ensure student success.

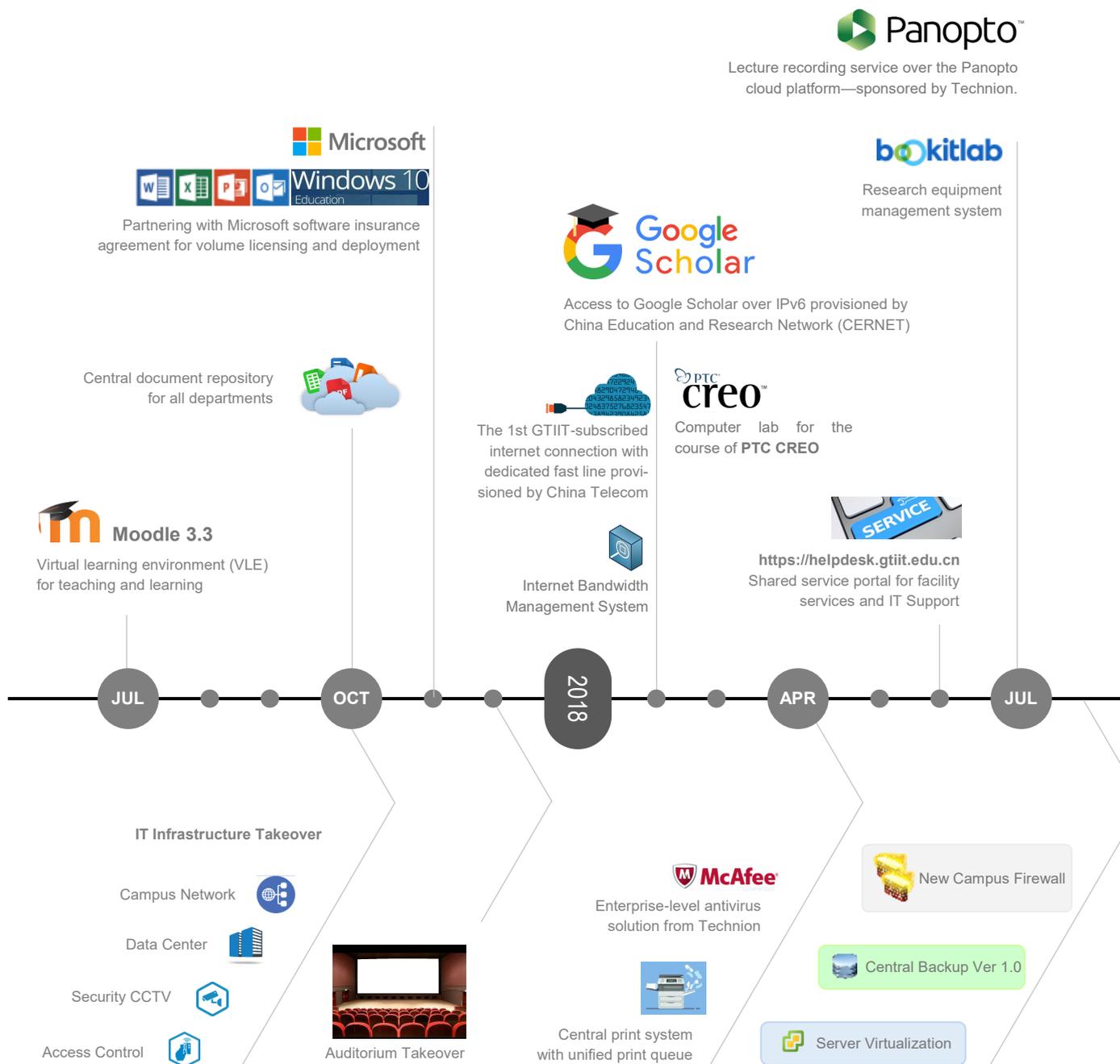
Integration and use of technology to support academia and research is always a priority. Now all of our classrooms with multimedia facilities

utilize the KRAMER central control system, providing a unified user interface, reducing the operation of appliances to a single touch. The launch of Technion's shared lecture capture service Panopto and the virtual learning environment Moodle were both adopted enthusiastically by the student body. By the end of 2019, the project for building a small scale, high-performance computing (HPC) cluster will provision research computing resources to support program testing prior to deployment in a national supercomputing center, as well as providing a teaching environment.

In the last two years many of our achievements came about through excellent collaboration with colleagues from other administrative departments, the faculty team and the Division of Computing and Information Systems at Technion. Using advanced technology and quality services, the IT Department remains a productive business unit wholly committed to facilitating the University's growth and shaping her operations.



Key Milestones





Computer lab for the MATLAB course



Migrated Moodle to GTIIT data centre from Shantou University and Upgraded it to the long-term-supported version 3.5



Integrated solution for exam preparation, test book scanning and online grading.



Together with Technion, we embraced ZOOM — cloud based videoconferencing solution, with Single Sign-On (SSO) integration.

ORACLE®
CLOUD SOLUTIONS



Finance module go-live



CoreHR module go-live



Payroll module go-live



Procurement module go-live



Amazon AWS cloud computing for Research



400Mbit/s

Upgrading the Internet bandwidth to 400Mbit/s and established a special connection for academic & research



Enablement of Multiple Choice Questions (MCQ) module



800Mbit/s

Upgrading the Internet bandwidth to 800Mbit/s

OCT

2019

APR

JUL



IT infrastructure in Teaching Lab Building

Central Backup

Cisco + Veeam

RMB 2m Server Farm powered by Cisco Hyper-Converged hardware and VEEAM backup solution, both donated by CCB.



KARMER solutions for 15 new multimedia classrooms



Email migration to Microsoft Office 365 International tenant from STU-shared tenant provisioned by 21vianet.



A new wireless network and reciprocal access to wherever it is being broadcast in over 80 nations around the world.

Enriching Academic, Research, and Administration

INTRODUCTION

Across 2017/2019 the IT department, through a series of requests, consultations and best practices for a University environment, implemented and configured bespoke developments and deployments of various applications. The purpose of these high end, intuitive applications is to facilitate staff and students in better managing and utilising their time. The IT department constantly monitors usage and end user satisfaction, providing where needed support and training.



Learning Management System (LMS)

<https://moodle.gtiit.edu.cn>

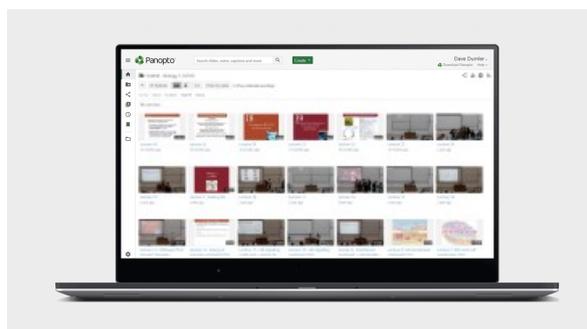
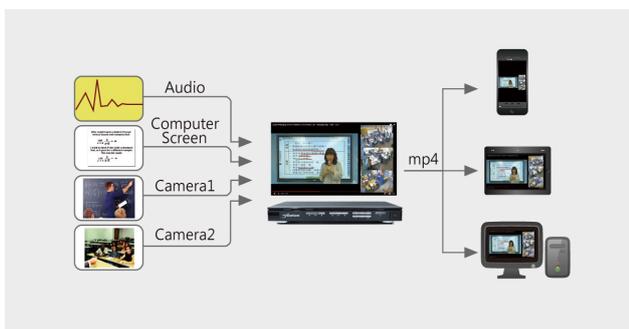


Collaboration with the Technion CIS team, and external partners, for the implementation of a LMS platform led to the commissioning of Moodle in September 2017. This

facilitated the creation of an effective online teaching and learning experiences in a collaborative, private environment. The LMS was

hosted by STU in its early stages with full migration to GTIIT data centre in July 2018 and the completion of a major software upgrade in September 2018.

IT Department continues to monitor and support the LMS platform as well as providing instructions to end users.



Lecture Recording System (Panopto)

<https://panoptotech.cloud.panopto.eu/>



IT Department identified the need for a lecture recording system after feedback and requests from both staff and students. In consultation and collaboration with Technion availability of this service was made available in September 2018 over the Technion Panopto cloud platform.

The service allows for the recording of lectures, incorporating audio, optional video and slides; facili-

tating students who wish to review a lecture at any later date from any internet accessible location.

To date a total of 434 videos are available, 384 recorded at Technion and 50 recorded at GTIIT for a total of 74 hours 10 minutes. To supplement these videos 9 recorded courses are also available with 6 recorded in Technion and 3 recorded in GTIIT. As use of the system progresses more and more courses will be recorded and made available to the student body.

Student Life-cycle Management System (in progress)



An in-house database & web application was developed and had its first release on January 2018. Over time, more functionalities were added, and provided the Undergraduates department and management with tools to manage all students and course information, and to perform analysis of academic status based on extensive grades reports.

As time passed-by, the system became a single trusted source of information for students data on any other system. It will be completely integrated with the Tomax online grading system and the Mercury Residential Management system, and exchanged data with Moodle and the Technion UG students system.

As of now, in order to meet the growing university needs, IT is initiating a new Students Life-cycle Management system implementation project – one holistic system that will meet all students and administration needs, that will integrate with other peripheral systems and the Technion systems. The new SLcM system should gradually take the place of the existing system that has laid the foundations for such a project and will make the transition much easier.



Integrated Solution for Online Grading

The TomaGrade cloud-based system was completely configured and commissioned, with all necessary data, ready for the coming semester's exam period. All user authentication and notification functions were enabled

The screenshot displays the TOMAX online grading system interface. The top navigation bar includes 'Exam Details', 'Grades and Factor', 'Attachments', 'Staff Comments', and 'Comments Bank'. The main content area shows exam details for 'ORDINARY DIFFERENTIAL EQUATIONS/H - Mid' with a course number of 524. A table lists student grades for two students, both of whom have completed the exam. Below the table, a statistical summary is provided for the selected group, including a bar chart showing the distribution of scores for each question.

#	Student ID	Exam status	Grade	Professor name	Question 1 - 20 points	Question 2 - 20 points	Question 3 - 20 points	Question 4 - 20 points
1	111111111	Checked	71	Lecturer: Stav Sofer	20	11	20	20
2	222222222	Checked	80	Lecturer: Stav Sofer	20	20	20	20

Stack Name	Checked	Average	Max	Min	StDev	Median
All Notebooks	2	75.5	80	71	6.36	75.5
Question 1	2	20	20	20	0	20
Question 2	2	15.5	20	11	6.36	15.5
Question 3	2	20	20	20	0	20
Question 4	2	20	20	20	0	20

After consultations with Technion the TOMAX online grading system was approved by PVC & Director General in September 2018, with implementation starting in October 2018.

The system went live in December 2018 with instructor training sessions and to facilitate the Tomax deployment the IT department provisioned a dedicated printer/scanner and computer system within a dedicated, secure environment. The first exams were scanned and graded online in January 2019. Further development was planned for extra features to allow for automatic generation, grading and reporting for multiple choice (MCQ) exams.

Faculty can now utilise this system to manage any examination, inclusive of open questions, MCQs or hybrid questions. Furthermore, IT staff have been working with the supplier to develop grades and prerequisite courses reports, collaborating with the Technion IT to publish a new grades inquiry interface, improving work efficiency with Technion on undergraduate related joint Processes, enabling labs and online classes for GTIIT students.

Since going live a total of 92 exams have been scanned and graded online with a total of 6416 students exams notebooks scanned, graded and released to the Technion Grades system.



Category	Grade	Grades publication date	Scan	Scan Date	Observe date	Histogram
Finals	96					[Histogram Icon]
Lab		08/03/2017				[Histogram Icon]
Final_A	96	09/02/2017	[Scan Icon]	09/02/2017		[Histogram Icon]

Calculated Task	Task Name	Category	Students	Pass/Fail	Pass(%)	Your location	Min	Max	Average	Median	Exam date
1	Final_A	Final_A	115	85/30	74	6	9	100	69.096	72	

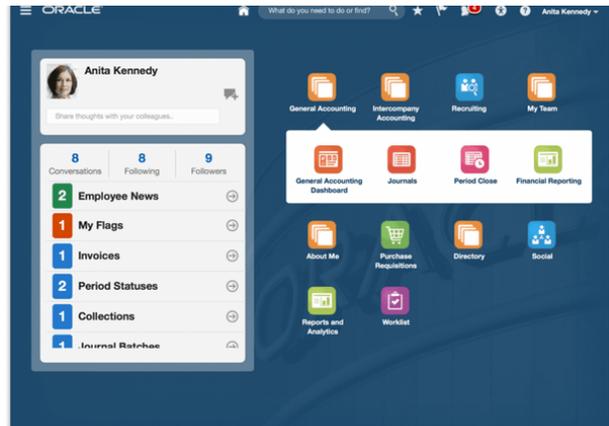
Full integration with Technion Grades System – graded exams are delivered to Technion designated location to be integrated into the Grades system's interface

Starting from the second academic semester, GTIIT started to utilize the Technion Grades System and through that joined to a unified process of reporting and releasing the students grades.

The Technion grades system provides two interfaces – ‘Upgrade’ interface, which allows the Undergraduates office an easy way to report all GTIIT students grades directly to the Technion main system, and the ‘Grades’ interface – web application that let students inquire about their grades, check their position in class, receive email

notifications for new available grades, and view the graded exam notebooks that are delivered automatically from the Tomax online grading system upon completion of the online grading process by faculty.

The grades system is also integrated with other available applications in Technion, such as the Technion mobile app and the Technion online transcript. All these resources provide our students and staff with tools to continuously monitor their academic status and assure a successful learning process.



Enterprise Resource Planning (ERP) System



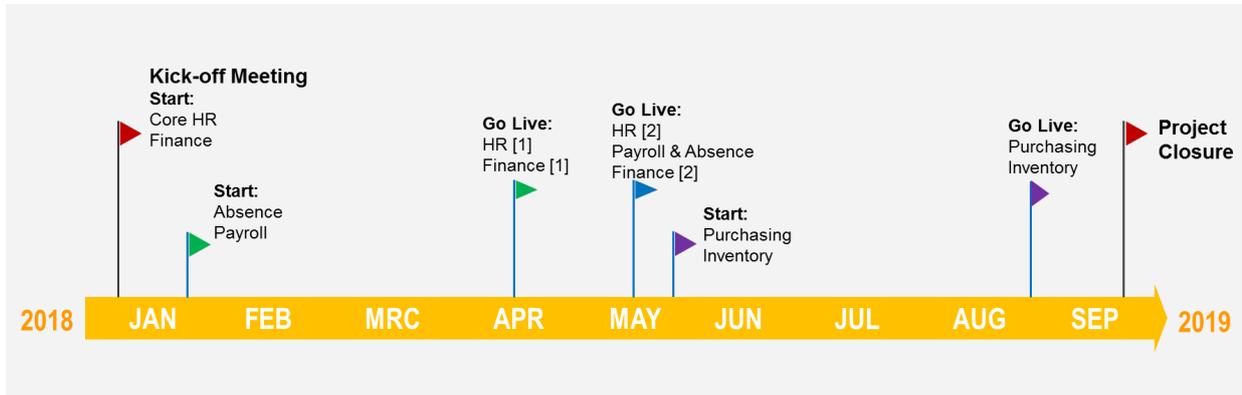
Partnering with the Human Resources, the Finance, and the Campus Operations & Logistics, we are developing and supporting a campus administrative systems that accelerates our administrative efficiency. The primary goal of this project is to build an institution-wide unified campus management system that consists of human capital management, payroll, finance, inventory and purchasing.

Starting December 2017 a systems testing and review of ERP systems began with Oracle Cloud

ERP being chosen and submitted to the board. This was subsequently approved by the board in September 2018. Upon approval the purchasing and licensing cycle was invoked.

Following the approval from GTIIT leadership, the project implementation was kicked off in December 2018. The conversion to Oracle Cloud ERP is a strategically significant initiative that not only is replacing spreadsheet-based workflows but is cultivating our business processes with the best practice of global.

ERP Project Timeline



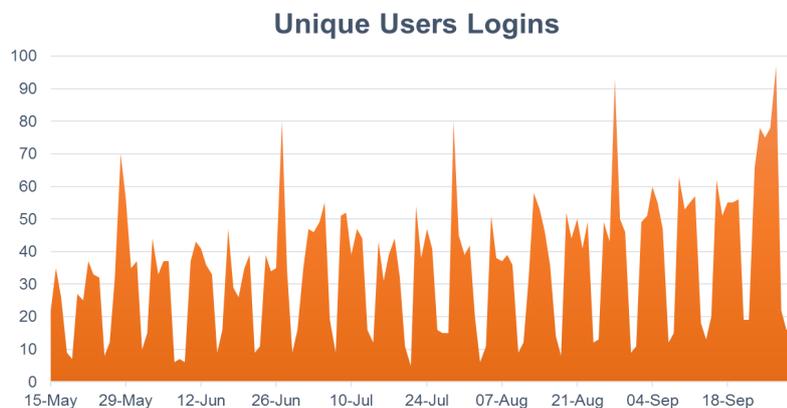
In January 2019, development for HR and Finance began with the enablement of Core HR and Finance GL/AP/FI in April 2019. The payroll and absence module being deployed in May 2019. At this stage, development of the Purchasing and Inventory module began, with that system going live in August 2019, the project was deemed complete in September 2019.

Currently the system allows GTIIT staff to check their employee profiles online, claim reimbursements and submit absence applications. This is beneficial as it allows staff to access information held about them by the University and, if needed, have that information amended. Another advantage is the ability to view payslips as well as employment details.

Since going live individual user logins have steadily increased with a growth in logins towards the end of the month after payslips have been generated.

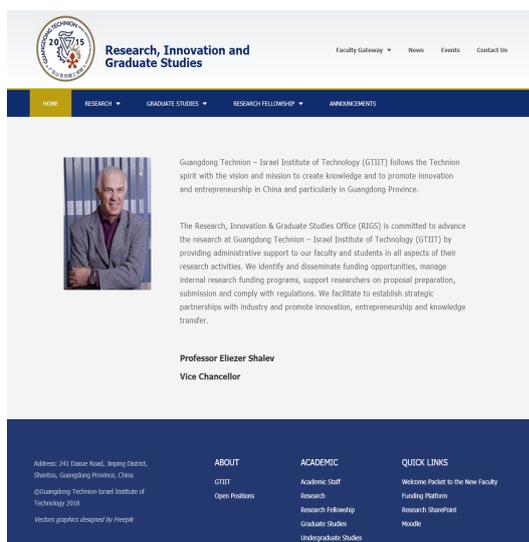
To fulfil the necessary provision of quality technical support the IT Department recruited an ERP administrator in April 2019, with the ERP administrator providing first line support for all incidents and requests concerning the ERP module. Once the application usage increases and reaches full maturity, the University will have a fully digital resource planning platform which will help reduce workloads by making paper-based systems redundant.

Month	Availability
March	99.98%
April	100.00%
May	100.00%
June	100.00%
July	100.00%
August	100.00%
September	100.00%



Web Development to Research

<https://sites.gtiit.edu.cn/research>



In 2018, IT Department assisted the Department of Research, Innovation and Graduate Studies (RIGS) in the planning and development of the online platform that aims to only manage information of research funding opportunities, also attract the best and most talented graduate students by promoting the University's top-notch research capacities on the Internet.

The first version was released in Apr 2018, and later the system was upgraded to WordPress framework with commercial plugins to enhance its functionalities along with user interface. We have also provided the hosting services and backup & restore for this platform.

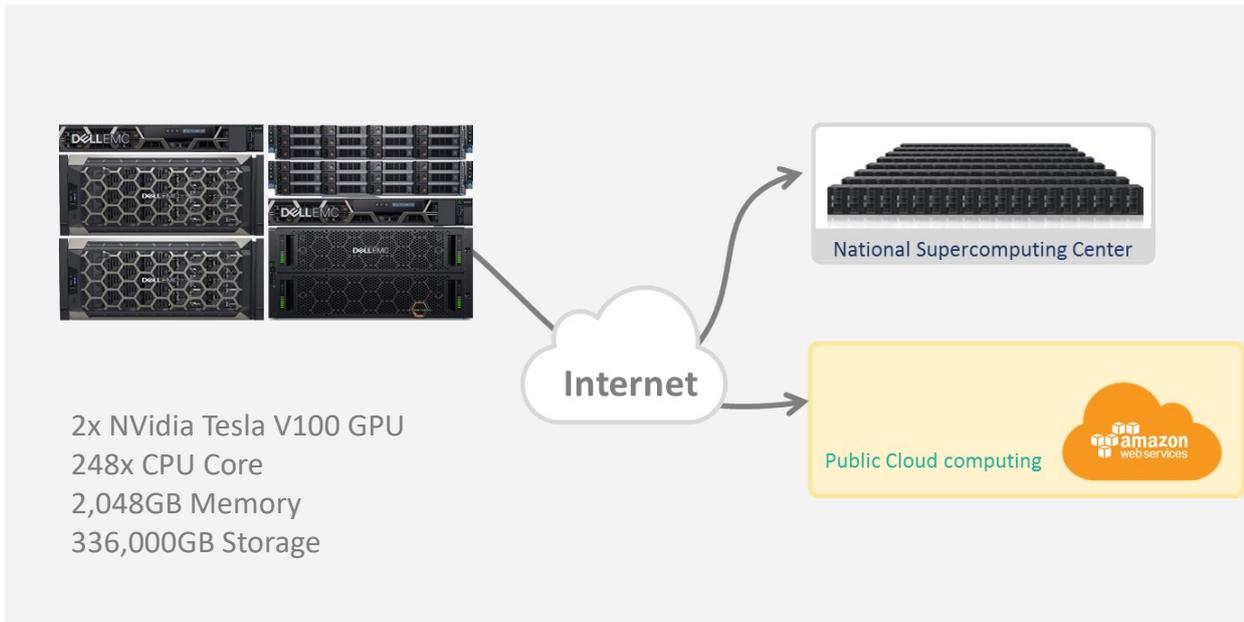
Shared resources from Technion and Shantou University

In partnership with Shantou University (STU), IT Department has been providing support to all members for the access to STU shared resources, including the printed books and online resources in STU library, smartcard payment in STU canteen, playground, gym, and others.



Our home university—Technion, also offers GTIIT members a range of academic resources, such as Technion Library, off-campus VPN. The IT Department is the local support to resolve all technical issues raised by our staff or students.





Research Computational Facilities and Ahead in the Cloud

IT Department has been taking a leading role in a new initiative to develop computational services for University's research.

Following the approval of RMB1.25million budget for a local high-performance computing (HPC) cluster, IT Department has been working with research representatives and the Procurement Team to buy a group of servers. In November 2019, this in-house platform will be available for faculty and students for code testing or teaching.

Proposed by IT Department, an advisory group will be established soon to govern the use of local HPC cluster, as well as to prioritize all computing

jobs towards better ROI.

In June 2019, we established an enterprise collaboration agreement with Amazon China for the use of Amazon Web Service (AWS). This agreement provides several benefits to faculty and staff, most notably the ability to provide on-demand cloud computing resources that allows faculty and students to leverage their computing power and knowledge to tackle research needs, and eliminate many existing roadblocks between ideas and execution. In addition, the payment for AWS services is in compliance with the University procurement policy.



Office 365 International

<https://outlook.office.com/>



A central document depository was implemented as a shared resource with STU in October 2017 using Office 365 (21viaNet version) as the chosen platform.

The limitations of this system were apparent to the GTIIT and a planned migration to Office 365 (Global Edition) was planned. However, due to regulations and the need to procure licenses for this system the migration did not take place until May 2019.

The initial migration was terminated due to a system bug discovered by Microsoft support team. Over the weekend of the successful migration in excess of 300GB of data was migrated to the new email system with minimal disruption.

The system currently has 1195 registered users

and each user has access not only to email but to OneDrive for central storage of files. These files can be accessed from anywhere on any device having internet access. End users are currently using about 3TB of storage and with 411 users actively using SharePoint to share and collaborate the system usage is growing and will prove a beneficial asset to all members of staff and students alike.

The new system offers transformational services with innovative features, familiar applications and strategic tools that will help keep GTIIT competitive. More than simply email, it is a unified suite of communication and collaboration tools for GTIIT staff and students.

As with all other platforms running within the GTIIT campus the IT Department offer full support and maintenance for this system.



<https://gtiit.zoom.us>



The implementation of the Zoom video conferencing service in January 2019 has allowed unlimited video and/or voice meetings from any location with internet access. This has benefited GTIIT staff in boosting productivity and reducing costs associated with travel. As of August 2019, there are 77 registered users partaking in 292 meetings with a total of 938 participants comprising 40,987 minutes. The meetings spanned China, Israel, Japan, Hong Kong, United States, Asia Pacific, India United Kingdom and Spain. This indicated a significant saving in time and money to GTIIT.



Thanks to the collaborative agreement between Technion and Zoom this enterprise level system is provided free of charge to GTIIT.

Self-Service Password Management Service

<https://pwm.gtiit.edu.cn/>



A self-service password reset system had been successfully deployed. It allows staff and students to remotely self-reset the password from a web browser, as well as provides a management solution which not only reduces the number of help desk password tickets, but also enhances the productivity of an end user by shortening unnecessary waits. By the end of last academic year, more than 500 users had registered on this system and used it to manage their account credentials.

Technology Infrastructure

Introduction

The IT department at GTIIT took over an extant network infrastructure that was to a large degree integrated with STU. Over the period 2017/2019 part of the IT department roadmap was to develop a secure, robust and highly integrated network infrastructure. This integration was accomplished through cooperation with STU,

Technion Israel and third-party stakeholders. Over the period integration, equipment upgrades through procurement and donation from third party stakeholders, allied with significant configuration implementations, has allowed the IT department to bring the infrastructure to the level of maturity that exists today.



Shared Data Centre with Shantou University (STU)

Information Data Centre (IDC)

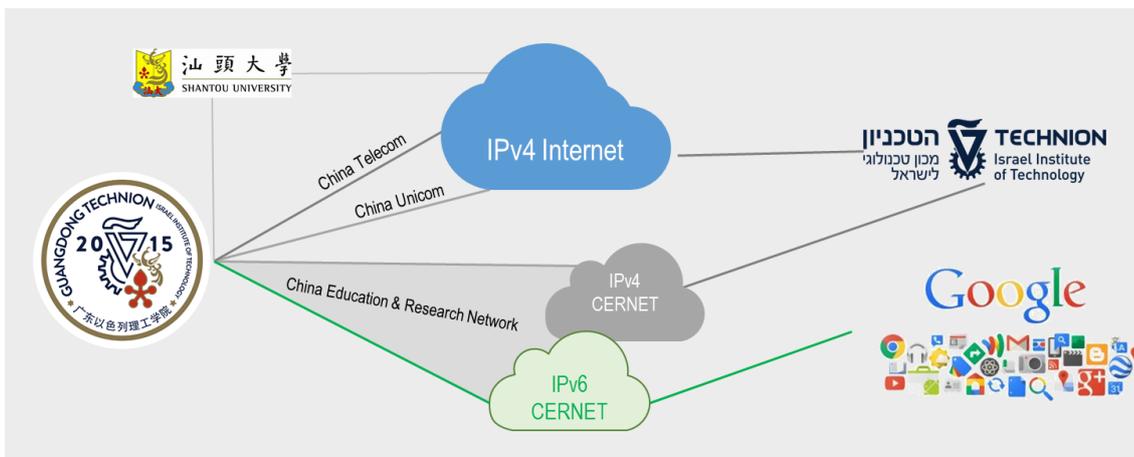
Shared resources were provided by STU until our data centre was commissioned in November 2017 and was dependent on the provision and implementation of Microsoft Volume Licensing Agreements. At that point, a localised infrastructure was put in place initially consisting of generator, UPS hosts, external batteries, eight LENOVO servers, and multiple network switches.

The provision of licences by VMware in April 2018 allowed for the creation of a vCentre server farm across these Lenovo servers which assisted in strengthening the GTIIT core network. To further the co-operation between STU and GTIIT, a provision for sharing GTIIT's data centre resources was provisioned in June 2018. This further enhances the spirit of co-operation across the two universities.

The donated Cisco HyperFlex system from China Construction Bank in April 2019 facilitated the ongoing improvement and modernisation of the core network. This Cisco solution allowed replacement of the lower end Lenovo servers as provided by local authorities in the North Campus project. Through the use of the five servers provided all of GTIIT's internal systems such as Moodle, Smartcard and Access Control, Student

Database, Residential Management System, Central Authentication System (Active Directory), Print Management System and others can be hosted on a robust and reliable physical platform.

Further improvements to our campus network continued to be made, including dedicated internet connections from China Telecom and China Unicom.



Internet Connections

In February 2018, the established partnership with China Telecom offers the first GTIIT-subscribed dedicated internet fast line to all staff and students through our wireless network services. The bandwidth provided was initially 100Mbit/s with failover and high availability provision through the fiber connection to STU.

A significant bandwidth improvement was implemented in January 2019; whereby available bandwidth for internet access was increased to 300Mbit/sec allowing for the provision of a special connection for academic research.

IPv6 — The Next Generation of Internet

The deployment of IPv6 provisioned next generation network infrastructure; this service was implemented through the China Education and Research Network (CERNET) allowing campus wide access to IPv6-enabled educational resources such as Google Scholar. This service has been available for all staff and students over both wired and wireless network since Jan 2018. It enables our users to access academic websites easily, also it is a significant contribution to academic excellence and research innovation.



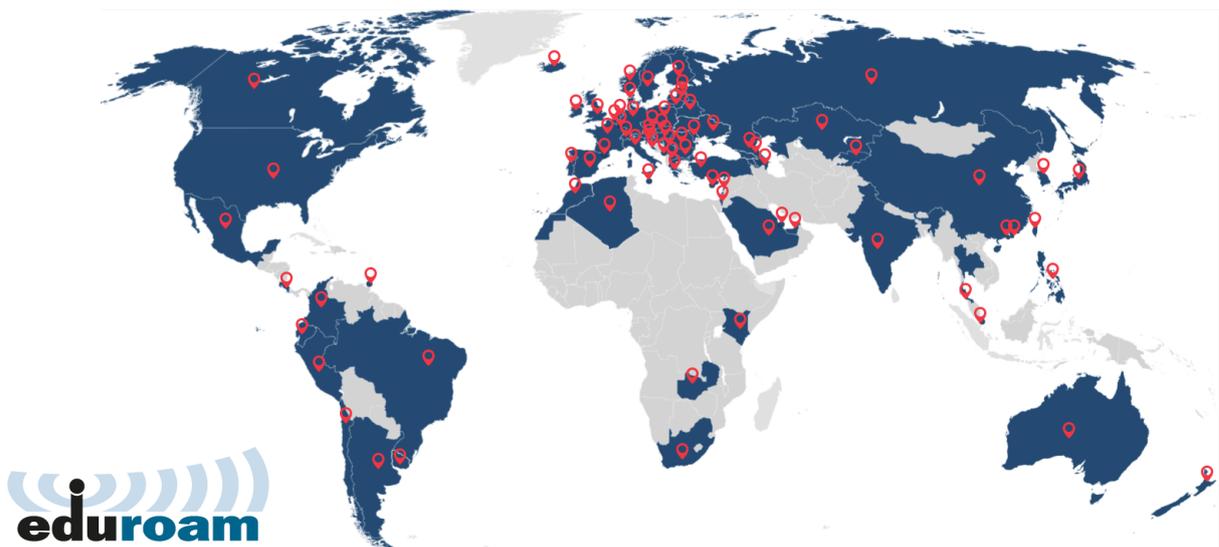


Wireless networking at GTIIT

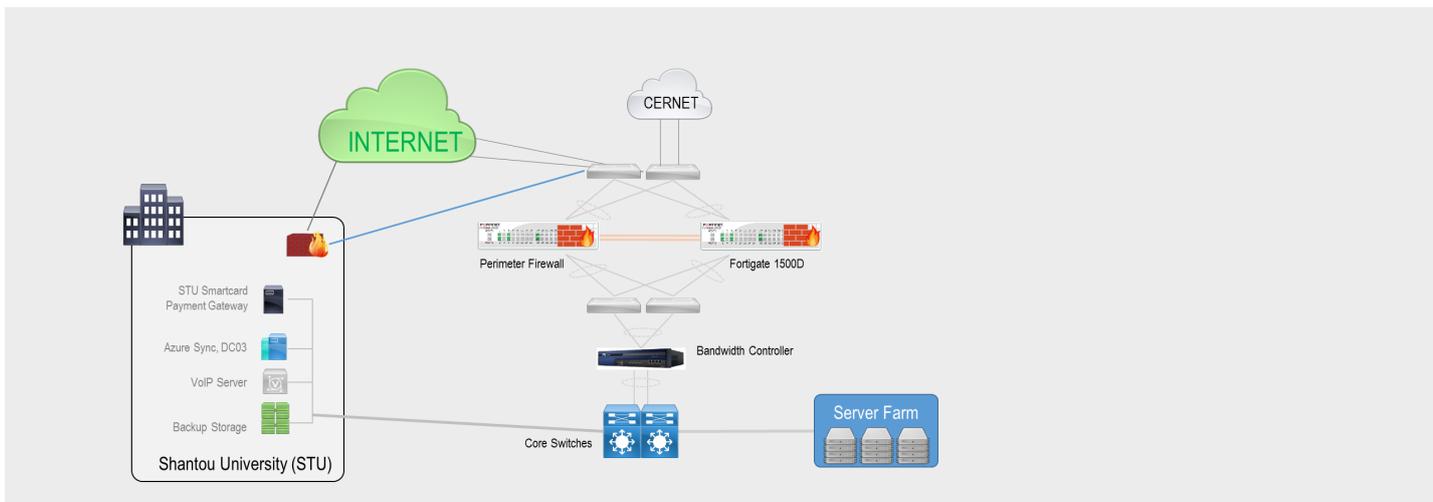
In today's distributed higher education environment, wireless networking and access to wireless internet are paramount.

GTIIT-SEC, a secured wireless network implemented in December 2018 in order to replace GTIIT-WLAN, is a campus wide wireless network that eliminated connection timeouts or the need to re-login.

More than 6,000 eduroam hotspots are available at universities, research centres, academies, many schools, and other research and education institutions in more than 100 territories around the world.



The eduroam wireless network — an international roaming service for users in research, higher education and further education, the deployment in GTIIT provides a simple, easy, secure connectivity from thousands of hotspots across more than 100 countries. The added benefit is that visiting students, staff and researchers use their eduroam 'home' credentials to access Wi-Fi services on campus, they have a quick, easy and secure way to get online without IT support, so the IT team can focus on managing essential services.



Campus Firewall and Cyber Security

To harden the GTIIT network and improve security, both internally and externally, the IT Department instigated a planned rollout of measures to improve network security. In January 2018 for the first phase of this rollout Technion provided (free of charge) an Enterprise version of McAfee Anti-Virus Security. The next phase in March 2018 saw the implementation of Internet bandwidth control using a solution from Sangfor; this provided the IT Department with a unified management solution for monitoring, tuning and regulating bandwidth usage across the campus, whereby critical and core applications received

priority. In the same month, the campus firewall solution was upgraded through the use of Fortigate hard firewalls. This allowed the IT Department to better route and monitor traffic into and out of the GTIIT network.

As more physical devices are added to the network, such as the Cisco servers mentioned above, the increase of BYOD (bring your own devices) usage, the IT department continues to monitor and re-configure the firewalls to ensure the best possible throughput and compliance with regulations.



Backup and Disaster Recovery

IT Department configured a resilient and robust central backup platform through daily server backups to the local storage system. In collaboration with STU, in February 2018, 5TB of space was allocated to GTIIT for server backup. This allowed for duplication of backups to an offsite facility, thereby enabling the implementation of a more robust disaster recovery plan.



Central control system in classroom

From August to September 2018, fifteen new multimedia classrooms were commissioned, and the IT Department continues to provide on-going support and configuration for optimal use of these facilities.

The integration of KRAMER in September 2018 enhanced the learning environment by making it

easier for students to learn and be engaged in the classroom. With user-friendly collaboration tools instructors currently use touch screen, but can request wirelessly connectivity from the IT department, and present instantly, view the main display on their device, mirror any device to the main display, share any size file, and turn the main display into a whiteboard.



Computer Lab

A computer lab of twenty-six high-end workstations was provided with the donated three-year license of PTC-CREO software. A custom script was developed to restore the PTC-CREO setting for every login session and deployed via group policy. These workstations were merged in June 2018 into the computer lab for the MATLAB course.



The Auditorium and Support to University Events

After the handover of all IT facilities in the auditorium from the local authorities in February 2018, IT Department has been managing the audio-engineering-level system — consisting of audio-visual, conferencing, presentation equipment, and others — with quality output for more than 50 events, which

covers VIP speeches, Open Day, conferences, ceremonies, training programs, and others.

The Wi-Fi system in the auditorium has high-density access points that can provide connection to more than 1,000 concurrent users.

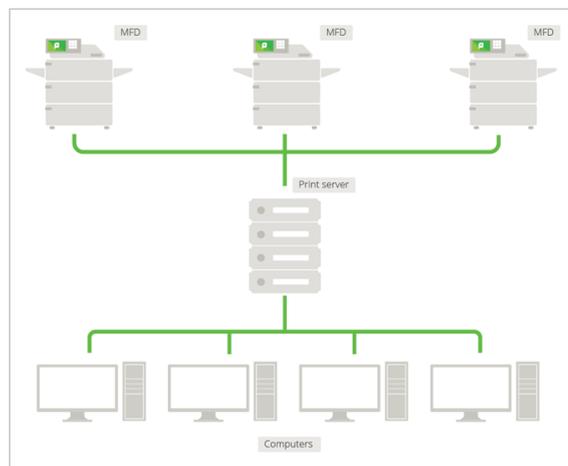
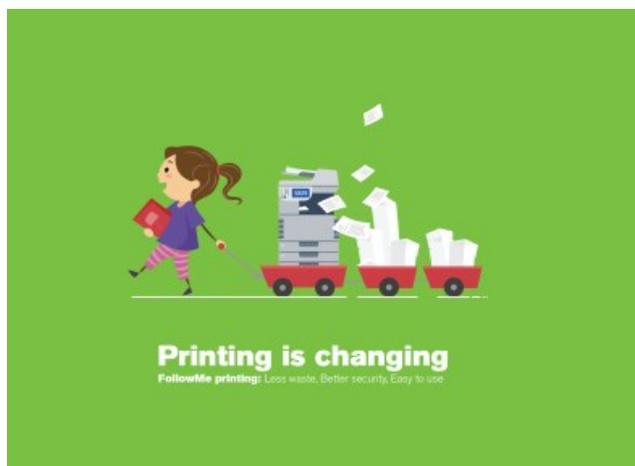


Wi-Fi in Dorm C, from H3C to Aruba

In May 2018, the wireless network in Student Dormitory C was migrated to the University Aruba system, giving student in that building access to the same high performance and network security that the rest of campus enjoys, thereby increasing coverage, capacity, speed and compatible with the GTIIT wireless network.

Teaching Laboratory Building

Following on from the commitment to support the infrastructure and facilities in all teaching labs; the IT Department, in close cooperation with Campus Construction, provided for the installation of a cable and wireless network, access control system, and CCTV in the Teaching Lab Building in March 2019 to facilitate the needs of all teaching activities.



Follow-me print service

<http://print.gtiit.edu.cn/>



To facilitate printing and reduce waste and costs, shared multifunctional printers/ photocopiers (MFP) were installed in several convenient public spaces. All print jobs are sent to the print server and users can go to the location most convenient to them to print out their print jobs.

Print services can be used through follow-me Mobile Print (implemented in August 2018), which allows users to send print jobs from any location using their mobile devices. All printing is managed through PaperCut MF, this watches the print queues and extracts job information such as page counts, and uses this to implement logging, charging, control, quotas or reporting or a combination of all.





Office Telephony (Cisco VoIP)

VoIP infrastructure and equipment are currently provided to GTIIT by STU. Maintenance and support of this service and equipment within GTIIT falls within the remit of the IT Department. This is a temporary arrangement and once GTIIT have received approval for equipment purchase etc. The IT department will instigate a rollout of an independent VoIP system.

Cellular Network

Dropouts in cellular coverage were reported to and detected by the IT Department. After consultation with service providers China Mobile and China Unicom. Installed equipment in March 2018 to remediate the lack of coverage in the Education building, Administration building and the Canteen. The IT Department continues to liaise with the providers in order to integrate new technologies, such as 5G, and optimise existing technologies.



IT Service Excellence

Introduction

The prime objective of the IT Service Management is to provide professional and timely solutions to end user issues and requests, monitor the network infrastructure and pre-empt issues that will have a derogatory effect on performance and usability. To

facilitate this, the IT department make use of various monitoring and reporting tools to ensure maximum uptime of all systems. The service desk is tasked with prioritizing and responding to all tickets in a timely manner.



IT Orientation to newcomers

The group IT orientation for freshman, as they come on board, and the face-to-face orientation for new staff, have both proved to be highly effective in assisting familiarisation with the wide range of services offered by the IT Department. All participants can make a confident start to work or study by getting to know more about how to connect to campus network, access the University email system, store digital files in OneDrive for collaboration with others, use the multi-functional photocopiers for printing and copying, and all other services.

Daily IT Services

IT Provision Laptop and/or desktop computers for GTIIT staff. Installation and maintenance of software for specific uses for teaching staff. Provision of peripherals devices for teaching and research staff such as headsets, microphones, screens and audio-visual equipment.



Global IT Services

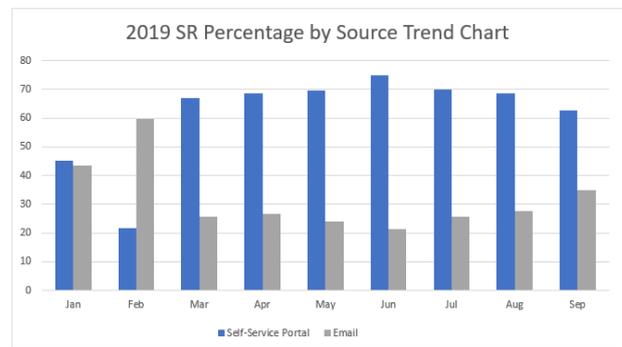
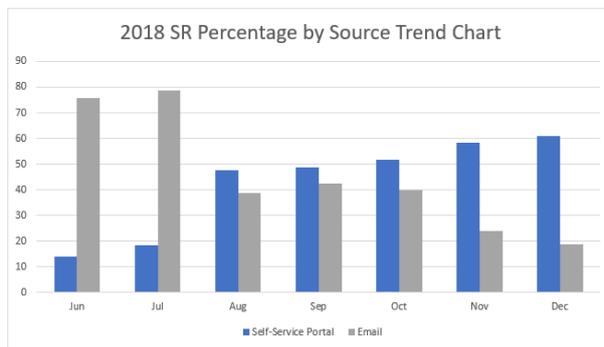
The IT Department has worked towards a successful information technology development in Technion. In October 2017, following the one week business visit of Mr. Zeev Schneider - Deputy CIO of Technion, a long-term partnership was established to strengthen our collaboration towards a global IT strategy. Later in April 2018, a range of invaluable materials regarding the IT strategy, running systems, support models, and projects in progress in Technion were absorbed, during the business visit to Israel, and following on from several meetings between the then President P. Lahav, CIO, and different teams in the Division of Computing and information Systems (CIS) of Technion. Not only did the

provision of global license agreements for MacAfee, Zoom videoconferencing, and other systems reduce GTIIT's cost, but the professional advice, valuable comments, and seasoned service management tactics shared by Mr. Zeev Schneider and his team greatly assisted in facilitating our growth.

The IT Department also provides local support to our staff and students for the use of Panopto, VPN, Library, and other services provisioned by Technion, with the fortnightly meeting between Technion CIS and GTIIT IT providing an effective approach of global collaboration

Shared Service Portal

<https://helpdesk.gtiit.edu.cn/>



Service Record logging trends 2018-2019



The service portal is the main point of contact between the end user and the service desk. However, the IT Service Desk was initially lacking a fully integrated platform. The IT Department identified the need for a platform that was not simply a ticket management system, but one that also included robust reporting, availability of a customised self-service portal, asset management, project management, Chinese language support etc.

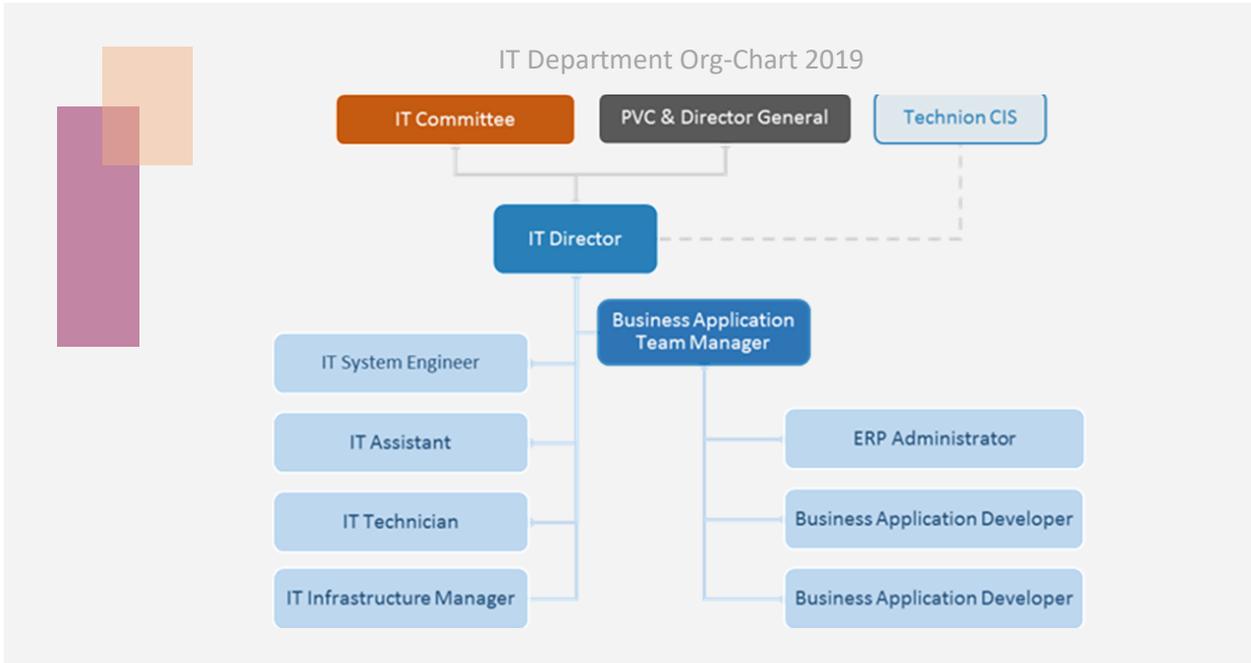
After reviewing several offerings and in consultation with Technion, we decided to opt for SysAid as not only did it offer most of the requirements but, as it was already in use by Technion, a readily available resource was on hand to offer expertise if required.

The system was deployed in February 2018, initially as a ticket management system. Further customisation allowed for the development of the self-service portal whereby the end user can log

an incident or a request. The generated ticket is then assigned to either IT or Campus Operations for action, using the portal the end user can keep track of their ticket and will also receive automated updates regarding progress. This feature saves time for both the end user and the IT staff. The aim of deploying this platform is to foster an environment where the majority of tickets are raised on the self-service platform.

Over the course of 2018 raising of service records via email fell and usage of the self-service portal rose, topping out around 60%. This trend continued in 2019 with the percentage rising to a high of around 75%. Whilst a significant number of service records are still raised via email, with a small percentage being raised locally on the service desk through the administrative portal, the trend is towards use of the self-service portal. The IT department will continue to encourage end users to use the portal as the preferred method of raising a ticket.

Team Development



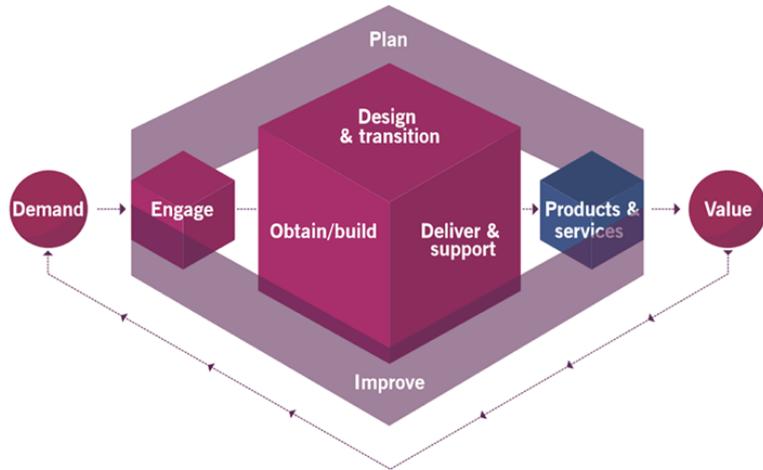
In the last two years, in conjunction with the University's rapid growth, the reorganisation of the IT department structure included the addition of several new specialists, leading to our team growing from four to eight.



IT TEAM MEMBERS



This restructuring included the appointment of an IT infrastructure manager, and the establishment of a business application team, consisting of a team manager and three members. These appointments were necessary to deal with the growing demands of the University, and were used to facilitate the streamlined integration of developing applications and the IT infrastructure re-design.



IT Professional Training

IT Service Management is an essential part of GTIIT's daily operations. We realize the effectiveness of IT Service Management, the need for professional technical support and services is increasing along with GTIIT's growth. In 2019, IT Department sent three members to study the latest version of Information Technology Infrastructure Library (ITIL) foundation course training, becoming certified IT professionals after three days in Shenzhen. Now half of the IT team has a systematic and professionally valued approach to the best practice methodology, with the increased ability of a technical professional to identify, plan and support our services for GTIIT members.



Following the enablement of VMware server virtualization for the server farm in our data center, one system engineer participated in the must-have training course of VMware Certified Professional (VCP) for working in our data center and managing virtual environments.



As smart technology advances, the ways in which our lives can be greatly impacted by cybercrime increase dramatically. Through several online and offline training organized by local authorities in the last two years, IT staff perceived advanced cybersecurity knowledge for keeping up-to-date skills and evolving threats, providing cyber exercise and incident response planning to protect GTIIT's data, networks, and business systems better.

Towards 2020 and beyond...

The IT department will continue its endeavors in liaising with planners, sub-contractors, software and services vendors, both local and international, in its mission to provide IT infrastructures and services to the best international standard and practices. As part of this mission the IT department will continue to develop a framework for the phased integration of the new South campus with the existing North campus with the goal of providing a seamless and user-friendly IT environment for all GTIIT's end users.



GUANGDONG TECHNION

Department of Information Technology
广东以色列理工学院信息技术部



GTIIT WEBSITE



IT Helpdesk