

## Computing Plan 2016-2017

**Faculty/Unit:** University Information Technology (UIT)

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### Introduction

University Information Technology is York's central information technology services organization. UIT provides common, integrated information technology services, solutions and support that enable all members of the York community in furthering the University's and their own academic, research and administrative goals. UIT aims to be seen as York University's trusted information and communications technology advisor and a responsive provider of great solutions and services to the entire University community.

This 2016-2017 computing plan represents UIT's annual operational plan – the implementation of its multi-year (2016-2020) integrated resource plan and features five priorities, directly aligned with the University's strategic priorities:

**Priority #1:** Support Academic Quality, Research and Teaching

**Priority #2:** Contribute to student success through the use of information technology

**Priority #3:** Enhance community engagement

**Priority #4:** Valuing people and strengthening the workplace

**Priority #5:** Resource Integration and Sustainability

### PART A – Review of Past Year's Accomplishments:

UIT's accomplishments against plan are detailed below. Although not all goals have been achieved, significant progress was made across all priorities. Of 158 initiatives noted in the plan from 2015-16, 71% have been completed (by end of the fiscal year) or are in progress – slight increase from last year where that same number was 68%. Completion of initiatives rose slightly from the previous year where 26% were completed. The percentage of work in progress/ongoing initiatives has remained constant relative to 2014-15.

#### Status Summary of 2015-16 Initiatives

|                               |    |     |
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| Complete                      | 48 | 30% |
| In progress/ongoing           | 65 | 41% |
| Not Complete (incl Cancelled) | 45 | 28% |

**Priority 1: Support Academic Quality, Research and Teaching**

| Objective   | Initiatives   |
|---|---|
| <p>1. Support innovation in and enhancement of teaching and learning through the use of information technology.</p> | <p>1.1.2</p> <ul style="list-style-type: none"> <li>- <b>Completed</b> - Launch chat-based service for support of e-learning, with access from Moodle and elsewhere</li> <li>- <b>Complete (by end of fiscal)</b> - Pilot use of screen-sharing to support e-learning technologies</li> <li>- <b>Completed</b> - Implement a service to send service suggestions and issue reports directly from Moodle and possibly other tools</li> <li>- <b>In Progress</b> - Augment existing documentation to include examples of the use of tools for particular purposes</li> <li>- <b>Completed</b> - Streamline course creation via automation of granting access to courses and restoration of previous courses</li> <li>- <b>Not Complete (On Hold)</b> Explore opportunities to use Google Apps in support of eLearning.</li> <li>- Additional possible initiatives -               <ul style="list-style-type: none"> <li>- <b>Not Complete (On Hold)</b> - Create improved Moodle student activity reporting and gather feedback</li> <li>- <b>Complete (by end of fiscal)</b> - Create a showcase of examples highlighting effective use of e-learning technology</li> <li>- <b>In Progress</b> - Create an e-learning roadmap web site, updated semi-annually, to inform the community about technology directions, additions, and retirements and solicit input</li> </ul> </li> </ul> <p>1.1.3</p> <ul style="list-style-type: none"> <li>- <b>In Progress</b> - Gain approval for multi-year classroom renewal</li> <li>- <b>Not Complete</b> - Working with the Office of the VPFA and the Office of the Provost, establish a classroom oversight committee</li> <li>- <b>In Progress</b> - Identify standard for video conferencing and complete initial implementations</li> <li>- Additional possible initiatives -               <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Implement an “experimental classroom” in collaboration with the Teaching Commons - dependent upon access to appropriate space.</li> </ul> </li> </ul> <p>1.1.4</p> <ul style="list-style-type: none"> <li>- <b>In Progress</b> - Upgrades to classrooms at Keele and Glendon (estimate Keele 78 rooms; Glendon 17 rooms depending upon resources)</li> <li>- <b>In Progress</b> - Deliver new support materials for effective use of classroom technology; Include creation of “one-stop-shop” classroom support portlet in yu link that includes instructor schedule (complete), links to classroom images (complete), training videos, CEO requests, etc.</li> <li>- <b>Not Complete</b> - Expanded support for classroom recording, including via roll-in carts</li> </ul> <p>1.1.5</p> <ul style="list-style-type: none"> <li>- <b>Complete (by end of fiscal)</b> - Provide self-serve access to video editing for instructors that record their own video shorts</li> <li>- <b>In Progress</b> - Create and document strategy for enterprise video recording, hosting, and integration, primarily for e-learning but also beyond</li> </ul> |

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| 2. Provide ICT advice and services that support research innovation and strong and effective research programs. | 1.2.2 <ul style="list-style-type: none"> <li>- <b>Complete (by end of fiscal)</b> - In collaboration with University Libraries launch an integrated research computing services site</li> <li>- <b>Completed</b> - Provided ultra-high speed network connectivity to York's ODLRC node</li> <li>- <b>In Progress</b> - Introduction of research-focused low/cost, large capacity data storage</li> </ul> |
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**Priority 2: Contribute to student success through the use of information technology in both the learning and student service domains.**

| Objective  | Initiatives   |
|--|---|
| 1. Provide services and supports that are broadly accessible by students in support of their learning needs with particular attention to the needs of mobile, commuter students. | 2.1.1 <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Design and implement a responsive web template for Moodle, to improve mobile use</li> <li>- <b>In Progress</b> - Support LA&amp;PS migration from Quickr to Moodle</li> <li>- <b>Completed</b> - Improve speed of gradebook</li> <li>- <b>In Progress</b> - Integrate my.yorku.ca and Moodle so that students can (a) see core information outside Moodle and (b) navigate from a course to the corresponding Moodle course</li> <li>- <b>In Progress</b> - Integrate video collaboration into Moodle, building on (Adobe Connect??) 1.1.5 (?)</li> <li>- <b>Ongoing</b> - Provide support to course transformation projects supported by Ontario Online and the Academic Innovation Fund</li> <li>- Additional possible initiatives <ul style="list-style-type: none"> <li>- <b>Completed</b> - Design new course formats to Moodle to support a wider range of pedagogical approaches (with Teaching Commons)</li> <li>- <b>Not Complete (On Hold)</b> - Integration of bookstore content into Moodle</li> <li>- <b>Not Complete (On Hold)</b> - Implement support for timed content release</li> </ul> </li> </ul> 2.1.2 <ul style="list-style-type: none"> <li>- <b>Complete (by end of fiscal)</b> - Identify a solution for "classroom engagement" that supports options beyond physical clickers</li> </ul> 2.1.3 <ul style="list-style-type: none"> <li>- <b>Completed</b> - Refresh VPS sponsored student labs</li> </ul> 2.1.4 <ul style="list-style-type: none"> <li>- <b>Ongoing</b> - Complete WiFi upgrades in remaining buildings as part of multi-year upgrade program</li> <li>- <b>Completed</b> - Complete WiFi technology refresh of 1st gen 802.11n access points</li> <li>- <b>In Progress</b> - Phase out AirYork and improve WiFi service by migrating all users to AirYorkPLUS; completed 2015 milestone of disabling broadcast of AirYork SSID</li> </ul> 2.1.5 <ul style="list-style-type: none"> <li>- <b>Completed</b> - Complete roll out of Google Apps at York to undergraduate students</li> <li>- <b>Not Complete (on hold)</b> - In collaboration with FGS investigate use of the Google Apps at York service by</li> </ul> |

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|   | Graduate students   |
| 2. Use IT to make interaction with the University (tools, content, staff, services) easier for prospective students, current students, and alumni | <p>2.2.2</p> <ul style="list-style-type: none"> <li>- In collaboration with the Division of Students - <ul style="list-style-type: none"> <li>- <b>Completed</b> - Expand the capabilities and use of the CRM and bulk e-mail tools to support the 2016 admissions cycle.</li> <li>- <b>In Progress</b> - Investigate solutions to support management of information for non-degree students</li> <li>- <b>Not Complete (on hold)</b> - Identify and Implement an improved Degree Audit capability (informed by February 2015 RFI)</li> <li>- <b>Completed</b> - Complete expansion of YU START functionality as required for fall 2015 intake and in preparation for fall 2016 intake</li> <li>- <b>In Progress</b> - Implement Visual Schedule Builder to make timetabling easier for students</li> </ul> </li> <li>- <b>Completed</b> - Improve student portal to take advantage of new base software, implement responsive web template for full mobile support, and new hardware for improved performance</li> </ul> <p><b>In Progress</b> (for this fiscal) Integrate with YU Connect and YU START</p> <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - support for time management</li> </ul> <p>2.2.3</p> <ul style="list-style-type: none"> <li>- <b>Not Complete (on hold)</b> - Working with York Alumni Office extend email service to Alumni</li> <li>- <b>Not Complete (on hold)</b> - Complete pilot of Alumni authentication to use of social media authentication</li> </ul> |
| 3. Engage students in the process of identifying needs and implementing solutions.  | <p>2.3.1</p> <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Establish a standing student advisory group (carried forward)</li> </ul>  |

**Priority 3: Enhance community engagement by raising York's profile in the I.T. community, supporting communication and reputation building efforts in general and by mitigating risks to the University's reputation.**

| Objective  | Initiatives  |
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| 1. Safeguard University assets                     | <p>3.1.1</p> <ul style="list-style-type: none"> <li>- <b>Completed</b> - Introduction of new Information Security policy framework and related procedures and standards, including those for information classification, mobile security, and third-party services</li> <li>- <b>In Progress</b> - To improve compliance with policies, implement a convenient interface to data storage systems suitable for data that has high-security requirements</li> <li>- <b>Completed</b> - Continuation of PCI DSS compliance program to address new version 3 requirements and gaps</li> <li>- <b>Not Complete</b> - Pursue renewal of central web infrastructure based on a "hybrid" approach (on site and "cloud")</li> </ul> |
| 1. Support and enhance the University's reputation | <p>3.3.1</p> <ul style="list-style-type: none"> <li>- <b>Completed</b> - Complete implementation of new bulk email solution (Click Dimensions)</li> </ul>  |

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| through external communication and broad community engagement. | <ul style="list-style-type: none"> <li>- <b>Completed</b> - Support adoption of York’s responsive web template by Faculty and unit sites;</li> <li>- <b>In Progress</b> - expand use to include UIT applications such as ARM (in progress) and online course evaluation - ONCE (complete)</li> </ul> |
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**Priority 4: Valuing people and strengthening the workplace.**

| Objective   | Initiatives   |
|---|---|
| 1. Provide IT services and support to students, faculty and staff in a manner that is seamless, effective, transparent and responsive | 4.1.2<br><ul style="list-style-type: none"> <li>- <b>Ongoing</b> - Implement a replacement for current service desk system</li> </ul> 4.1.3<br><ul style="list-style-type: none"> <li>- <b>Ongoing</b> - Refresh of the UIT service catalogue supported by a review of services through a “start/stop/continue” exercise.</li> </ul> 4.1.4<br><ul style="list-style-type: none"> <li>- <b>In Progress</b> - Improve effectiveness of UIT communications through establishment of UIT Communications role and strategy including:               <ul style="list-style-type: none"> <li>- Standardization of UIT communication via email, web, phone, digital signage and social media</li> <li>- Re-design of UIT support pages introducing critical service dashboards,</li> </ul> </li> </ul> 4.1.5<br><ul style="list-style-type: none"> <li>- <b>In Progress</b> - In support of move to SHARP review services and develop service delivery agreement through definition of mandated central service bundles.</li> </ul> 4.1.6<br><ul style="list-style-type: none"> <li>- <b>In Progress</b> - Establish end user computing virtualization strategy, including the completion of pilot projects for lab and office computing.               <ul style="list-style-type: none"> <li>- <b>In Progress</b> - Target UIT managed labs for transition to virtualized environment</li> <li>- <b>In Progress</b> - Creation of virtual application delivery to new environment</li> </ul> </li> <li>- <b>In Progress</b> - Increase help desk first point of resolution through greater capacity and capability to resolve incidents or provide services (e.g. remote desktop, remote classroom support, scheduling of classroom equipment shutdown, computer registration (moves/adds/changes), etc.</li> <li>- <b>Not Complete</b> - Establish Pan-University desktop software group , creating awareness of application usage, improved access to software from request, to testing to delivery, reducing costs through economies of scale or potential volume acquisitions.</li> <li>- <b>Not Complete</b> - Creation of new software service to provide for request, virtualization, distribution and tracking</li> <li>- <b>Not Complete</b> - Improvement of monitoring tools and processes to better detect and respond to availability impacts and detect system changes for security and change management compliance, and to assist troubleshooting</li> <li>- <b>In Progress</b> - Replacement/upgrade of network and telecom management systems (ie. netdisco, Bitek, etc.) to improve quality of information available and support simplified processes</li> </ul> |

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|   | <p>4.1.7</p> <ul style="list-style-type: none"> <li>- <b>Completed</b> - Development of improved processes for support of VOIP devices</li> <li>- <b>Ongoing</b> - Revise communications infrastructure standards for use with construction projects</li> <li>- <b>Not Complete</b> - Development of mobile device configuration standards for security and improved integration with York systems for use with device management tools</li> </ul>  |
| 2. Continue to build a safe, positive, healthy, collegial, campus environment | <p>4.2.2</p> <ul style="list-style-type: none"> <li>- <b>Ongoing</b> - Build skills and capacity in the area of process analysis and redesign</li> <li>- <b>Not Complete</b> - Engage in institution-wide staff development program to enhance client service particularly as it impacts student experience</li> </ul> <p>4.2.3</p> <ul style="list-style-type: none"> <li>- <b>In Progress</b> - Explore potential to extend use of selective elements of Google Apps to faculty and staff</li> <li>- <b>In Progress</b> - Replacement/Update of mymail web interface</li> <li>- <b>Completed</b> - Upgrade of central Lotus Notes servers to version 9 for improved supportability</li> <li>- <b>Completed</b> - Deployment of VOIP to Glendon and remote sites</li> <li>- Additional potential initiatives - <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Initial deployment of SIP clients for integration of campus telecom system with PCs and mobile devices</li> </ul> </li> </ul> <p>4.2.4</p> <ul style="list-style-type: none"> <li>- <b>Completed</b> - Continue expansion of yu link functionality including graphical refresh, single sign-on into HR Self-serve, and movement of core employee content from <a href="http://www.yorku.ca">www.yorku.ca</a> into yu link</li> </ul> |

#### Priority 5: Resource Integration and Sustainability

| Objective   | Initiatives   |
|---|---|
| 1. Ensure on-going alignment of information technology resources with the University's strategic and academic priorities  | <p>5.1.2</p> <ul style="list-style-type: none"> <li>- <b>Ongoing</b> - Establish executive level IT steering/investment group and supporting project prioritization framework.</li> </ul> <p>5.1.3</p> <ul style="list-style-type: none"> <li>- <b>Not Complete</b> Build on metrics development done for AAPR and identify metrics for major services (also in support of SHARP service agreement development)</li> </ul>  |
| 2. Improve operational effectiveness and make York easy to work with and within by taking an organizational-wide, process oriented approach to the way work is done supported | <p>5.2.1</p> <ul style="list-style-type: none"> <li>- Finance/Procurement <ul style="list-style-type: none"> <li>- <b>Completed</b> - Extend the T&amp;E solution scope through implementation of travel provider - summer 2015.</li> <li>- <b>In Progress</b> - Extend the T&amp;E solution scope through implementation of expense claims for Students, Senior Scholars and Visiting faculty</li> <li>- <b>Ongoing</b> - Support for migration to the new budget model/process</li> </ul> </li> </ul> |

by innovative and effective IT solutions

- **In Progress** - Extend EFT payments to undergraduate and graduate students
- In Progress (end of fiscal) - create framework for customer satisfaction assessment
- HR Management
  - **Ongoing** - Time Reporting Tool Phase 2 - Implement time reporting for Casual Employees
  - **Completed** - Enhancements to Employee Self Service (e.g. Automated T4s)
  - **Ongoing** - Support implementation of Talent Management System (TMS) to facilitate improvements to the non-academic employee recruitment process.
  - Additional possible initiatives -
    - **Not Complete** - Adoption of PeopleSoft automated testing framework
- Campus Services
  - **Completed** - Support Housing and Hospitality in process improvement and automation around managing York Apartments
- 5.2.2
- Finance/Procurement
  - **Completed** - Complete Finance system upgrade to FSCM 9.2/8.53 - winter 2015
  - **Completed** - Implementation of a new Account Receivable software – summer 2015
- HR Management
  - **Not Complete (Cancelled)** Application of Maintenance Packs (MP9, GP) – summer 2015
  - **Ongoing** - Initiate technical preparation for Human Resources system upgrade to HCM 9.2/8.53 – spring 2016
  - **Ongoing** - Identify priority requirements for Attendance Management Program Reports
- Division of Advancement:
  - **Completed** - AWA Migration: Complete planning and initiate implementation project (target completion mid-2016)
  - **Not Complete (pending dependency)** - Initiate analysis for replacement or upgrade of SmartCall application.
  - **Not Complete** - Identify solutions and develop implementation plan for Registration and Events Management system.
- VP Academic and Provost
  - **Not Complete (On Hold)** - Develop and execute implementation plan for YUQAP Curriculum Mapping solution.
  - **Not Complete (pending dependency)** Identify solutions and develop implementation plan for Experiential Learning communication tools (website, YUlink site and EE database to track EE Courses and related EE Partners).
  - **Not Complete (Cancelled)** - Initial discovery to Identify Cyclical Program Review solution for YUQAP and define implementation plan.
  - **Not Complete (Cancelled)** - Complete requirements gathering for Central Community Engagement website.
  - **Completed** - ONCE Formative – Provide faculty members ability to conduct Course Evaluations

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|  | <p>using their questions and time of choosing. Complete pilot with LAPS, followed by implementation planning.</p> <ul style="list-style-type: none"> <li>- <b>Completed</b> (end of fiscal) - Enhancement of ONCE to include core institutional questions</li> </ul> <p>5.2.3</p> <ul style="list-style-type: none"> <li>- VP Students <ul style="list-style-type: none"> <li>- <b>Completed</b> - Complete Implementation of the new tuition billing framework for Fall 2015</li> <li>- <b>Ongoing</b> - Continue to implement transfer credit improvements prioritized by the Registrar's Office</li> </ul> </li> <li>- Sport and Recreation <ul style="list-style-type: none"> <li>- <b>In Progress</b> - Investigate and prepare for the migration of the CLASS System to ActiveNet cloud solution</li> </ul> </li> <li>- VP Academic &amp; Provost <ul style="list-style-type: none"> <li>- <b>Ongoing</b> - Continue enhancement of ARM functionality to support FGS activities, including FGS appointments and management of graduate student funding</li> </ul> </li> <li>- Campus Services <ul style="list-style-type: none"> <li>- <b>Completed (by end of fiscal)</b> Enable mobile app eAccounts functionality for students &amp; staff. This enables the ability for YorkU community members to add and manage yucard funds through web portal and mobile app..</li> <li>- <b>Not Complete (Cancelled)</b> Complete upgrade of Parking and citations environment, T2Flex (carried forward)</li> <li>- <b>In Progress</b> - Pilot use of mobile devices to support housing maintenance activities.</li> <li>- <b>Completed (by end of fiscal)</b> - Develop custom reports for Bookstore inventory and point of sale system (WinPrism)</li> <li>- <b>Not Complete (Cancelled)</b> Implement a locally hosted version of Archibus for Space Management.</li> </ul> </li> <li>- Campus Safety <ul style="list-style-type: none"> <li>- <b>In Progress</b> - Complete door access upgrade (YUcard use) in complex 2.</li> <li>- <b>Completed (by end of fiscal)</b> - Upgrade of the Perspective PPM security application to the latest supported version (carried forward)</li> <li>- <b>In Progress</b> - Go to market to replace existing LCD infrastructure for Emergency Messaging &amp; Digital Signage (EMDS) at York. (Carry forward from 2013-2014)</li> </ul> </li> </ul> <p>5.2.4</p> <ul style="list-style-type: none"> <li>- Finance/Procurement <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Implement Sm@rtBuy cheque requisitions</li> </ul> </li> <li>- HR Management <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Advance the streamlining of support for the "full time faculty file"</li> <li>- <b>Not Complete</b> - Standardization of data exports Phase II and implement to replace existing custom interfaces (e.g. to Advance)</li> </ul> </li> </ul> |
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|   | <p>5.2.5</p> <ul style="list-style-type: none"> <li>- Division of Students <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Identify supporting solution and pilot workflow automation to improve business process within the Division of Students</li> </ul> </li> </ul>   |
| <p>3. Provide integrated systems, data and records necessary to support proactive communication, and evidence-based planning and decision making.</p>     | <p>5.3.1</p> <ul style="list-style-type: none"> <li>- <b>Ongoing</b> - Based on direction of the EDW steering group extend capability and scope of EDW admissions and enrolment applications</li> <li>- <b>Not Complete (Pending dependency)</b> - In conjunction with work on Advancement AWA migration move elements of the pilot Advancement BI application to production and extend application as needed.</li> </ul> <p>5.3.2</p> <ul style="list-style-type: none"> <li>- <b>Not Complete (Pending dependency)</b> - Expand reports for TRT – as required by new functionality for casuals</li> <li>- <b>Not Complete</b> - Engage in requirements gathering to inform a new direction for integrated management reporting</li> <li>- <b>Not Complete</b> - Review of SIS reports and enhancing self-serve capability such as a self-serve catalogue of SIS reports that users can subscribe to and remove old SIS reports that have are seldom used.</li> <li>- Additional potential initiatives - <ul style="list-style-type: none"> <li>- <b>Not Complete</b> - Gather requirements and identify solutions to support SEM Early Alert requirements and processes.</li> </ul> </li> </ul> |
| <p>4. Identify strategic opportunities for use of alternative sourcing opportunities to maximize resources</p>  | <p>5.4.1</p> <ul style="list-style-type: none"> <li>- <b>Complete (end of fiscal)</b> - As an outcome of refreshed application portfolio analysis identify 2-3 candidate applications or services to migrate to a “cloud” hosting/service delivery option.</li> </ul> <p>5.4.2</p> <ul style="list-style-type: none"> <li>- <b>In Progress</b> - In collaboration with the Information Privacy Office and others put in place and communicate policies and procedures related to use of external services. (carried forward)</li> </ul>   |
| <p>5. Establish and maintain a reliable, secure and sustainable technology infrastructure to support the operation of University information systems.</p> | <p>5.5.2</p> <ul style="list-style-type: none"> <li>- Campus Services and Safety - <ul style="list-style-type: none"> <li>- <b>Completed</b> - Review, document and update supporting infrastructure designs for utilities monitoring and security services</li> <li>- <b>Completed</b> - Develop business case for design and replacement of analog security camera infrastructure with IP based system</li> </ul> </li> <li>- <b>In Progress</b> - Review and revision of data centre network, storage, compute, virtualization technology and architecture to enable improved service levels, flexibility and cost effectiveness. Including investigation of Infrastructure as a service (IaaS) cloud technology and integration potential</li> </ul> <p>5.5.3</p> <ul style="list-style-type: none"> <li>- <b>In Progress</b> - Renewal/replacement and growth of central data storage systems</li> <li>- <b>In Progress</b> - Complete upgrade of legacy databases to supported versions and from SPARC to lower-cost Intel platform</li> </ul>  |

- **In Progress** - Move select elements of the “classic” SIS applications to the web to improve ease of use and sustainability.
- **In Progress** - Decommission the University modem pool service as the technology is no longer supportable, it contains uncorrectable security vulnerabilities and costs to operate it cannot be justified; ubiquitous residential and mobile broadband Internet access has long ago eliminated any practical utility it once had
- **Ongoing (in conjunction with VOIP migration)** - Redesign and Migration of Access Network VLANs to improve supportability, security and easier adaptability to emergent needs
- **Not Complete** - Renewal/Replacement of firewall technology and architecture
- **Completed** - Upgrade of IPNS (DNS/DHCP) Systems
- **Ongoing** - Complete upgrade program for Windows 2003 Server, which reaches end of support in July 2015
- **In Progress** - Complete upgrade program for Linux systems reaching end of support
- **In Progress** - Upgrade backup system to support continued growth, supportability
- **Not Complete** - Upgrade of virtualization software to support enhanced capabilities required for new data centre technology architecture
- ICT Infrastructure and AV planning, design and deployment in support of campus development, including:
  - **Completed** - Pan Am stadium commissioning, games operation and York occupancy
  - **Completed** - New Engineering building completion and occupancy
  - **Not Complete (pending dependency)** - Atkinson major renovation move ripple and occupancy
  - **Ongoing** - New Student Centre building planning and design
  - **Ongoing** - Schulich expansion planning and design
  - **Ongoing** - Support for a number of anticipated academic space conversions and renovations
- Additional potential initiatives
  - **Ongoing** - Automation of SIS testing tools to improve the testing cycle when deploying new software. The goal of this initiative is to reduce the time for testing during the software development cycle.
  - **In Progress** - Expand on shared backup service by introduction of additional partner institutions, potentially in a consortium model

5.5.4

- **In Progress** - Printer rationalization - Transition remaining University printing to sustainable cost-per-page model on consolidated Multi-Functional-Printers (MFP's). Includes integration of YU Card and card readers to facilitate “off the glass” secure print release and “follow-me printing”

5.5.5

- **Not Complete (Cancelled)** - Increase resiliency of WiFi network infrastructure by introduction of additional aggregation switch
- **Completed** - Increase stability of the WiFi network by upgrading packetfence servers
- **In Progress** - Replace/renew wide-area-network services
- Additional potential initiatives -
  - **In Progress** - Investigate feasibility and potentially implement alternate path/provider for data connectivity to Glendon campus in order to support increasing reliance on the network for critical communications (dependent upon funding and external service capabilities)

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| <p>6. Manage risk to the confidentiality, integrity, and availability of University data, applications, information, and communication systems.</p> | <p>5.6.1<br/>- <b>Complete (by end of fiscal)</b> - Complete a new application portfolio analysis, extending to all UIT and distributed IT units</p> <p>5.6.5<br/>- <b>Not Complete</b> - Introduction of information security awareness program for staff and faculty<br/>- <b>Completed</b> - Improvement of content and communications push for student information security awareness program<br/>- <b>Completed</b> - Upgrade of vulnerability management tools and processes</p> <p>5.6.6<br/>- <b>Not Complete</b> - Update of UIT Disaster Recovery Plan and put forward proposals for addressing current gaps<br/>- <b>Completed</b> - Support the implementation of a backup generator for the Steacie data centres</p> |
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**Other Initiatives Completed:**

A number of other significant initiatives that were not anticipated in the development of the 2015-16 plan were completed:

- Addition of high school information to EDW admissions reports
- Investigation and proof of concept implementations in support of staff/faculty email strategy
- Participation in development of CCTV RFI and technology strategy

**PART B – Action Plan**

**Introduction**

The initiatives described in the plan below draw on consultations with UIT’s stakeholders across the University. The plan represents a set of proposed initiatives that remain subject to one or both of further prioritization work/consultation and final review within the budget process.

The computing plan continues to draw on directions and implementation priorities articulated in the 2009 IT Strategy as well as some important institutional initiatives including:

- The strategy for eLearning integration is driving improvements in our capability for eLearning support including the Moodle LMS, classroom technology and course development and transformation.
- Student recruitment and retention remains the major priority for the University - by extension contributing to a positive student experience in and outside the classroom is important for UIT.
- Continuing support for initiatives that support improved administrative processes in Finance, Human Resources and University Advancement.

- For I.T. infrastructure and services there continue to a number of significant initiatives related to meeting growing demand (e.g. wireless networking) and renewal (e.g. server virtualization and migration; database upgrades)
- Continuing our efforts to be clear about the value we provide via our services and look for opportunities to improve both clarity and quality of service.

Through the year the plan outlined below will be adjusted to consider the impact of further priority setting discussions as plans and priorities emerge and are clarified. It is further expected that actions arising from the emerging University strategic directions planning process will have an impact on UIT initiatives through 2016-2017.

**Priority 1: Support Academic Quality, Research and Teaching**

| Objective   | Actions/Strategies   | Initiatives   |
|---|--|---|
| 1. Grow and sustain physical classroom facilities in support of teaching and learning | 1. Grow and sustain physical classroom facilities in support of teaching and learning<br><br>2. 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.  | <ul style="list-style-type: none"> <li>• Establish a classroom oversight committee in collaboration with VPFA, Facilities, and academic stakeholders.</li> <li>• Adjust classroom technology room standards/tiers and develop implementation plan</li> <li>• Under the direction of the classroom committee complete prioritized classroom upgrades.</li> <li>• Carry out a classroom technology service &amp; support survey</li> <li>• Complete classroom training materials for faculty on use of technology within Teaching &amp; Learning spaces (yu link portlet)</li> </ul>  |
| 2. Grow and sustain online tools and resources in support of teaching and learning.   | 1. Support of efficient and effective eLearning by sustaining and deepening existing online tools and resources and by adding new tools and resources to further the eLearning strategy.<br><br>2. Sustain and enhance resources to support instructors in their use of educational tools and their understanding of student attitudes to technology.<br><br>3. Support faculty members as partners in the selection and design of educational technology and its support. | <ul style="list-style-type: none"> <li>• Implement Moodle Enhancements per E-Learning Plan:               <ul style="list-style-type: none"> <li>- responsive web template for improved mobile experience</li> <li>- general improvements, including social media capabilities, enhanced messaging, and notifications via mobile app</li> <li>- improvements for instructors, including date-based release of content and improved reporting</li> <li>- improve e-learning support by use of screen sharing and adding to the e-learning showcase</li> </ul> </li> <li>• Continued development of approaches to involve instructors in technology decisions               <ul style="list-style-type: none"> <li>○ Create standard approach to facilitate instructor involvement with new technologies and technologies being retired</li> <li>○ launch e-learning roadmap site</li> <li>○ Execute new e-learning needs survey</li> </ul> </li> </ul> |

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|  | <p>4. Improve the overall quality and coherence of the overall portfolio of eLearning tools and resources, including making them mobile- friendly.</p>   | <ul style="list-style-type: none"> <li>• Launch new service for classroom engagement technology</li> <li>• Introduce “yu learn” as umbrella “brand” for learning technologies.</li> <li>• Implement first stage of enterprise video distribution, integrated with Moodle</li> <li>• Online course evaluation (ONCE) enhancements: <ul style="list-style-type: none"> <li>- support for publishing of core question results</li> <li>- offer self-serve formative evaluation</li> </ul> </li> </ul> |
| <p>3. Build organizational capacity to support the development and delivery of fully online and blended courses.</p>                   | <p>1. Meet university demand for conversion of face-to-face courses to blended/online and for creating new online courses. Support continuous improvement of online course quality.</p>  | <ul style="list-style-type: none"> <li>• Implement processes to support development of course using a distributed, team-based approach.</li> <li>• Add content researcher/editor to staff</li> <li>• Establish plan for support of remote students</li> </ul>  |
| <p>4. Provide information technology advice and services that support research innovation and strong, effective research programs.</p> | <p>2. Provide consulting services to researchers on external grant submissions and facilitate sourcing for projects.</p> <p>3. Evolve UIT's portfolio of services for researchers including integration with services available from University partners and external agencies/ consortia.</p> <p>4. Increase access for faculty and graduate students to specialized software packages through advantageous pricing and administration of licenses for broad and easy distribution.</p> | <ul style="list-style-type: none"> <li>• Support development of large scale CFI grant applications (June 2016-Sept 2016)</li> <li>• Introduce a low-cost, high-security data storage/archive service for research use (carried forward)</li> </ul>   |

**Priority 2: Contribute to student success through the use of information technology**

| Objective  | Actions/Strategies   | Initiatives  |
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| <p>1. Provide services and supports that are broadly accessible by students in support of their learning and campus experience with particular attention to the needs of mobile, commuter students.</p>  | <p>1. Create and maintain a highly connected campus environment for students, primarily through wireless networking.</p> <p>2. Provide information technology services, facilities and tools that contribute to a supportive and productive environment for students.</p>  | <ul style="list-style-type: none"> <li>● Grow exposure/use of “AirYorkPlus” service by retiring the legacy “AirYork” SSID</li> <li>● Introduce a “guest” WiFi service (for parents, alumni, visitors)</li> <li>● Improve resiliency of WiFi services by introduction of clustered aggregation switch</li> <li>● Improved printing experience for students via wireless printing to print queues. Eliminating webprint services and associated issues.</li> <li>● Review and renew the “service catalogue” and web site for IT services for students.</li> <li>● Migrate graduate students to a new email service.</li> </ul> |
| <p>2. Work with others to enhance the digital experience through the provision of services online. Use information technology to make interaction with the University (tools, content, staff, services) easier for prospective students, current students, and alumni.</p> | <p>1. 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.</p> <p>2. Improve the continuity of students’ experience in transitioning to Alumni, including both an alumni portal and with respect to identity management.</p> | <p>In partnership with VPS -</p> <ul style="list-style-type: none"> <li>● Complete initial implementation of the “Visual Schedule Builder” tool for students</li> <li>● Extend the student portal (my.yorku.ca) to provide greater integration of student services and notification of important conditions via a general York notification mobile app</li> <li>● Enhance YU START for May 2016 intake</li> <li>● Enhance integration of MyFile into Admissions process (Admissions letters)</li> <li>● Replace campus event publishing system, integrated with improved room booking</li> </ul>                             |
| <p>3. Engage students in the process of identifying needs and implementing solutions. Act as a conduit of internal and</p>   | <p>1. Support the direct and indirect involvement of York students in projects to improve fit of service functionality and usability to their needs and provide student</p>  | <ul style="list-style-type: none"> <li>● In response to student survey (to be complete in spring 2016) develop and action recommendations.</li> <li>● Establish a standing student advisory group (carried forward)</li> <li>● Establish a web site with design resources for services to be used by students</li> </ul>   |

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| external findings of student needs and characteristics to support student-centered design of UIT services. | development opportunities. |  |
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**Priority 3: Enhance community engagement**

| Objective  | Actions/Strategies  | Initiatives   |
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| 1. Help improve York's reputation indirectly through partner support and directly through University IT leadership in best practice. | <ol style="list-style-type: none"> <li>1. Partner with other units in the community to deliver communications or events that enhance the University's reputation.</li> <li>2. 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.</li> <li>3. Support and enhance the University's reputation through external and internal communication and broad community engagement.</li> </ol> | <p>Through continued participation in HigherEd sector group, confirm strategic direction in alignment with sector, leverage working groups for exposure to new services and technologies.</p> <p>Expand on potential for multi-institution shared services for backup and storage by:</p> <ul style="list-style-type: none"> <li>• completing introduction of additional partner institution</li> <li>• Foster a consortium model for providing such shared services</li> </ul> |

**Priority 4: Valuing people and strengthening the workplace.**

| Objective  | Actions/Strategies   | Initiatives  |
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| 1. Continue to contribute to a positive, collegial work environment at York. | <ol style="list-style-type: none"> <li>1. Build community by providing and supporting services and initiatives that enhance the communication and collaboration environment.</li> <li>2. Enhance the service culture within UIT through staff development and</li> </ol> | <ul style="list-style-type: none"> <li>• Implementation of web-based video conferencing and collaboration service</li> <li>• Work with administrative units to migrate web content to yu link; integrate additional features into yu link based on feedback from community</li> <li>• Begin to deploy new email service for faculty and staff</li> <li>• Develop and deploy select elements of Google Apps for use by faculty and staff</li> <li>• Pilot enterprise file synch/share service to provide more convenient yet secure access to file storage services including FAS.</li> </ul> |

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|  | <p>training, seeking feedback and actively engaging with colleagues in distributed IT units.</p> | <ul style="list-style-type: none"> <li>● Implement an improved web-based interface for “mymail”</li> <li>● Continue multi-year plan for VOIP deployment with next phase of roll-outs</li> <li>● Perform Initial deployments of “soft phone” to integrate the University voice service with computers and mobile devices.</li> <li>● In collaboration with other IT providers do a satisfaction survey of faculty/staff.</li> <li>● Continue to foster customer service culture by review of satisfaction surveys and measuring responses. Gear continued training on any identified areas needed</li> <li>● Invest in the technical and professional skill development in order to adapt to changes in technology and service</li> </ul> |
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**Priority 5: Resource Integration and Sustainability**

| Objective   | Actions/Strategies   | Initiatives  |
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| <p>1. Ensure on-going alignment of information technology resources with the University’s strategic and academic priorities</p> | <ol style="list-style-type: none"> <li>1. Establish executive level information technology steering group(s) and processes to guide priority setting and investment decisions around information technology.</li> <li>2. Support and maintain the priority setting processes and groups through a mature project portfolio management process, service measurement program and integrated, pan-institutional IT planning.</li> <li>3. Under the direction of the executive information technology steering group, engage in a process to update the University information technology strategy.</li> <li>4. Put in place integrated service agreements that reflect service</li> </ol> | <ul style="list-style-type: none"> <li>● Establish executive level IT steering/investment group (carried forward)</li> <li>● Development of a prioritization framework/rubric to be leveraged by the information technology steering group(s)</li> <li>● In line with expectations of SHARP, develop service agreement(s) for common services with supporting measures and benchmarks.</li> <li>● Expand development and communication of service metrics for UIT services (carried forward).</li> <li>● Implement UIT Communications Plan (standarize templates, social media, revamp computing website)</li> <li>● Migration of Faculty and staff computing site to yu link</li> </ul> |



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|   | <p>standards and measures (in support of SHARP).</p> <ol style="list-style-type: none"> <li>5. Develop and maintain an IT Service Catalogue, to provide clarity on services available to students, faculty and staff.</li> <li>6. Put in place a SOP for multi-channel communications to keep the community informed of service changes and issues.</li> <li>7. Adapt the IT support organization to respond to changing demands and enhance efficient service delivery. Within the "shared services" initiative undertake a review of IT service delivery architectures in order to improve the distributed IT service delivery model (AAPR recommendation and PRASE opportunity).</li> </ol> |   |
| <ol style="list-style-type: none"> <li>2. Work with partners within York to deliver solutions that enable effective and efficient operation of the University.</li> </ol> | <ol style="list-style-type: none"> <li>1. 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).</li> <li>2. Deliver solutions through a mature project management discipline and greater integration of business process review and</li> </ol>  | <ul style="list-style-type: none"> <li>● Inform roadmaps with recommendations from spring 2016 portfolio analysis</li> <li>● Obtain a solution to support counsel office management of legal files.</li> <li>● Through a consultative process establish standards and University wide practices for University supported mobile devices.</li> </ul> <p>With VPRI -</p> <ul style="list-style-type: none"> <li>● Within Sophia, automate ORS checklist for research community</li> <li>● Extend use of Sophia platform to Finance and HR</li> </ul> <p>With Division of Students - (for student-facing, see 2.2)</p> <ul style="list-style-type: none"> <li>● Implement changes in SIS to act on Senate regulations regarding "forgiveness"</li> <li>● Implement changes required for new OUAC feeds</li> <li>● Investigate data integration of SIS with systems used for Career Services and</li> </ul> |

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|  | <p>re-engineering and organizational change management.</p> <p>3. Grow our capability around sourcing, implementation and integration of third party hosted/"cloud" based solutions.</p> | <p>OSCR.</p> <ul style="list-style-type: none"> <li>● Complete migration of key SIS module(s) to web (carried forward)</li> <li>● Engage in exploration of options for a next-generation student information system.</li> <li>● Extend CRM use for graduate applications</li> <li>● Obtain and begin implementation of a curriculum management platform.</li> <li>● Develop case for upgrade to scheduling application and begin migration.</li> <li>● Obtain and implement a new platform for management athletics and recreation</li> </ul> <p>With H.R. -</p> <ul style="list-style-type: none"> <li>● Support implementation of the "Applicant Tracking System"</li> <li>● Complete the implementation of TRT for Casuals</li> <li>● Begin work towards upgrade of PeopleSoft HR</li> <li>● Implement Post-Retirement Benefits Phase 1 - BRD</li> <li>● Automation of training record updates (from Moodle to Peoplesoft)</li> <li>● Implement PeopleSoft Testing Framework (carried forward)</li> </ul> <p>With Finance -</p> <ul style="list-style-type: none"> <li>● Implement direct bank deposit for undergraduate Student Accounts</li> <li>● Extend travel and expense serve, Concur, to Visitor/Student</li> <li>● Integration of Maximo--Peoplesoft</li> </ul> <p>With Division of Advancement -</p> <ul style="list-style-type: none"> <li>● AWA Migration: Continue project objective to carry over and introduce minimal amount of customizations, allowing the use of designed functionality and improved reporting.</li> <li>● Replacement of Online Donation Service: Undertake development of RFP with input from Schulich and Osgoode administrative users to replace the existing service with Unixvision/ASI.</li> <li>● CRM Enhancements: Initiate project to implement Subscription List functionality that will meet the needs of Advancement while also manageable at the institutional level. Introduce/adjust data feeds between ACE and CRM (potentially SIS) to ensure CASL compliance and data continuity between systems/interfaces.</li> <li>● Crowd Funding Service: Identify an alternate solution to replace the Unixvision/ASI crowd funding service which is currently in pilot phase.</li> <li>● Call Centre Application Replacement: Initiate requirements gathering following the implementation of AWA.</li> <li>● Registration and Events Management System: Gather requirements to create</li> </ul> |
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|  |  | <p>a web based form/application to manage Event Registration and Information to replace the existing Access Events System.</p> <p>In support of Dept of Campus Safety -</p> <ul style="list-style-type: none"> <li>● Deploy new EMDS solution - Next phase after RFP to replace existing Digital signage solution with new solution</li> <li>● Campus Door Access Enhancement <ul style="list-style-type: none"> <li>○ College Complex 2 Perimeter Doors (Carry Forward)</li> <li>○ Perimeter door access migration next phase - to include Steacie building, BSB, CUB &amp; Steadman Lecture Hall</li> </ul> </li> <li>● Campus CCTV Infrastructure Enhancements <ul style="list-style-type: none"> <li>○ Expansion of IP Camera deployment to include Ross podium area</li> <li>○ Business Plan for future CCTV solution &amp; migration - Next phase to develop and request funding for campus CCTV infrastructure upgrade</li> </ul> </li> <li>● Replace communication recording platform - Find a solution to replace the existing aging audio communication recording platform (Dictaphone)</li> </ul> <p>In support of Campus Services and Business Operation</p> <ul style="list-style-type: none"> <li>● YU Card Enhancements - Review, update/modify the YU Card environment infrastructure and network design to address the growing needs for the YU Card environment on campus</li> <li>● Metasys Application version upgrade v.7</li> <li>● Upgrade Boiler controller application at Glendon CSB to more consistent UIT standards</li> <li>● Complete an RFP for a replacement of Parking Permits &amp; Enforcement Platform</li> <li>● Upgrade Scantron Application &amp; hardware</li> <li>● Upgrade Bookstore Inventory &amp; POS environment to v27</li> <li>● Upgrade StarRez to v9.10</li> <li>● Upgrade WPS to latest version</li> </ul> <p>With OIPA, implement enhancements to ARM to:</p> <ul style="list-style-type: none"> <li>● Support a variety of FGS administrative processes</li> <li>● Better support Osgoode, Schulich, Continuing Studies, and Nursing</li> <li>● Improve collective agreement support (Faculty workload letters, CUPE 3903 hiring)</li> <li>● Better support general use (UI, minor enhancements, review of security roles,</li> </ul> |
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|   |  | integration with yu link)   |
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| 3. Provide integrated systems, data and information necessary to support evidence-based planning and decision-making. | <ol style="list-style-type: none"> <li>1. Maintain and extend the scope of information incorporated into the enterprise data warehouse to include additional dimensions of planning and decision around student activity to integrate financial, human resource, advancement and research in.</li> <li>2. Develop and implement roadmaps for information reporting tools that ensure broad access, continuity of services and to accommodate new and innovative analysis of information.</li> </ol>                            | <ul style="list-style-type: none"> <li>● Based on direction of the EDW steering group extend capability and scope of EDW admissions and enrolment applications: incorporating FFTE reporting and admissions trends.</li> <li>● In conjunction with work on Advancement AWA migration, <ul style="list-style-type: none"> <li>● finalize reporting requirements and modify eReports to accommodate new AWA application. <ul style="list-style-type: none"> <li>○ move elements of the pilot Advancement BI application to production and extend application as needed</li> </ul> </li> </ul> </li> <li>● Complete a feasibility assessment with VPRI and OIPA for integration of research data from Sophia into EDW</li> <li>● Develop a plan to integrate and streamline access to reports and retire legacy reports (i.e. for SIS reports and Infomart).</li> <li>● Construct a business case and RFP for the replacement of legacy reporting system for operational reporting</li> <li>● Support the selection and implementation of data visualization capability to augment/extend EDW reporting.</li> <li>● Complete next phase of the migration to a new ETL platform.</li> </ul> |
| 4. 4. Establish and maintain a reliable, responsive, and sustainable information technology environment.              | <ol style="list-style-type: none"> <li>1. Develop and maintain integrated multi-year roadmaps of IT infrastructure elements to ensure sustainable renewal and to adapt to changing demand.</li> <li>2. 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.</li> <li>3. Design, implement and support the University's core information</li> </ol> | <ul style="list-style-type: none"> <li>● Plan and implement the ICT infrastructure, classroom technology, and other IT elements required for new multi-year capital projects and major renovations, including: <ul style="list-style-type: none"> <li>○ New Student Centre</li> <li>○ Schulich Expansion</li> <li>○ Atkinson renovation</li> <li>○ Other projects anticipated to begin in 2016-17</li> </ul> </li> <li>● Revise communication infrastructure standards for use for construction and capital projects</li> <li>● Pursue renewal of central web infrastructure based on a “hybrid” approach (on site and “cloud”) (carried forward)</li> <li>● Complete development and initial deployment of next generation data centre technology architecture</li> <li>● Complete initial phase of process analysis and improvement for network and data centre services</li> <li>● Improvement of system and application monitoring tools and processes,</li> </ul>  |

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|   | <p>technology infrastructure as a highly available, resilient operational environment and extend and adapt it to changing needs.</p> <p>4. Continue to improve technical management and service management and delivery processes and capabilities.</p> <p>5. Adapt the information technology support organization to respond to changing demands and enhance efficient service delivery.</p> | <p>including:</p> <ul style="list-style-type: none"> <li>○ Update or replacement of central enterprise monitoring system</li> <li>○ Review of all enterprise applications for adequate monitoring</li> </ul> <ul style="list-style-type: none"> <li>• Complete migration programs from unsupported/legacy platforms: <ul style="list-style-type: none"> <li>○ Application migrations from Sparc to Intel</li> <li>○ Legacy Windows Server migrations</li> <li>○ Legacy UNIX/Linux migrations</li> </ul> </li> <li>• Replacement of telecom management system</li> <li>• Restructure software lifecycle management to create a new software request service to provide faculty and students with increased access to software</li> <li>• Complete pilot and establish new virtualization environment for desktop and applications access and management</li> <li>• Introduce support for Windows 10</li> <li>• Mature UIT service delivery processes via ITSM <ul style="list-style-type: none"> <li>● Implementation of self-serve service requests and</li> <li>● Implementation of dashboard reports</li> <li>● Enhanced service reliability via change management adoption</li> </ul> </li> <li>• Establish multiple distributed “service centres” at Keele campus to support ease of access and timely service response.</li> </ul> |
| <p>5. Manage risk to the confidentiality, integrity, and availability of University data, applications, information, and communication systems.</p> | <p>1. Support institutional governance of information security risk</p> <p>2. Establish Information Security Policy, data classification guidelines and related standards.</p> <p>3. Replace Passport York - unify and extend identity management and directory services for improved control of account and access management, and support enhanced authentication</p>                        | <ul style="list-style-type: none"> <li>● Complete development of York’s information security strategy</li> <li>● Develop and implement mobile device policy and supporting standards for configuration and management.</li> <li>● Implement standards and tools for laptop and mobile device encryption</li> <li>● Extend PCI-DSS program to address point-of-sale.</li> <li>● Introduce an information security awareness program for faculty and staff.</li> <li>● Update the University’s IT disaster recovery plan</li> <li>● Replacement of legacy firewall technology</li> </ul>  |

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|  | <p>capabilities.</p> <p>4. Develop cyber security awareness program for staff and faculty. Extend and improve program for students.</p> <p>5. Upgrade and augment tools and capabilities for Information Security.</p> | <ul style="list-style-type: none"> <li>● Implement resilient border network for the University's external connectivity</li> </ul> |
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**PART C – Summary of Planned IT Initiatives and Expenditures**

Financial support for the initiatives described in this plan will come in the main from the UIT budget (some initiatives are also supported by one time project-based funds). As has been the past practice there is no requirement for support from the Academic Equipment Fund.