Orchestration of Graduate Petitions

Using the AutoWorX business process management system (BPMS), the Operational Excellence team, in partnership with Faculty of Graduate Studies (FGS) transformed the Graduate Petition process from a six-week, manual and paper-based process to an efficient orchestrated process that takes as few as two days (1400% productivity improvement) . This work also ensured accuracy and traceability, critical elements of academic integrity. Students can check the progress of their submissions and are updated automatically when a decision is made. This orchestration manifests our guiding principles of operational excellence and improves the York experience for our graduate students and graduate petitions administration.

Improve Digital Service Reliability & Performance

Recognizing the importance and the reliance on its digital services, UIT made a number of improvements to increase stability and reliability. These improvements included:

- In December 2021, UIT successfully moved eClass to the cloud. It is now fully managed on Amazon Web Services (AWS) Canada.
- All production servers were migrated to hyper-converged Dell VxRail platform
- Implemented new call center solution
- Implemented new high-speed data center network and increased VPN processing and bandwidth to better enable remote work.
- 63% if Oracle databases were migrated to high performance platform (Exadata Cloud - ExaCC).

New Ticketing System (HaloITSM)

UIT in collaboration with the University Services Centre, successfully launched a new ticketing system (HaloITSM). The new ticketing solution provides a much improved user experience and is mobile friendly. Improvements also include better reporting and transparency of service response. and efficiency. By implementing HaloITSM, York University avoided over $500k in costs towards maintaining its legacy system (Cherwell).

Hardening Systems Infrastructure Against Cyber Attack

Several initiatives in the cybersecurity roadmap were completed that focused on further strengthening IT system and infrastructure against cyber attack, including: completing deployment of 2FA for privileged access; deployment of continuous assessment tools for ongoing diligence and protection of York's Active Directory environment; initial deployment of deception technologies for early detection and interruption of attacker activity; deployment of the CIRA DNS Firewall to the campus network; and strengthened security standards for UIT servers and workstations. While these efforts were largely behind-the-scenes, they involved substantial effort and commitment from several UIT teams. Penetration testing has shown the real-world impact of these improvements to be of great benefit in protecting critical IT infrastructure. As global cyber threats continue to increase at a rapid pace, York will continue to strengthen and broaden its cyber defenses.

The Student Systems Renewal Program (SSRP) – Identity Access Management (IAM)

The SSRP program is comprised of a series of smaller initiatives that target specific areas to achieve the overall vision. One of those initiatives is Identity Access Management (IAM). A modern IAM system will set the framework of policies and technologies to ensure appropriate access to data and technology resources. The IAM solution(s) will identify, authenticate, and authorize individuals needing access to York's suite of applications. The IAM system will support: The SSRP solutions, directory services and access management; Identity Governance and Administration (IGA); Access Management and Authentication (AM); Identity Repositories; Privileged Access Management (PAM); IAM integration with O365 and G Suite. PAM project was completed. AM implementation is underway and on track. IGA is planned to start in July 2022.

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1. 21st Century Learning

Improve learning and collaborative technology in support of 21st century teaching and learning standards

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:
Refresh classroom technology on an evergreening basis	Measurable: • # of classrooms refreshed in previous year • Percentage of refreshed classrooms vs planned • Age of oldest classroom technology on campus as a metric • Number of classrooms with technology older than 6 years	🟢 On Track
Retrofit RAC classrooms to enable Hyflex teaching	Measurable: • Number of classrooms refreshed by September 2021 • Develop how-to videos/guides on using the technology	✅ Completed
Develop capabilities, tools and plugins in eClass for an enhanced student and faculty experience	Milestones: • Upgrade to Moodle 3.9 in August 2020 • Improve eClass resilience by setting up a cluster • Create new course formats • Virtual Programming Lab • Demo student block • Integration of PHIPPA-compatible Zoom in eClass • Include gamification into eClass • Make Learning Analytics available to faculty • Course Enrolment view in eClass to improve student experience at the start of term allowing them to access eClass content upon registration in courses without delay • Instructor dashboard block within a course. Using AI, sentiment analysis, retrieves student progress/info and displays statistics to help instructors visually see student performance, needing help, etc.	✅ Completed

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Action/Strategy	Measures/Metrics/Milestones	Evaluation Status
Create a tool for seamless transfer of grades from eClass to SIS in the context of improving grade access for identification and support of at-risk students	Milestones: • Consult with Faculties to determine workflows • Map workflows • Code the plugin • Test • Final tweaks	❌ Discontinued
Improve the online classroom experience beyond eClass	Measurable: • Usage stats for Zoom • Usage stats for Lecture Capture Milestones: • Integrate Zoom into eClass • Implement an improved cloud-based lecture capture system • Integrate O365 with eClass • Complete Online Proctoring RFP and eClass integration (Spring 2021)	🟢 On Track

Improve access to technology for students, faculty and staff

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:
Create a "Tech Library" in collaboration with YU Library and the Department of Teaching & Learning	Milestones: • Define lending policy • Train staff and students on Alma • Implementation • Communication • Metrics	✅ Completed
Maintain a long-term laptop lending program during the pandemic, including internet access devices	Measurable: • 1,100 of laptops rented out • 95 of internet access devices rented out	✅ Completed
Improve access to software for students, faculty and staff	Measurable: • Utilize OnTheHub by Kivuto • Set up Shibboleth for authentication • Make Windows 10 and Microsoft Office suite available for download • Make other software offerings available (as needed)	✅ Completed

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2. Knowledge for the Future

Improve confidential and secure research data storage and safeguarding intellectual property

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:
Allow researchers to use OneDrive for storage and safeguarding of regulated data such as Personal Health Information (PHI) data	Milestones: • Implement controls that will ensure that PCI, PHI and other regulated data are properly protected • Ability to audit and ensure compliance • Communicate the new capabilities to research	✅ Completed
Provide resources and services for researchers to self-assess and improve protection of research data and systems.	Milestones: • Provide security self-assessment tools for researchers • Provide research-focused security guidance and threat assessment via information security website	✅ Completed

3. From Access to Success

Advance the Enterprise Architecture strategy toward a digital institution capable of delivering on the next-generation student support

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:
Advance and bring to completion the overall SSRP program	Milestones: • Create Program Charter • Create the Risk Register • Create the Business Case • Continuing support of the Program Executive Director • Resource hiring • Facilities • Governance • EA RFP and consulting • PMQA RFP and consulting • Finance forecast • Application inventory	🟢 On Track

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Advance and bring to completion the procurement of SSRP-SIS

Milestones:
- Publish RFP
- Paper evaluation
- Demos
- Consensus
- Negotiation

- Beginning of fit-gap

On Track

Procure and implement the SSRP-CRM

Milestones:
- Paper evaluation
- Demos
- Consensus
- Negotiations
- Fit-Gap
- Final Negotiation

On Track

Advance and bring to completion the SSRP-Data Management project

Milestones:
- Acquire Data CookBook
- Provide data definition
- Establish data architecture
- Acquire integration platform (expected to come with SIS solution)

Completed

Improve current Student Information System to ensure critical capabilities until the next-gen SIS is implemented

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:
Advance the Admissions Roadmap system to improve admissions processes and user experience	Milestones: • Automation of SIS to FGS adjudication platform • Gather requirements from stakeholder (OUR) • Application/Integration development • Test application /integrations • Tweak and finalize	Completed
Enable systems to allow students to use a Chosen / Preferred Name rather than their legal first name for most university business	Milestones: • Policy issuance • Requirements • Consult with OUR • Map workflows • Development • Testing • Final tweaks	Completed

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Implement Common Grading Scheme (Grading Scale Project)	Milestones: • Academic policy issuance • Requirements • Consult with OUR • Map workflows • Development • Testing • Final tweaks	🟡 Progressing
T4A Conversion to streamline and automate data preparation and data management	Milestones: • Requirements • Consult with OUR • Map workflows • Development • Testing • Final tweaks	✅ Completed
Student Financial Services (SFS) server Support Transfer from OUR to UIT	Measurement: • Move support for receiving and processing student loan payment to UIT. • Upgrade OS • Add automated Alberta's province loan remittance reporting • Eliminate user of outdated administrative account. Milestones: • Requirements • Consult with OUR • Map workflows • Development • Testing • Final tweaks	✅ Completed
Improve international student solution, MoveOn, by integrating it to SIS data	Milestones: • Requirements • Consult with OUR • Map workflows • Development • Testing • Final tweaks	✅ Completed

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Markham Campus systems changes (SIS-related)	Milestones: • Requirements • Consult with OUR • Map workflows • Development • Testing • Final tweaks	🟢 On Track
Markham Campus systems changes (not SIS-related)	Milestones: • Requirements • Consult with OUR • Map workflows • Development • Testing • Final tweaks	🟡 Progressing

Create need-specific nimble software applications to improve student, faculty and staff experience

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**
Redesign of ARMS to modern standards	Milestones: • Secure funding • Consult with OIPA • Re-architecture • Python 2 to 3 conversion • Move to new framework • Coding • Test • Final tweaks	🟢 On Track
Create an online curriculum manager for TAD (YULearn)	Milestones: • Consult with TAD, PM Assigned (HR Roadmap) • Coding • Integrate with Peoplesoft • Test • Final Tweaks	🟡 Progressing

Procure software applications to improve student, faculty and staff experience

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**

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Initiative	Milestones	Status
Implement a digital credential wallet	Milestones: • Consult with RO • Consult with Digitary • Clear information security and legal conditions • Build integration with SIS • Test • Launch	🟢 On Track
Implement a new solution for Student Clubs & Organizations solution (YU Connect)	Milestones: • RFP issuance and award • Implementation • Test • Final tweaks	✅ Completed
Implement mobile ordering platform to facilitate ordering from food outlets on Campus for on-site community members	Milestones: • Submit documents for privacy & legal review • Develop rollout plan • Communication plan	✅ Completed
Modernize and digitize YUCard to make it more secure and extend it to smartphone and wearable devices (digital YUCard)	Milestones: • LSPRA Review • Downstream system data & hardware integration • Update SOPs for card issuance & management	🟡 Progressing
Implement StarRez Web & Mobile components to existing StarRez platform to leverage mobile maintenance & student requests	Milestones: • Upgrade QA & test • Schedule upgrade platform • Complete Privacy assessment for Mobile • Operationalize Mobile	✅ Completed
Implement StarRez Short Stay module & Portal X to existing StarRez platform (GAUTAM JANARDHANAN: New Item)	Milestones: • Procure licensing for new components • Install components QA & test • Schedule install and deployment in Production StarRez	🟡 Progressing

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Upgrade & deploy Campus Electronic Door Access Control platform (ProWatch) to leverage automation & integration features available in new version. This iteration will automatically sync users from SIS, HR & YuCard	Milestones: • Complete new environment design validation • Deploy new servers • Import & sync users from systems of record (SIS & HR via YuCard) •Migrate devices & related workflows by building •Enable web-client for people lookup • Decommission old environment	✓	Completed
Provision Simple K software to catalog & track creation and issuance of physical keys & locks across campuses (GAUTAM JANARDHANAN: New Item)	Milestones: • Establish data structure for master key catalogue • Complete Application testing • Onboard Facilities Managers	🟢	On Track
Develop the framework and process for the multi-facetted use (academic, research & innovation and administrative) of the ArcGIS suite of applications (ESRI)	Milestones: • Renew contract Nov 2020 •Provision administrative use-case for Facilities • Document academic & research use cases and processes • Develop and institute an updated academic and research use case, leveraging existing systems of record for automating access, usage metrics	🟡	Progressing
Replace existing Inventory & POS solution for YorkU Bookstore	Milestones: • Develop RFP to go to market • Design & Validate new solution design • Develop Implementation Plan	🟢	On Track
Replace current POS terminals & solution used by Food Services outlets with Transact CloudPOS	Milestones: • Procure licenses & hardware • System Dataflow review • Update network design • LSPRA validation • Update EA • Physical location review • Schedule deployment per location	🟢	On Track
Deploy Call Recording solution for Security Control Centre	Milestones: • Review design • Update dataflows between telecom, physical radios & recorder servers • Setup infrastructure • Configure & Test • Deploy to production	🟡	Progressing

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Digitize Work-Orders & Maintenance processes with Maximo Mobile

Milestones:
- Coordinate hire PM for Facilities
- Upgrade existing environment to leverage licensing changes needed
- Issue RFP for migrating to Maximo Application Suite (MAS)
- Schedule MAS deployment
- Review key workflows and test cases to migrate to digital workflows
- Procure mobile devices & develop support / maintenance plan

- Initiate iterative BPS initiatives to migrate to digital processes

🟡 Progressing

Take advantage of leading-edge innovative technologies to improve student, faculty and staff experience

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**
Develop York's conversational AI tool, SAVY	Milestones: • Integrate all Faculties into SAVY • Translate French content for Glendon • Add push notifications for student reminders • Build SVA Platform as a POC for commercialization • Recreate Cognitive Broker Measurable: • # of users (per day, month, year) • # of conversations (per day, month, year) • # of messages (per day, month, year)	✅ Completed
Develop "child" Virtual Assistants to complement SAVY's knowledge base	Milestones: • Create a Virtual Assistant on IT and technical issues • Create a Virtual Assistant on exam support	✅ Completed

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Develop automation capacity and pursue projects that improve productivity and user experience	Milestones: • Implementation of Flowable • Automation of UIT-Admin processes • Automate Maximo doc merge • Automate FGS petition • Automate use of Service Catalogue • Create Flowable training modules • Implementation of uniform communication models (as per Communication strategy) • Implementation of orchestration for Project Intake, EA and LSPRA processes • Investigation into the replacement and enhancement (if appropriate) of the ethical research participation application • UBIX access management added as priority initiative at request of Provost and President in support of COVID response.	🟢 On Track
Expand capacity for data analytics	Milestones: • EDW Expansion • PowerBI premium deployment	🟡 Progressing
Advance cloud computing by establishing a presence in public cloud and have a structured approach to connect York to external networks	Milestones: • Connect Azure and design an institution wide tenancy • Connect to AWS and design an institution wide tenancy • Develop the foundation for a cloud strategy	🟡 Progressing
Implement state-of-the-art Continuous Integration / Continuous Deployment (CI/CD) technology for rapid deployment of infrastructure, in support of student-centered projects	Milestones: • Implement automation tools such Ansible, Terraform, Vault, VMware vRealize for server (de-) provisioning (starting with eClass) • Implement configuration management tools to ensure consistency of the infrastructure • Implement an automated change process utilizing CI/CD pipelines and tools such as Jenkins • Explore containers (Docker), container management (Kubernetes) in our private cloud and in public cloud for critical applications such as eClass • Modernize our observability. i.e. logging, tracing and events	🟡 Progressing

Provide a modern Infrastructure in support of students' and faculty's digital experience

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:

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Enhance work from home and remote learning experience through improved VPN capacity, speed and resiliency	Milestones: • Expand VPN capacity • Implement a scalable solution • Scale VPN to beyond 5000 users if required	✅ Completed
Address the technical deferred maintenance issues	Milestones: • Migration off Liferay platform for student and staff portals • Migration off Solaris for SIS applications (Perl, Prolog, C++) • Hire technical debt task force to augment team capacity to work down debt in priority sequence • Develop test case automation library for upgraded components (smoke tests)	🟡 Progressing
Improve systems and database capacity in a context of increasing student, faculty and staff reliance on digital services	Milestones: • Migrate Oracle databases to high performance and highly resilient platform (Exadata Cloud at Customer – ExaCC) • Consolidate and migrate MySQL of clustered solution. • Migrate to Microsoft SQL to a High Availability cluster • Modernize storage infrastructure and Increasing storage capacity	🟡 Progressing

Support major Infrastructure projects

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**
Manage IT elements of the Markham campus project	Milestones: • Design network • Design AV • Coordinate network/telecom implementation • Coordinate AV implementation • Oversee VoR efforts	🟡 Progressing

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Support major Infrastructure projects led by Facilities and YUDC	Milestones • Neuroscience • School for Continuing Studies • Classroom renovation • ADERSIM lab • Art Gallery of YU • 4747 and 4751 Keele expansion • Engineering Pavillion • School of Economics • "Library of the Future" – Scott Library • Petrie and Farquharson renovations for Lassonde and Science • portfolio of medium to minor projects • the QUAD – phase 2	🟡 Progressing

5. Working in Partnership

Strengthen existing IT-based strategic partnerships with leading organizations

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**
Strengthen York-IBM partnership	Milestones: • Develop SAVY • Facilitate knowledge transfer from IBM to UIT • Partner with IBM to commercialize SAVY • Explore further projects with IBM given adequate capacity • Advance projects with IBM Machine Learning Hub – Sentiment AI	🟢 On Track
Forge a partnership with Cisco, a leading networking organization	Milestones: • Consult with Cisco • Consult with SCS • Consult with Lassonde • Explore the possibility for degree and non-degree curriculum in partnership with Cisco • Explore the possibility of partnering with Cisco on a major innovative project to support student experience • Include Cisco in advisory committee(s)	🟡 Progressing
Strengthen cross-institutional cyber security efforts, knowledge transfer, and resources	Milestones: • Participate in CANARIE JSP2 for intrusion detection collaboration • Partner with other sources for intelligence feeds and other resources, and contribute to community knowledge	✅ Completed

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6. Living Well Together

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

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:
Modernize the network following the four guiding principles of performance, security, wireless-first and simplified operation (Phase 1)	Milestones: • Secure funding • Modernize IT standards • Modernize AV standards • Produce an architecture design for future network. • Modernize data centre network • Modernize core & distribution network • Start to modernize Wireless Access Network • Start to modernize wired access network • Start to modernize power and HVAC for data center and communication rooms	🟢 On Track
Take advantage of WiFi data to improve occupancy management	Milestones: • Ability to identify # people in buildings and areas • Identify areas of overpopulation where distancing is not being followed with long dwell times • Identify heavy use areas to prioritize Facilities activities • Explore the ability to use data for building controls	❌ Discontinued
Deploy Emergency Messaging Display screens to improve campus safety	Milestones: • Replace all public displays	✅ Completed
Use Wordpress backend to push content to public screens (example: emergency messaging display screens or lobby screens)	Milestones: • Work with Marketing and Communication on layout • Provide publishing capabilities to various user groups • Integrate AppArmor alerts to Signage solution	🟢 On Track

Develop a digital workplace that fosters collaboration and productivity

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:

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Complete the Central Mail migration to O365	Milestones: • Consult with Faculty Relations and YUFA • Determine final migration date • Communication with stakeholders • Complete migrations • Clean up unused account	✅	Completed
Increase O365 support capacity	Milestones: • Hire LAPS-funded contract-limited resource for O365 support • Hire two new full-time resources for O365 support, one for Sept. 2020, the other for April 2021	✅	Completed
Promote the use of SharePoint and take advantage of its capabilities as a key collaborative tool	Milestones: • Consult with LAPS and other Faculties • Expand unit self-administration capabilities • Launch new service	🟡	Progressing
Calibrate O365 to improve user experience and promote its use as a collaborative tool.	Milestones: • Improve O365 email archiving • Structure Teams as key communication and collaboration medium for York (higher number of communications to be over Teams vs email). • Integrate Teams with on premise telecom system • Secure email flow even when York data centers are down • Move shared folders from central storage to SharePoint • Improve security and compliance by using Exchange Online protection and Advanced Threat Protection • Improve accessibility by using features such as translator and subtitles • Reduce staff and faculty travel by promoting the use of collaboration tools • Streamlining IT operations with management tools and automation	🟡	Progressing
Implement an e-signature solution	Milestones: • Consult with Finance, HR, SEP • Secure funding • Enact Ricoh DocuSign contract and support option • Implement the solution	❌	Discontinued

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Develop UIT skills and expertise to better support the York community and advance the digital transformation of the institution

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**
Create a Skills Development Plan for UIT staff	Milestones: • Define technical skills for UIT units • Define non-technical skills for • Create a skills matrix • Create online learning paths • Start upskilling through courses and workshops	✓ Completed

Create a responsive service environment that provides an enhanced student and faculty experience

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**
Advance the HR Roadmap in collaboration with HR partner	Milestones: 2020/2021: • PeopleSoft Application and Tools Upgrade • Configuration for Benefit Administration	● On Track
Advance the Finance Roadmap in collaboration with Finance partner	Milestones: • Roadmap Workshops	● On Track
Facilitate Advancement projects to improve donation	Milestones: • Create iModules Glendon Donations Site • Standardize donation sites across campus	✓ Completed
Facilitate Advancement project to improve alumni relations	Milestones: • Launch alumni data capture campaign • Improving Alumni Engagement team with reaching more alumni through email	● Not On Track
Procure and deploy a new IT Service Management tool (ticketing system) to improve incident response	Milestones: • Broadly consult to finalize requirements • Send RFP to Procurement for review • Publish RFP • Select a solution • Implement the solution	● Progressing
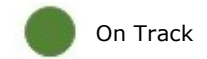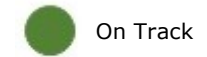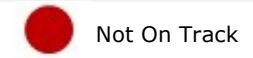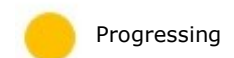
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Ensure an enterprise-wide visibility into and coordination between university projects	Milestones: • Procure Project Online • Design the institutional project base schema • Develop standard scorecard for broad adoption for comparability of portfolios in conjunction with VPS and Schulich • Enter UIT portfolio information into Project Online and develop reports (agile development) to support IT Exec, UIT Exec and other stakeholders	🟡 Progressing
Create a Service Catalogue defining UIT services to the community	Milestones: • Identify all external facing UIT Services • Integrate to Flowable • Advertise service catalogue • Begin to identify services that could be automated/orchestrated for future action • Cost service aggregate	✅ Completed
Determine Service Level Commitments as a new basis for partnership and user relationship	Milestones: • Consult with Nous for SL standards • Bundle services into service clusters for SL consumption • Define SLC • Publish SLC	🟡 Progressing
Raise the quality of the UIT website as a foundational component in UIT's relationship to the community	Measurable: • # visits (Google Analytics) Milestones: • Ongoing improvement to content and interface	✅ Completed
Create an IT Assets Lifecycle Management Plan in preparation for IT assets evergreening	Milestones: • Creating the plan • Communicating the plan	✅ Completed

Create a more secure digital environmental that manages risk to confidentiality, integrity and availability of University data, applications, information and communication systems

Action/Strategy:	Measures/Metrics/Milestones:	Evaluation Status:

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Implement 2-factor authentication for staff and faculty	Milestones: • Select and purchase technology/solution(s) • Integration with existing authentication • Integration with VPN • Integration with AD for privileged access • Policies, communication, and operational support processes in place for new service • Availability to faculty and staff • Active staff/faculty fully onboarded	✓	Completed
Implement 2-factor authentication for students	Milestones: • Select and purchase technology/solution(s) • Integration with existing authentication • Integration with VPN • Integration with AD for privileged access • Policies, communication, and operational support processes in place for new service • Availability to students • Active students fully onboarded	✓	Completed
Update cyber-security awareness programs	Milestones: • Cyber-security awareness outreach focusing on staff and faculty •Self-phishing program and measurement started • Mandatory cyber training for all university employees	●	On Track
Improve cyber-security systems and infrastructure	Milestones: • Update central logging service • Security infrastructure upgrades completed • Implement Security information and event management	✓	Completed
Assessment/audit of cyber security institution-wide and development of updated cyber plan	Milestones: • Update central logging service • Security infrastructure upgrades completed • Implement Security information and event management	✓	Completed
Email ID/Domain protection	Milestones: • Activation of SPF/DKIM/DMARC for York email domains • External mail tagging implemented • DMARC monitoring and tuning processes in place	●	Not On Track

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Objective	Milestones	Status
Implementation of advanced threat protection (ATP) for Office 365 email	Milestones: • Solution procurement • Policy and operational procedure development completed • Operational deployment completed	🟡 Progressing
Replacement of legacy firewalls and improvements to network security	Milestones: • Replacement of data centre firewall modules • Deployment of a next-generation firewall at network border • Hardening of network policy to default-deny	🟢 On Track
Develop and implement new security policy and standards	Milestones: • Update server security standard • Develop standards for endpoint security • Compliance measurement framework and reporting in place	🟢 On Track
Improve cyber-security threat intelligence	Milestones: • Dark web threat intelligence in place • Deception technologies in place • MISP threat feed engine active and feeding protection and alerting systems	✅ Completed
Deploy privileged access management (PAM) for critical IT systems	Milestones: • Development of policies and procedures • Solution selection and procurement • Solution implementation and integration with critical systems	🟢 On Track
Advance institutional information security governance and policies	Milestones: • Enact Information Classification Procedures & Governance • Interactive risk register deployed and in use • Self-assessment tools deployed and in use	🟡 Progressing
Advance the procurement of SSRP-IAM	Milestones: • Publish RFP • Paper evaluation • Demos • Consensus • Negotiations • Fit-Gap • Final Negotiation • Privileged Access Management	✅ Completed

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Deployment of next-generation access management technology	Milestones: • Integration with IAM-IGA platform • Integration with York applications across enterprise	● On Track
Deployment of next-generation identity governance and administration (IAM-IGA) technology	Milestones: • Policy and Business Rules discovery • Technology implementation • Technology coexistence and retrofitting with existing Passport York • Integration with York applications across enterprise • Retirement of legacy Passport York and removal of retrofits	● On Track
Develop an updated infrastructure design for modern BAS and IoT services for Facilities & Ancillary Service solutions	Milestones: • Document and validate clear use-cases both current and future • Establish IT standards for on-going support and for future initiatives (Renovations & Capital Construction) • Update DR, Response Plan & Responsibility matrix to address ongoing operations • Explore options to optimize monitoring & trending of critical systems via new network platform functionalities	● On Track

7. Answering the Call

Sustainable Cities and Communities

Action/Strategy:	**Measures/Metrics/Milestones:**	**Evaluation Status:**
Participate in Sustainable IT Procurement Pilot	Milestones: • Complete Self-Assessment Tool • Attend Action Planning Workshop (October 2020) • Implementation Workshop (Early February 2021) • Digital White Paper & Participant Case Studies (Spring 2021)	✓ Completed