

University Information Technology

Top -5 Accomplishments - April 2020, Year-End Evaluation

- 1. Creation and launch of the Student Virtual Assistant.** Working with IBM and Student Services, UIT developed a Student Virtual Assistant (SVA) consisting in a conversational AI trained to answer questions on programs and courses, student life (including events, extracurricular activities and mental health support) and career development. After a launch in January and March, the SVA will be continuously developed by the IT Innovation Lab.
- 2. Technology renewal of over 100 classrooms within a year.** With a view to evergreening all 290 centrally bookable classroom, UIT has updated technology in over 100 classrooms this year.
- 3. Conversion of the University to a nearly universal Work From Home and Remote Learning environment.** In the wake of COVID-19, UIT was tasked with readying the University for remote work and learning. This involved automatically enrolling Zoom licensing (7000 for faculty, 55,000 for students), creating multiple VPN connections (up to 2500) and re-architecting the underlying network, making laptops (1000) and internet devices (100) accessible to users who didn't have the proper setting at home, train faculty, staff and students on multiple technologies (MS Teams, Moodle, etc.) during extended hours, including weekends.
- 4. Foundation for UIT's largest project in its history: the SIS Renewal program.** The Student Information System (SIS) is the largest IT project in UIT's history. Approved by the Board of Governors in April 2019, this project was launched in summer 2019. After intense preparatory activities (e.g. preparing use cases, formalizing the project structure, initiating communication and change management activities, hiring the Program Director, etc.), the RFSQ was completed and the RFP published in February 2020.
- 5. Enhancements to a key academic service: Moodle.** Moodle has been enhanced to improve its resiliency and performance and accommodate increased demand at the start of the fall semester. Moodle now sits on high-end hardware ([details](#)); it's software base is on a regular upgrade schedule (including the database software as well as up-to-date Moodle upgrades); it relies on automated testing cycles (load and functional).
- 6. Implementation of an Emergency Mass Notification system online.** This system allows Campus Safety to easily and quickly send out message to multiple channels (online, text, phone, screens, etc.) across the University. This multi-year project contributed to making the University a safer place.

Academic Quality

2. Advancing Exploration, Innovation and Achievement in Scholarship, Research and related Creative

Support research technology

Strategy/Action

Measure/Milestone

Provide advice and guidance to researchers on grant submissions technology and facilitate sourcing for projects where necessary.

1) Procedure for UIT review in the grant development stage where there is a significant technology impact



Completed

Evolve UIT's portfolio of services for researchers including integration with services available from University partners and external agencies/consortia.

1) Service portfolio is published and current.



Completed

Increase access for faculty and graduate students to specialized software packages through advantageous pricing and administration of licenses for broad and easy distribution.

1) Published and maintained catalog of available software packages



Completed

Student Success

3. Enhanced Quality in Teaching and Student Learning

Grow and sustain physical classroom facilities in support of teaching and learning 3

Strategy/Action

Measure/Milestone

Further the eLearning strategy through support of efficient and effective learning and teaching along with innovation in pedagogy via application of classroom technology and classroom design.

- 1) Upgrade and renewal plan in place and approved.
- 2) Satisfaction with the classroom technology services and support (bi-annual survey)
- 3) Number of classrooms equipped with technology (based on plan)
- 4) How many teaching spaces adhere to adopted standards.



On Track

Support of efficient and effective eLearning by sustaining and deepening existing online tools and resources and by adding new tools and resources.

- 1) Milestone: Develop service roadmaps
- 2) Roadmap maintenance and tracking service status and progress to roadmaps
- 3) Performance measures including average response time and service availability
- 4) Usage trends



Completed

Support faculty members as partners in the selection and design of educational technology and its support.

- 1) Milestone for establishment of clear and documented consultation processes and mechanisms
- 2) Milestone for communication of processes and mechanisms to community
- 3) Annual report of consultations with community, including questions asked and results obtained
- 4) Annual summary of educational technology progress reports to community



Completed

Improve the overall quality and coherence of the overall portfolio of eLearning tools and resources, including making them mobile-friendly.

- 1) Completion of milestones:
 - (a) creation of roadmap to achieve maximum % of teaching and learning applications and resources that are mobile-friendly,
 - (b) design and consultation with community on unifying eLearning brand,
 - (c) deployment of new eLearning brand with a communication plan,
- 2) Annual update of list of level of mobile-friendliness for teaching and learning applications/resources



Completed

Provide opportunities for students to develop IT skills in a complex Enterprise environment by using the Work Study Program [OM] and partner with other Divisions that engage students in an experiential learning capacity

- 1) Number of work study students employed per year, and UIT teams in which they work with a view to as broad participation as possible



Completed

Student Success

4. A Student-Centred Approach

Provide flexible and state-of-the-art infrastructure to support student-centered initiatives

Strategy/Action

Measure/Milestone

Implement a next generational Student Information System (SIS)

- 1) Consult with the community and key stakeholders
- 2) Create RFP plan and strategy for the SIS Program
- 3) Develop and validate use cases with key stakeholders
- 4) Develop target architecture (including BI & Data Analytics, Integration, CRM, IAM)
- 5) Implement and integration SIS



On Track

Create an E-Campus Innovation Garage

- 1) Put together an initial team to explore innovative projects
- 2) Nominate a head
- 3) Normalize operations
- 4) Celebrate the first innovative product
- 5) Create momentum



Completed

Create a university-wide Student Virtual Assistant (Yubie)

- 1) SOW with IBM for the university-wide deployment of Yubie
- 2) SOW with IBM for the maintenance/training/expansion of Yubie
- 3) SOW with IBM on the commercialization of Yubie
- 4) Deployment of Yubie university-wide
- 5) Create a team to maintain/train/expand Yubie
- 6) Business plan for Yubie commercialization
- 7) To complement SVA Yubie "pull" mode, implement Navigate with VPS to provide a "push" model of info about events and reminders



Completed

Engagement and Outreach

5. Enhanced Campus Experience

Provide service and supports that are broadly accessible by students in support of their learning and campus experience, with particular attention to mobile, commuter students.

Strategy/Action

Measure/Milestone

Create and maintain a highly connected campus environment for students, primarily through wireless networking.

- 1) Milestone completion for:
 - (a) establishment of minimal standard for a classroom to be covered via WiFi (e.g. number of students/devices/bandwidth)
 - (b) establishment of methodology to assess number of classrooms covered,
 - (c) establishment of a list of non-classroom spaces to be covered and a minimal standard for what coverage means,
 - (d) establishment of strategy to support Internet of Things for students (e.g. number of devices per students, bandwidth per device, network architecture)
- 2) Annual report on % of classrooms covered and % of designated non-classroom spaces covered
- 3) Annual comparison of York statistics to most recent ECAR averages for devices per student

- 4) Annual report on utilization of wireless service, e.g. peak bandwidth from all WiFi access points, ideally for students alone

- 5) Overall student satisfaction (bi-annual survey) with comparison to most recent ECAR student satisfaction scores



Completed

Provide information technology services, facilities and tools that contribute to a supportive and productive environment for students.

- 1) Milestone completion for:
 - (a) create baseline catalogue of general services offered by UIT directly to students such as email, calendaring, printing, file sharing, free anti-virus and other desktop software, computer labs, and collaboration services,
 - (b) initial assessment of service catalogue relative to student needs to identify gaps if any
- 2) Bi-annual assessment of service catalogue relative to York competitors and standard sources such as EDUCAUSE, leading to prioritized list of desired enhancements and new services
- 3) Monthly service availability
- 4) Extend online Expense Claims service to students (Concur)
- 5) Support international education through appropriate solutions (MoveOn)
- 6) Initial development of Navigate (formerly YUSTART 1234) to deliver important events to new and ongoing students



Progressing

Maintain and enhance a comprehensive portfolio of student-oriented services that are responsive, highly usable, mobile-friendly, organized into portals as appropriate, and fulfill the needs of students and the York groups that support them.

- 1) Improve Moodle-related solutions
- 2) Improve student services related solutions



Completed

Engagement and Outreach

6. Enhanced Community Engagement

Help improve York's reputation indirectly through partner support and directly through University IT leadership in best practice.

Strategy/Action

Measure/Milestone

Continue to demonstrate leadership in the university IT community. Leverage conferences, award programs and participation in external industry groups to raise the profile of successes with IT at York.

1) Annual log of reviewed presentations given

2) Annual log of conferences and other multi-institution meetings with representation from UIT

3) Organize an annual IT Day for those involved in IT planning, support and decision making at the University



Completed

Enabling the Plan

7. Enabling the Plan


Continue to contribute to a positive, collegial work environment at York.

Strategy/Action

Measure/Milestone

Build community by providing and supporting services and initiatives that enhance the communication and collaboration environment.

- 1) Milestones -
 - (a) Implementation of a new email/calendaring service
 - (b) Implementation of video-conferencing service
 - (c) Enhanced voice-service through implementation of VOIP
 - (d) Continued enhancement to yulink intranet.
- 2) Service utilization statistics
- 3) Develop a digital workplace initiative to provide proactive support, training, and adoption strategies for the institution to best leverage leading-edge collaboration and communication tools, including the full range of Office 365 capabilities

 On Track


Support and maintain the processes of project portfolio management process, service measurement program and integrated, pan-institutional IT planning.

- 1) Milestone – Identification and development of a project portfolio management system to allow for integrated pan-institutional IT planning in support of the IT Governance group

 Progressing

Strengthen the communication and collaboration with Facilities Services in support of better aligned execution of telecommunications and audio-visual deliverables for construction and renovation projects

- 1) Milestone - develop and publish associated building standards in accordance with the Master Specification Master Format Divisions.
- 2) Milestone – develop and publish Division of Scope RACI charts for different project types including: Standard renovation, Major renovation and New Construction
- 3) Milestone – Definition of an integrated resource model to achieve projects

 Completed

Establish a communications plan to keep the community informed of IT changes and IT outages

- 1) Formal documented process for notification in place
- 2) Measure volume of notifications and mediums, # or volume of responses, likes, re-tweets (should include social media)
- 3) Communications plan documented and awareness within UIT
- 4) Communication channels setup and major incident protocol tested
- 5) Develop two UIT communication awareness courses



On Track

Engage partners to identify and develop system/solution roadmaps that will allow the University to meet strategic goals, maximize existing solutions/investments, and improve integration of resources (people, processes, systems).

- 1) Establishment of consolidated partner-wide roadmaps
- 2) Annual maintenance of roadmaps to reflect changes in the environment and user needs
- 3) Annual tracking progress to roadmap/plan



On Track

Deliver solutions through a mature project management discipline and greater integration of business process review and re-engineering and organizational change management.

- 1) Trend number of projects leveraging process review competency
- 2) Lessons learned survey on PM/PMO driven effectiveness evaluations
- 3) Establishment of change management standards for larger/complex projects
- 4) Bi-annual survey of partners and UIT internally of PMO services and value



Progressing

Grow our capability around sourcing, implementation and integration of third party hosted/"cloud" based solutions and platforms.

- 1) Number of third party hosted/"cloud" solutions in place.
- 2) Number of integrations in place.
- 3) Adherence/compliance to standards
- 4) Institutional agreements with leading cloud platforms such as Microsoft Azure and Amazon AWS
- 5) Cloud computing costing model for budgeting and planning purposes



On Track

Develop and implement roadmaps for information reporting tools that ensure broad access, continuity of services and to accommodate new and innovative analysis of information.

- 1) Application "health"- as measured through the application portfolio
- 2) Multi-year plans in place for EDW and operational reporting platforms.
- 3) Replace or upgrade platform for operational reporting (by 2018)
- 4) Completion of migration to Informatica ETL tool.
- 5) Augment EDW platform with visualization tools to accommodate new and innovative analysis of information.



Completed

Develop and maintain integrated multi-year roadmaps of IT infrastructure elements to ensure sustainable renewal and to adapt to changing demand.

- 1) Infrastructure sustainability plan in place
- 2) Efforts/achievements to plan
- 3) Issue rates with root cause infrastructure - trending to decrease
- 4) Technical debt reporting



Progressing

Continue to mature application planning, acquisition, implementation, testing and support processes, including regular assessment of the application portfolio and maintenance of documented data and application architectures.

1) Milestone completion of:

- (a) expansion of application portfolio scope to Faculties,
- (b) establishment of sustainable repository of and processes for data and application architectures,
- (c) establishment of robust quality assurance function,
- (d) creation of system integration vision including architectures and documentation standards,
- (e) creation of roadmap to implement the system integration vision



Completed

2) Bi-annual application portfolio data gathering and analysis

3) Annual tracking progress to system integration roadmap

4) Bi-annual assessment of impact vs cost of system integration initiative

Design, implement and support the University's core information technology infrastructure as a highly available, resilient operational environment and extend and adapt it to changing needs.

- 1) Measures - track breadth/scale of key infrastructure elements and year to year change (e.g. number of network end points, number of servers).
- 2) Availability - Time lost to planned and unplanned interruptions (track to decrease).
- 3) Establish planned vs unplanned interruption targets and measure against (e.g. 99.9% uptime not including planned outages, 97.5% including planned outages)



Completed

Continue to improve technical management and service management and delivery processes and capabilities.

1) Milestones -

(a) Establishment of tracking mechanisms (e.g. bar code/asset inventory system)

(b) Review service desk solution (including relocation)

(c) Implementation of application virtualization

2) Number of incidents (track to decrease).

3) Major update of UIT website



On Track

Support institutional governance of information security risk

1) Establish cyber security governance council

2) Initiate compliance monitoring and reporting for regulated PCI DSS data

3) Establish risk register for information security risks

4) Perform external assessment of institutional cyber security risk

5) Develop next cycle of cyber security plan based on risk assessment and related priorities



On Track

Establish Information Security Policy, data classification guidelines and related standards.

- 1) Data classification scheme
- 2) Number of security program audit items (track to zero)
- 3) Establish security control standards corresponding to the information classification framework



Completed

Replace Passport York - unify and extend identify management and directory services for improved control of account and access management, and support enhanced authentication capabilities.

- 1) Implementation of a common directory service.
- 2) Number of user ID's available/required per unique person (track to decrease to 1:1).
- 3) Percentage of community using the common directory.
- 4) Transparency of rules for granting authorizations based on roles.
- 5) Speed of de-authorizing an employee with changed status.
- 6) Initial deployments of 2-Factor authentication
- 7) Launch next-generation Identity and Access Management initiative



On Track

Develop cyber security awareness program for staff and faculty. Extend and improve program for students.

- 1) Awareness grade capability established for all participating staff, faculty and students.
- 2) Milestone - Security awareness communications program developed and in place
- 3) Number of staff, faculty and students reached - annual and cumulative.



Completed

Upgrade and augment tools and capabilities for Information Security.

- 1) Establishment of Roadmap for renewal/replace/implementation (tracking to plan)
- 2) Initial deployment of advanced threat protection for endpoints
- 3) Upgrade of intrusion detection system
- 4) Upgrade of centralized log correlation and automated response capabilities
- 5) Establish automated threat intelligence feed intake to information security systems
- 6) Development of cyber incident response support plan for integration with university emergency management framework
- 7) Update and development of cyber incident response processes and playbooks



On Track

Create home-grown ability for process automation at York

- 1) Complete RFP for a BPMS solution and purchase BPMS solution
- 2) Hire a Business Process Developer
- 3) Automated at least two processes






On Track

Creation of a Strategic Plan for 2019-2020

- 1) Creation of IT Strategic Planning Steering Committee
- 2) Review of past consultation and analysis documents
- 3) Meeting with key stakeholders
- 4) Townhalls
- 5) Submission to University Leadership



Completed

Creation of IT Governance Structure	<ol style="list-style-type: none">1) Consultation with key stakeholders2) Write IT Governance document3) Establish a governance steering committee (ITEX)4) Create all relevant committees5) Normalize activities of IT Governance6) Maintain and publish list of prioritized projects for broad consumption	 Completed
Implement Enterprise Architecture framework	<ol style="list-style-type: none">1) Document current state and assess opportunities2) Create EA target3) Create EA roadmap(s)4) Establish EA principles and standards5) Create EA Framework and Governance6) Normalize EA activities, especially in the EAC	 Completed
Develop a five-year UIT Implementation Plan (2019-2024)	<ol style="list-style-type: none">1) Initiative prioritization2) Capacity planning3) Timelines4) Costing5) Consultation with partners / stakeholders6) Communication planning	 On Track