

Computing Plan 2012-2013

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 2012-2013 computing plan represents UIT's annual operational plan – the implementation of its multi-year (2011-2014) integrated resource plan, finalized in June 2011 (and directly informed by the University IT Strategy).

The UIT IRP 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 in both the learning and student service domains.

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.

Priority #4: Valuing people and strengthening the workplace

Priority #5: Resource Integration and Sustainability

The 2011-2012 computing plan was developed prior to the completion of the UIT IRP and had slightly different set of priorities. These have been maintained in PART A for clarity and connection to least year's planning objectives.

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.

Priority 1: Contribute to a Positive Student Experience and to the Teaching, Learning, and Research Function of the University

Objective	Actions/Strategies	Status of 2011-2012 Initiatives
<p>1. Provide ICT advice and services that support research innovation and strong and effective research programs.</p>	<ol style="list-style-type: none"> 1. Act as researchers’ “gateway” to IT services providing consulting services to researchers to identify the IT systems/services to best suit their needs including: advising on external grant submissions, facilitate sourcing and advise on eligibility of IT costs with granting agency guidelines. 2. Continue to evolve our technical service “portfolio” to provide agile, cost effective information, communications and technology services (e.g. desktop/laptop support; system hosting and/or management; large scale computing, networking, storage and backup, web-site support and application development.). 3. Implement a web-based portal for faculty, highlighting research opportunities, active research, potential collaboration opportunities, a view into administering research, and self-serve tools and training modules for technology in teaching and learning. 	<p>#2 – Completed – Through work with LA&PS in particular in the implementation of FAS and Office 2010, came to clarity regarding ORU support.</p> <p>#3 – In progress – Requirements obtained in planning for the faculty portal has been incorporated into the planned faculty/staff intranet.</p>
<p>2. Provide faculty with effective and easy-to-use access to resources for research collaboration and</p>	<ol style="list-style-type: none"> 1. Provide a suite of collaborative tools (online meetings, web-based collaboration) suitable for use by groups within York and beyond. 2. Work with faculty and researchers to create web sites and applications that support communications and collaboration initiatives in the VPRI, Faculties, 	<p>#1 – Ongoing – the ORION O3 service continues to be the platform advocated by UIT and the VPRI.</p> <p># 2 – In Progress – Investigation into alternatives for research administration continues. RFP in development for 2012-13 release.</p> <p>Partially Completed – Support was provided for the Markham Convergence Centre. Implementation of a video-conferencing solution</p>

communication including dissemination of research results – knowledge mobilization	research units, and specific research projects.	was not completed (carried forward)
3. Support innovation in and enhancement of teaching and learning through the use of information technology.	<ol style="list-style-type: none"> 1. Support the innovative design, implementation and renovation of classrooms and instructional spaces. 2. Complete plan for classroom technology equipment upgrades to ensure all teaching spaces meet a minimum but highly functional standard. Support the use of classroom technology with training and measures to ensure reliability of the technology 3. Maintain and expand software that supports teaching and collaboration including Moodle, blogs, and wikis and provide training and other support to faculty members and others to allow effective use of these tools 4. Improve the effectiveness of instruction and research dissemination through the production of multi-media content and easily accessible training and personal consultation on how to do this. 5. Enhance networks and computing infrastructure to keep pace with changing learning technologies to ensure excellence in on-line and distance learning experiences. 	<p>#1 – Completed – Supported the successful opening of the renovated new Osgoode facility and the Life Science building.</p> <p>#2 – Partially Complete - Classroom technology – Resource constraints limited the scope of classroom upgrades. By the end of 2011-2012 upgrades planned for 10 rooms and Vari and 2 in Petrie will be completed. UIT Instructional Technology was also engaged in the design and implementation of a number of new classrooms associated with renovations and new facilities (in Vanier, Founders, LSB, Osgoode and Glendon).</p> <p>#3 – Completed – Evaluation of Moodle 2.0; implementation of small production instances leading to planning for wide scale use in 2012-13.</p> <p>Ongoing – Extended support for Faculty of Health use of Moodle.</p> <p>In Progress – Migration of courses from WebCT to Moodle progressing towards completion by summer 2012.</p> <p>In Progress – Support of a number of AIF projects, notably LA&PS/Health development of eLearning courses.</p> <p>#4, #5 – Completed – expansion of number of lecture capture enabled rooms to now include 68 large lecture halls in rooms in ACE, ACW, Chem, CLH, HNE, Lassonde, Osgoode, Ross, Stong, SLH, TEL and Vari.</p> <p>Not Completed – Anticipated media streaming/recording applications were not upgraded as planned: Mediasite, streaming server and Adobe Connect. (carried forward)</p>
4. Provide services and	1. Support the enhanced experience of mobile, web-oriented students by making more institutional and	#1 – Partially Complete - Online and mobile services for students -

<p>supports that are broadly accessible by students in support of their learning needs with particular attention to the needs of mobile, commuter students.</p>	<p>learning resources and services available online and accessible from mobile devices.</p> <ol style="list-style-type: none"> 2. Enrich the student experience by promoting the availability and accessibility to classroom technologies. 3. Deliver access to computing lab applications and other specialized applications “anytime/anywhere” from computing labs using University owned equipment and also utilize virtualization technology to allow similar access from student-owned computers and mobile devices. 4. Remove barriers to on-line access by extending and enhancing wireless network access on campus. 5. Provide students with a broad set of up to date tools to support their learning (e.g. access to specialized software, discounted software, training supports). 	<p>Integrated new services into the student portal for 1st year experience initiatives and student awards.</p> <p>Complete – York launched a “mobile friendly” web site that included a mobile version of the student portal.</p> <p>#3 – Completed – Computer hardware was renewed in UIT supported labs as planned: William Small Centre; Accolade labs; Alternate exam centres. Total of 474 Lab PCs upgraded to new hardware and Windows 7.</p> <p>Not completed – review of alternative use of lab space and impact of “thin client” technology.</p> <p>#4 – In Progress – Proposal for wireless service improvements presented to the Student Centre board. Upgrades to be done pending decision.</p> <p>Completed – AirYork upgrades to portions of Scott Library and Central Square.</p> <p>Incomplete – Planned upgrades to TEL and SSB were not completed (carried forward)</p> <p>In Progress – Planning for residence wireless upgrades is proceeding in conjunction with Housing strategy development.</p> <p>#5 - In Progress – Computing web site for students in process of being developed.</p>
<p>5. Use IT to make interaction with the University (tools, content, staff, services) easier for prospective students, current</p>	<ol style="list-style-type: none"> 1. Maintain and enhance (a) usability and responsiveness across all high-impact and high-usage applications and (b) functionality in these particular application areas: <ol style="list-style-type: none"> a. The prospective and current student portals, including integration of the vast majority of tools/services b. Applications and content accessible from mobile devices, including portals 	<p>#1 – Partially Complete - enhancements to the current student portal, additional student services online:</p> <ul style="list-style-type: none"> • Completed refinements to MyFile portlets for prospective students portal • Deferred Addition of graduate student information and service into the prospective student portal. • Extending the “My Program” application was also deferred. • Several admissions forms were moved online including the

students, and alumni	<ul style="list-style-type: none"> c. YU card and other e-commerce options d. Online student services generally, including the Student Information System <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>letters of recommendations process.</p> <p>#2 – In Progress - improvements to the transition experience from student to alumni.</p>
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Priority 2: Provide Effective Planning and Responsible Management of University Resources

Objective	Actions/Strategies	Initiatives
1. Ensure on-going alignment of information technology resources with the University's strategic and academic priorities	<ul style="list-style-type: none"> 1. Maintain an IT Strategic Plan 2. Work with University leadership to establish clear, well-functioning IT Governance processes and structures. 3. Support IT Governance through: <ul style="list-style-type: none"> a. Developing and implementing processes and structures governing formal review, approval, and prioritization of IT projects and providing on-going oversight of approved IT initiatives. b. Development of information on IT investments including services and projects University-wide. c. Implementation of a metrics program to track IT service utilization and performance. 4. Build on current planning processes to establish University-wide IT operational planning that provides for client/IT exchange and discussion of cross-functional initiatives or impacts. 	<p>#1 – Not Completed – revisions to the IT strategy were anticipated. It was decided that an update was not required. The existing IT Strategy was used as the basis for the UIT Integrated Resource Plan.</p> <p>#2 – In Progress – An advisory group for academic technology is being formed in collaboration with the AVP Teaching and Learning; With the support of the PRASE initiative priority setting process for general administrative projects being developed.</p> <p>#3 – In Progress – UIT project portfolio being completed with plans for providing visibility via the revised computing web site.</p> <p>Not Completed - analysis for executives of institutional spend on IT and IT service delivery; Further the use and reporting of IT performance indicators, beginning with measures arising from the implementation of incident and change processes.</p>
2. Improve operational effectiveness and make York	1. Enhance business process through business process review and identification of opportunities for improvement and the potential to leverage the University's existing ERP systems beyond central	<p>#1, #2, #3</p> <p>In Progress – Planning and requirements gathering in progress for the development of a faculty/staff intranet/portal.</p>

<p>easy to work with and within by taking an organizational-wide, process oriented approach to the way work is done supported by innovative and effective IT solutions</p>	<p>functional units.</p> <ol style="list-style-type: none"> 2. Maintain enterprise computing software applications [administrative, academic, student] across the whole range of activity of the university including eReports and all business, academic and unit-specific systems. 3. Develop and support client-specific computing software applications across academic and business units. 4. Improve operational efficiency (both technical and business process) and improve data quality by extending integration between key systems and data. 5. Relieve the administrative burden of manual, paper-based processes by pursuing a broad-based, enterprise approach to the use of document management and workflow technologies. 6. Increase ease of access to diverse applications and web-based services through the implementation of unified login/authentication capability for staff and faculty. 7. Improve return from existing and future IT investments through attention to usability and provision of accessible training for end users of systems. 8. Improve agility and efficiency through the simplification of our IT environment, increasing standardization and integration via the definition of architectures for data and applications. 	<p>Completed – Implementation of central “eCommerce Payment Gateway”.</p> <p>Completed - Extend the functionality of the application to support the IRP process.</p> <p>In progress – Upgrade to Office 2010 University-wide.</p> <p>Completed – Requirements and case for a web content management system.</p> <p>In progress – Completed additional releases of ARM and expect to complete integration necessary for CUPE hiring.</p> <p>Completed - Upgrade of Sports and Recreation “class” system (Keele and Glendon)</p> <p>Human Resource Management -</p> <p>In Progress - implementation of the Time and Labour/Absence Management system (targeted launch June 2012).</p> <p>Completed – First phase implementation of an application for online ETFs.</p> <p>Completed - Implementation of the UPK (User Productivity Kit) On-line training tool.</p> <p>Not Completed - Implementation of a Moodle environment for use in staff training.</p> <p>Completed - implementation of “Disability Claims Management”</p> <p>In Progress - Launch of H.R. self serve including – employee and manager self serve features.</p> <p>In Progress – Improvements to the CUPE hiring application as part of ARM development.</p> <p>Additional potential H.R. initiatives (i.e. eRecruit, eDevelopment) noted in the plan were not pursued.</p> <p>Finance and Procurement –</p> <p>In Progress – Implementation of SmartBuy system (SciQuest) and integration with PeopleSoft.</p> <p>In Progress – Redevelopment of budget and forecast submission applications.</p> <p>Completed – enable functionality to view attachment in PeopleSoft – Implementation</p> <p>Completed – upgrade to new version TravelEx to improve outgoing</p>
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		<p>payments In Progress (identified as PRASE priority initiatives) – application/service to support a streamlined travel expense reimbursement process and; integration of PeopleSoft HR direct deposit information with PeopleSoft Finance.</p> <p>Other Finance and Procurement initiatives that were described in last year’s plan were not pursued.</p> <p>University Advancement -</p> <p>Completed - IT support for the creation of the new Advancement Division creation/transition. In Progress – Application upgrades for SunGard Advance and SmartCall. Completed - Implementation of a system to support online donations and e-receipts</p> <p>Campus Services and Business Operations –</p> <p>Completed – Maximo Phase II - Maximo/Pcard integration and Maximo Self-Service requests Completed - Metasys Environment System Completed - YUCard System Upgrade In Progress - Avanti new version for Printing Services – enables on-line submission of print requests Completed - T2 Parking Administration System ecommerce upgrades. Non Completed - Energy Management Ion System – Upgrade – Discovery and Business Case Development In Progress - emergency notifications through the implementation of Alertus Software. In Progress - TrafPark (Parking Gate) system replacement Not Complete - Bookstore Digital Display implementation. Not Completed - Distribute web access to the VisionFM space management system.</p> <p>#5 - Not Started – Further development of the business case for document management.</p> <p>#6 – In Progress – Simplification of username/passwords through</p>
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		integration of FAS and PY; implementation of self serve password management (PRASE project).
3. Identify strategic opportunities for use of alternative sourcing opportunities to maximize resources	<ol style="list-style-type: none"> 1. Monitor the solutions marketplace on an ongoing basis to identify emerging opportunities for alternative sourcing. 2. Define policies and guidelines to guide the appropriate sourcing and use of external services. 	<p>#1 - In Progress – Review of external alternatives for student email.</p> <p>#2 - In Progress – Draft guidelines are completed and in review.</p>
4. Manage risk to the confidentiality, integrity, and availability of University data, applications, information, and communication systems.	<ol style="list-style-type: none"> 1. Manage the health and sustainability of the University's software applications and making recommendations for improvement and retirement, facilitated by establishing an application portfolio management discipline. 2. Manage and monitor access to University data such as student, financial, and HR information, driven by comprehensive data classification and identity management disciplines. 3. Implement systems with capabilities required for support of legislative and regulatory compliance, including privacy protection, security and industry information regulation. 4. Continually improve the security of York's information and communication systems through an information security program that includes monitoring, detection, and timely response for security incidents, regular testing for security vulnerabilities, consultation for secure system design and operation, promotion and awareness of security best practices within the University community. 5. Manage availability risk by evolving ICT capacity plans and disaster recovery plans to the changing requirements and priorities of the University. 	<p>#1 – In Progress – Application portfolio update to be completed by end of 2011-2012.</p> <p>#3 - Completed – In collaboration with Finance, and other University groups, achieved compliance for 4 major e-commerce applications. Transition to ongoing program to manage regular compliance to be done by May 2012.</p> <p>#4 – Completed – After review, upgraded versions of existing applications for endpoint security and anti-virus are now in use.</p> <p>In Progress – Design completed for PCI DSS compliant network zones to support point of sale.</p> <p>In Progress - Upgrade and enhance the capabilities of the internal security systems (enhancements to intrusion detection, addition of capacity and redundancy to intrusion prevention system).</p>

Priority 3: Establish infrastructure, systems, training, and supports to ensure the effective operation of the University.

Objective	Actions/Strategies	Initiatives
<p>1. Provide IT services and support to students, faculty and staff in a manner that is seamless, effective, transparent and responsive</p>	<ol style="list-style-type: none"> 1. Enhance the user experience by providing an enterprise wide single central IT point of contact for services and support to the York Community including a self-service tool that will enable users to request, track and review the progress of their IT issues. 2. Implement a common service desk system based on ITIL framework that supports common processes, service measurement, and integration of service delivery. 3. Develop and maintain an IT service catalogue, to provide clear definition and eligibility of services to students, faculty and staff. 4. Communicate on a regular basis to the York Community on how to access UIT services and notify of emergencies, outages and planned changes, all in non-technical language to ensure their understanding. 5. Administer service agreements to all clients across campus ensuring that they are in place, up to date, and that the level of service agreed to is being provided. 6. Provide continued improvement of technical management practices including system monitoring, desktop maintenance, application licensing, product or service acquisition process, consultation, installation, replenishment of hardware, software and system configuration. 	<p>#2 - In Progress - Extend the adoption of ITSM and implementation of Remedy – moving to a second track for change management; discovery mapping tool in use to support CMDB planning; Remedy reporting for incident management in place.</p> <p>#3 – In Progress - redevelopment of the computing web site for both students and faculty/staff.</p> <p>#5 – Not Completed – development of a technical service catalogue.</p> <p>#6 – Partially complete - Improved technical management practices – tools to support remote desktop computer management introduced (including UIT, SSB, LA&PS).</p> <p>Other potential IT process improvements identified in the plan – asset management and desktop lifecycle management were not pursued and were identified as future PRASE opportunities.</p>
<p>2. Provide</p>	<ol style="list-style-type: none"> 1. Develop a roadmap for convergence from our current 	<p>#1 and #3 - In Progress – Direction established for voice services</p>

<p>integrated systems, data, and records necessary to support proactive communication, collaboration, and evidence-based planning and decision-making</p>	<p>multi-vendor, multiple technology environment toward an integrated, unified communication/collaboration model.</p> <ol style="list-style-type: none"> 2. Adopt an integrated enterprise shared workspace platform. 3. Implement and support enhanced telecommunications services, including deployment of voice-over-IP technology to extend capacity and flexibility of core communication and collaboration services. 4. Unify and extend university directory services to enable enhanced collaboration, flexibility and agility for the IT environment. 5. Implement the enterprise data warehouse and continue to expand access to a broad set of integrated, authoritative information. 6. Continue to improve and integrate operational reporting (e.g. eReports, SIS reports). 	<p>through an upgrade of the core telephone system to support VOIP and unified communications. VOIP deployed in new Life Sciences Building and Markham convergence centre.</p> <p>#2 Not Completed –Implement a production Sharepoint service and develop associated development capacity.</p> <p>#3 – In Progress – An RFP to source the voice system upgrade was completed Dec 2011, and upgrade is in progress, scheduled for completion in July 2012.</p> <p>#4 – In Progress - Complete the migration to the enterprise implementation of Active Directory (known as File Access Service/FAS)</p> <p>#5 and #6 – Enterprise Reporting and Data Warehouse - Completed - implementation of the Admissions domain in the data warehouse In Progress – extension of EDW to include graduate admissions. In Progress - Upgrade of our EDW reporting platform to the most current version. Not Completed - Define an approach for improved ad-hoc reporting into more enterprise systems. Not Completed - Data management plan to aid integration and data sharing. Not Completed - Develop a “reporting strategy” to address demand for self-serve access to information and clarity on technology direction (carried forward)</p>
<p>3. Continue to build a safe, positive, healthy, collegial, campus environment</p>	<ol style="list-style-type: none"> 1. Provide formal framework for ongoing professional development and training for all staff; monitor effectiveness, identify trends and adjust to meet needs of the organization 2. Create customer centric culture to improve client experience with IT by developing skills beyond the IT functional area by providing training in customer service, process analysis and project management. 	<p>#1 – Completed – In collaboration with HR Learning and Development, created a common development plan for all UIT CPM staff.</p>

<p>4. Establish and maintain a reliable, secure and sustainable technology infrastructure to support the operation of University information systems.</p>	<ol style="list-style-type: none"> 1. Develop and maintain long-range plans and sustainability framework for key infrastructure elements, including the network, communication systems, servers, data storage, backup, and data centre resources. 2. Develop integrated technical architectures and technology planning to ensure that infrastructure standards are well supported, integrated, flexible and cost effective. 3. Design, implement and support the University's core IT infrastructure and adapt it to changing and emergent needs: <ol style="list-style-type: none"> a. Data centres, cable and fibre plant for telecom and network connectivity on campus. b. Systems and connectivity for satellite campuses, connectivity with other educational and research networks and institutions, and other external linkage. c. Data storage and backup systems, servers and other computational resources used by University applications. d. Databases used by university applications to enable higher-performing applications and higher availability and resiliency. e. Campus expansion and renovation 4. Continually assess technologies and solutions for optimum cost effectiveness and considerations of environmental sustainability. 5. Adopt a fault-tolerant and resilient operational environment for the ICT infrastructure. 6. Adopt leading University practices for financial and HR planning and management, fostering greater line manager accountability in these areas. 	<p>#2 – Infrastructure Planning:</p> <p>Not Completed - Further planning to adopt IPV6 including potential trials. Completed - Infrastructure facilities standards to meet new demands of VOIP developed and implemented in LSB and Osgoode.</p> <p>#3 - University's core IT infrastructure:</p> <p>Servers, storage and databases -</p> <p>In Progress – Process underway for selection of technology to support a redefined back up service. In Progress – Server virtualization increased to 45% from 30% of servers (of approximately 800 UIT-managed servers). In Progress - Further migrations to Linux, retirement of outdated hardware/operating systems. Complete – Implementation of storage service and redundant network core enabled provision of DR backup service for key services – email and FAS. In Progress - Database management improvements: consolidation of SQLserver environment; new data base tools related to storage environment in testing.</p> <p>Network operations –</p> <p>Not Completed - Improvement of network management tools. In Progress – Implemented 10GbE at the network distribution layer for new buildings. In Progress - Plan for WAN resiliency for Glendon campus in development in conjunction with GTAnet.</p> <p>Telecommunications -</p> <p>In Progress - Upgrade of the core telecom switch and management systems to integrate and support IP-based technology (VOIP). Not Completed - Pilot deployment of Unified communications technology, i.e. integration with software clients, applications, and mobile devices.</p>
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	<p>7. Effective measures in place to ensure appropriate controls (e.g. for asset management) and compliance with University policy and external (e.g. license) agreements.</p>	<p>Completed – Gained approval for strategy to move ahead with multi-year VOIP migration.</p> <p>Infrastructure operations –</p> <p>Not Completed - Select fibre upgrades to add capacity; Completed - New building designed for VOIP readiness. Not Completed - Upgrade of data centre network elements. Not Completed - Upgrade of Glendon data centre to support VOIP and growth.</p> <p>General –</p> <p>Completed - Supported the “move-in” process for Osgoode and the new Life Sciences building. In Progress - planning for the SSB India campus. Not Completed - Create a more robust MySQL implementation. Not Completed - Upgrade PY provisioning system (performance and capability). Not Completed - Improve web application hosting infrastructure Not Completed - Upgrade supporting infrastructure for the central web service.</p> <p>#4 – Not Completed - Work with IT council on principles and standards related to IT and environmental sustainability. Identify key opportunities (e.g. local printers).</p>
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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 to final review within the budget process.

The computing plan continues to draw heavily on directions and implementation priorities articulated in the 2009 IT Strategy. Initiatives are planned across all of the areas of IT support and enablement within the University driven by the themes of the IT Strategy:

- Continued support for research primarily through ensuring alignment of large projects with appropriate University IT and the clear definition and delivery of common services;
- Continuing to build the “platforms” to support the expansion of eLearning;
- Moving more student service and access to learning materials online, particularly to suit the mobile nature of our students;
- Priority support for initiatives that can contribute to operational efficiency;
- Addressing evident “gaps” in or I.T. capability including service delivery improvement and a robust, secure and sustainable I.T. infrastructure.

Specific drivers for priorities for 2012-2013 –

1. Student experience – through the classroom/academic experience; IT in support of delivery of student administrative services; quality of the technology services directly available to students. A number of proposed initiatives extend directly from student feedback gained via the survey conducted in spring 2011.
2. Improvement of administrative processes and services as directed by PRASE.
3. Initiatives that drive near term cost savings and service improvements – with in IT as well as in other administrative areas.

Through the year the plan outlined below will be adjusted to consider the impact of further priority setting discussions with a number of groups and most significantly by plans for administrative and student supporting process improvement – as defined by PRASE are not yet defined for 2012-2013.

Priority 1: Support Academic Quality, Research and Teaching

Objective	Actions/Strategies	Initiatives
<p>1. Support innovation in and enhancement of teaching and learning through the use of information technology.</p>	<ol style="list-style-type: none"> 1. In collaboration with the Faculties of Health and LA&PS, develop and implement effective, sustainable, and scalable models for blended and online learning. 2. Maintain and expand software that supports teaching and collaboration including Moodle, blogs, and wikis and provide training and other support to faculty members and others to allow effective use of these tools 3. Support the innovative design, implementation and renovation of classrooms and instructional spaces. 4. Complete plan for classroom technology equipment upgrades to ensure all teaching spaces meet a minimum but highly functional standard. Support the use of classroom technology with training and measures to ensure reliability of the technology 5. Improve the effectiveness of instruction and research dissemination through the production of multi-media content and easily accessible training and personal consultation on how to do this. 	<p>#1 – Support the requirements, in collaboration with LA&PS eServices Office, of the joint Faculty of Health/LA&PS project to expand the number of blended and online course offerings. With the Faculty’s, develop a sustainable model for ongoing creation and support of eLearning</p> <p>#2 - Upgrade of the University’s core learning management system Moodle to version 2.0, including high availability architecture and transition all courses for September 2012.</p> <p>In support of the upgrade develop and extend additional Moodle instruction for faculty.</p> <p>Complete migration of courses from WebCT to Moodle in order to retire the WebCT service by August 2012.</p> <p>Enhance ONCE (online course evaluations) to support mobile devices.</p> <p>Pilot the use of an e Portfolio tool integrated with Moodle.</p> <p>#3 - Provide support for the opening of new classrooms at Glendon and design support for new facilities (Engineering, SSB India).</p> <p>#4 - Enhance reliability and performance of existing equipped classrooms through equipment renewal and software upgrades.</p> <p>Introduce/pilot support for faculty tablet devices for presentation.</p> <p>#5 – Upgrade of lecture capture platform (Camtasia relay) and continue to expand utilization and support for lecture capture.</p> <p>Further the use of the (“private”) iTunesU service for distribution of course content.</p> <p>Upgrades of Media site and Adobe Connect platforms (both carried forward from 2011-2012)</p>

<p>2. Provide ICT advice and services that support research innovation and strong and effective research programs.</p>	<ol style="list-style-type: none"> 1. Act as researchers' "gateway" to IT services providing consulting services to researchers to identify the IT systems/services to best suit their needs including: advising on external grant submissions, facilitate sourcing and advise on eligibility of IT costs with granting agency guidelines. 2. Continue to evolve our technical service "portfolio" to provide agile, cost effective information, communications and technology services (e.g. desktop/laptop support; system hosting and/or management; large scale computing, networking, storage and backup, web-site support and application development.). 3. As part of a broader faculty/staff portal, address the needs of researchers: highlighting research opportunities, active research, potential collaboration opportunities, a view into administering research. 4. Increase access for faculty and graduate students to specialized software packages through advantageous pricing and administration of licensed for broad and easy distribution 	<p>#1 - Continue to provide support for grant processes.</p> <p>Complete network implementation in support of the outdoor robotics project.</p> <p>#2 - In line with VPRI planning processes, work with the VPRI office and researchers on the renewal of service strategy for researchers (first version developed in 2006).</p>
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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	Actions/Strategies	Initiatives
<p>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,</p>	<ol style="list-style-type: none"> 1. Support the enhanced experience of mobile, web-oriented students by making more institutional and learning resources and services available online and accessible from mobile devices. 2. Enrich the student experience by promoting the availability and accessibility to classroom technologies. 3. Deliver access to computing lab applications and other specialized applications "anytime/anywhere" 	<p>#1 – In response to student feedback, introduce application enhancements (using SIS and the student portal) to improve navigation to course websites/resources.</p> <p>Improve information on availability of services and support through the redesign of the computing web site for students and the enhanced "current student" web presence.</p> <p>Continue to add new services to the mobile student portal.</p>

<p>commuter students.</p>	<p>from computing labs using University owned equipment and also utilize virtualization technology to allow similar access from student-owned computers and mobile devices.</p> <ol style="list-style-type: none"> 4. Remove barriers to on-line access by extending and enhancing wireless network access on campus. 5. Provide students with a broad set of up to date tools to support their learning (e.g. access to specialized software, discounted software, training supports). 	<p>Complete definition of direction for student email etc. and move forward based on recommendations.</p> <p>#2 – Related to initiatives identified in Objective 1.</p> <p>#3 – The “web FAS” service will be upgraded to improve access to files via the web.</p> <p>#4 – Responding to the highest priority identified by students in the 2011 student survey a widespread renewal and upgrade of the AirYork wireless network service will be undertaken in 2012-2013.</p> <p>In partnership with housing, introduce wireless service into undergraduate residences and improve overall infrastructure capacity of the ResNet Service.</p> <p>#5 - Upgrade of all student labs to Windows 7 will be completed.</p>
<p>2. Use IT to make interaction with the University (tools, content, staff, services) easier for prospective students, current students, and alumni</p>	<ol style="list-style-type: none"> 1. Provide support for initiatives arising from the “Academic Innovation Fund” process and “PRASE” program that target improved service delivery for students. 2. Maintain and enhance usability and responsiveness across all high-impact and high-usage applications and functionality in these particular application areas: <ol style="list-style-type: none"> a. The prospective and current student portals, including integration of the vast majority of tools/services b. Applications and content accessible from mobile devices, including portals c. YU card and other e-commerce options d. Online student services generally, including the Student Information System 3. Improve the continuity of students’ experience in transitioning to Alumni, including both an alumni portal and with respect to identity management. 	<p>#1 – Provide support for AIF first year experience projects (e.g. online advising pilot) and for priorities that emerge with phase 2 of the PRASE initiative.</p> <p>#2 – Major planned focus will be on current and future student portal improvements (YU Connect, notification, more mobile support, MyFile, student statement, others).</p> <p>It is expected that the PRASE initiative will also identify priorities in the area of student service applications.</p>

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	Actions/Strategies	Initiatives
1. Safeguard University assets	1. Establish and maintain systems, processes and procedures to protect the University's data and IT assets.	<p>#1 - Design and implement PCI SAQ-C compliant system to provide for point of sale devices.</p> <p>Definition of standards and solution for mobile device security and implement the solution as a pilot (likely in the research domain).</p>
2. Help improve York's reputation through leadership in best practice	<p>1. Leverage conferences, award programs and participation in external industry groups to raise the profile of successes with IT at York.</p> <p>2. Raise the profile of the IT environment at York to assist in attracting students, faculty, and staff.</p>	<p>#1 - Ensure that York has a presence at Ontario and national University IT conferences.</p>
3. Support and enhance the University's reputation through external communication and broad community engagement.	1. In partnership with University communications/marketing and other groups, seek out and implement innovative ways to reach external audiences.	<p>#1 - Implementation of public-facing iTunesU site.</p> <p>Working towards AODA compliance, improve resources available to accessibility for web and application development.</p> <p>Extend application of new standard web site "template".</p> <p>Support implementation of enhanced services for convocation.</p> <p>Support for measures to improve campus security profile and emergency communications initiatives</p> <ul style="list-style-type: none"> ○ Expanded LCD screen network ○ Alertus implementation ○ Public address system

Priority 4: Valuing people and strengthening the workplace.

Objective	Actions/Strategies	Initiatives
<p>1. Provide IT services and support to students, faculty and staff in a manner that is seamless, effective, transparent and responsive</p>	<ol style="list-style-type: none"> 1. Enhance the user experience by providing an enterprise wide single central IT point of contact for services and support to the York Community including a self-service tool that will enable users to request, track and review the progress of their IT issues. 2. Implement a common service desk system based on ITIL framework that supports common processes, service measurement, and integration of service delivery. 3. Develop and maintain an IT service catalogue, to provide clear definition and eligibility of services to students, faculty and staff. 4. Communicate on a regular basis to the York Community on how to access UIT services and notify of emergencies, outages and planned changes, all in non-technical language to ensure their understanding. 5. Administer service agreements to all clients across campus ensuring that they are in place, up to date, and that the level of service agreed to is being provided. 6. Provide continued improvement of technical management practices including system monitoring, desktop maintenance, application licensing, product or service acquisition process, consultation, installation, replenishment of hardware, software and system configuration. 7. Develop policies, standards, and processes to enable the achievement of enhanced service delivery. 	<p>#2 - Extend the adoption of ITSM and implementation of service processes (carried forward) –</p> <ul style="list-style-type: none"> • Implement service request process and supporting Remedy module • Plan for implementation of CMDB to support change process. • Introduce the use of “knowledge management” as identified within PRASE. <p>#3 – Complete a redevelopment of the computing web site for both students and faculty/staff (continued from 2011-2012)</p> <p>#4 – Introduce, as part of the computing web site redesign, improved capability to present notices and service information to the community.</p> <p>#6 – Improved technical management practices particularly as identified by PRASE phase 2. Priorities to be determined, potentially:</p> <ul style="list-style-type: none"> • Printer rationalization phase 2 • Initial steps on desktop process management
<p>2. Continue to build a safe,</p>	<ol style="list-style-type: none"> 1. Provide formal framework for ongoing professional development and training for all staff; monitor 	<p>#3 – Working in partnership with marketing and communications and</p>

<p>positive, healthy, collegial, campus environment</p>	<p>effectiveness, identify trends and adjust to meet needs of the organization</p> <ol style="list-style-type: none"> 2. Create customer centric culture to improve client experience with IT by developing skills beyond the IT functional area by providing training in customer service, process analysis and project management. 3. Provide support for services and initiatives that enhance the communication and collaboration environment within IT and throughout the entire University community (including in particular initiatives arising as priorities through the Better Workplace Initiative). 4. Facilitate collaborative work through the implementation of a common, integrated, shared workspace platform. 	<p>human resources, introduce a faculty/staff “intranet” including a personalized portal.</p> <p>Introduce a collaborative desktop video, online meeting service (initially to support work/meetings in relocated administrative groups). This also encompasses the delivery of a solution for the Markham innovation centre (carried forward)</p> <p>#4 – Implement a web-based application to facilitate easy work group and project-based information sharing and communication (via Sharepoint integrated with FAS).</p>
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Priority 5: Resource Integration and Sustainability

Objective	Actions/Strategies	Initiatives
<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"> 1. Maintain an IT Strategic Plan 2. Work with University leadership to establish clear, well-functioning IT Governance processes and structures. 3. Support IT Governance through: <ol style="list-style-type: none"> a. Developing and implementing processes and structures governing formal review, approval, and prioritization of IT projects and providing on-going oversight of approved IT initiatives. b. Development of information on IT investments including services and projects 	<p>#1 – The need to revisit the existing IT strategy will be examined in conjunction with senior leadership.</p> <p>#2 - Further the function/maturity of IT Governance (carried forward) -</p> <ul style="list-style-type: none"> • Continue to work to establish formal priority review and decision processes for: administrative systems; academic technology; IT infrastructure and architecture (carried forward) <p>#3 – Supports that will be implemented to support priority setting and visibility of I.T.:</p> <ul style="list-style-type: none"> • Improved information on plans and projects for the community

	<p>University-wide.</p> <p>c. Implementation of a metrics program to track IT service utilization and performance.</p> <p>4. Build on current planning processes to establish University-wide IT operational planning that provides for client/IT exchange and discussion of cross-functional initiatives or impacts.</p>	<p>(i.e. project portfolio excerpts on the web).</p> <ul style="list-style-type: none"> • Mature project intake and review process in line with PRASE work (i.e. use of standard business case format) • Make key benchmarks and service data available via the web.
<p>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 by innovative and effective IT solutions</p>	<ol style="list-style-type: none"> 1. Enhance business process through business process review and identification of opportunities for improvement and the potential to leverage the University's existing ERP systems beyond central functional units. 2. Maintain enterprise computing software applications [administrative, academic, student] across the whole range of activity of the university including eReports and all business, academic and unit-specific systems. 3. Develop and support client-specific computing software applications across academic and business units. 4. Improve operational efficiency (both technical and business process) and improve data quality by extending integration between key systems and data. 5. Relieve the administrative burden of manual, paper-based processes by pursuing a broad-based, enterprise approach to the use of document management and workflow technologies. 6. Increase ease of access to diverse applications and web-based services through the implementation of unified login/authentication capability for staff and faculty. 7. Improve return from existing and future IT investments through attention to usability and provision of accessible training for end users of 	<p>#1 and #2 – A large number of opportunities exist for the use of I.T. to support the improvement of administrative processes. The PRASE initiative is expected to play a significant role in identifying priorities for 2012-2013 so the full extent of “candidates” is not detailed within this plan.</p> <p>Support for improved administrative processes will include:</p> <p>Completion of existing PRASE Phase 2 initiatives:</p> <ul style="list-style-type: none"> • Services for Researchers – post award processes • Procurement: Electronic Marketplace Implementation (SciQuest) • Finance: Direct Deposit (EFT) • Finance: Travel and Expense (T&E) • HR: Improve Contract Faculty “Hire to Pay” process • HR: Automated HR General Enquiries (“Intelliresponse”) • HR: Time and Labour Metrics Realization • HR: Employee Transaction Form <p>Implementation of solutions/support for additional initiatives to be identified within PRASE.</p> <p>Completion of the Time Reporting Tool implementation</p> <p>Completion of upgrade of Advance and supporting systems</p> <p>Address priorities for upgrades/enhancements to administrative systems (examples):</p> <ul style="list-style-type: none"> • Maximo mobility and data integration/interfaces • Bookstore e-commerce enhancements • Housing (StarRez) upgrades and interfaces.

	<p>systems.</p> <p>8. Improve agility and efficiency through the simplification of our IT environment, increasing standardization and integration via the definition of architectures for data and applications.</p>	<p>Complete application upgrades and replacements for PCI compliance (e.g. TrafPark replacement).</p> <p>#3 - Support for current and emerging priorities related to delivery of student services (including directions to come from PRASE)</p> <ul style="list-style-type: none"> • Online application/admissions enhancements • Addition of document upload features. • Future student CRM and possible CRM for current students • Support for student mobility (across institutions). • Implementation of Ontario Education Number • Broader roll out of the degree progress report <p>Completion of Office 2010 roll out</p> <p>Complete roll out of enterprise File Access Service and implement service improvements, including:</p> <ul style="list-style-type: none"> • Enhanced web access to files • Access for mobile devices. <p>Introduce email service improvements</p> <ul style="list-style-type: none"> • Infrastructure renewal • MyMail interface replacement • Lotus notes service enhancements to increase quotas <p>#4 - Complete integration of ARM/CUPE hiring/Peoplesoft integration</p> <p>#5 – Based on requirements analysis done in 2011, select and implement a web content management application (carried forward)</p>
<p>3. Provide integrated systems, data, and records necessary to support proactive communication, collaboration,</p>	<p>1. Implement the enterprise data warehouse and continue to expand access to a broad set of integrated, authoritative information.</p> <p>2. Continue to improve and integrate operational reporting (e.g. eReports, SIS reports).</p>	<p>#1 - Extend information in our EDW to include student enrollment data.</p> <p>Development of BI reports for performance tracking and analysis within Advancement.</p> <p>Complete upgrade of the OBIEE platform to 11g along with conversion of existing reports and dashboards.</p> <p>#2 - eReport development to support enterprise projects (Time and</p>

and evidence-based planning and decision-making		Labour; Advance; budget/forecast applications).
4. Identify strategic opportunities for use of alternative sourcing opportunities to maximize resources	<ol style="list-style-type: none"> 1. Monitor the solutions marketplace on an ongoing basis to identify emerging opportunities for alternative sourcing. 2. Define policies and guidelines to guide the appropriate sourcing and use of external services. 	#2 - Gain approval for external sourcing guidelines (carry forward)
5. Establish and maintain a reliable, secure and sustainable technology infrastructure to support the operation of University information systems.	<ol style="list-style-type: none"> 1. Develop and maintain long-range plans and sustainability framework for key infrastructure elements, including the network, communication systems, servers, data storage, backup, and data centre resources. 2. Develop integrated technical architectures and technology planning to ensure that infrastructure standards are well supported, integrated, flexible and cost effective. 3. Design, implement and support the University's core IT infrastructure and adapt it to changing and emergent needs: <ol style="list-style-type: none"> a. Data centres, cable and fibre plant for telecom and network connectivity on campus. b. Systems and connectivity for satellite campuses, connectivity with other educational and research networks and institutions, and other external linkage. c. Data storage and backup systems, servers and other computational resources used by University applications. 	<p>#2 – Initial phase of network infrastructure support for IPv6</p> <p>Review of Sparc/Solaris sustainability as a strategic platform.</p> <p>#3 – ICT Infrastructure planning and deployment to support campus expansion:</p> <ul style="list-style-type: none"> • EOB decommissioning and associated moves; • Establishment of new office site on Keele St; • Kinsmen building renovation; • Subway construction; • Pan Am Stadium planning; • Glendon construction; • SSB India; • Next phase of Life Science Building <p>Complete back up service infrastructure selection and upgrade.</p> <p>Continue to move server infrastructure to virtualization and standardized platforms (i.e. re-platform from Solaris to Linux).</p> <p>Examine case for a renewed large scale, low cost storage (“archive”) service</p> <p>Accelerate network infrastructure upgrades and improvements to support expanded mobile use and readiness for VOIP etc.</p>

	<p>d. Databases used by university applications to enable higher-performing applications and higher availability and resiliency.</p> <p>e. Campus expansion and renovation</p> <p>4. Continually assess technologies and solutions for optimum cost effectiveness and considerations of environmental sustainability.</p> <p>5. Adopt a fault-tolerant and resilient operational environment for the ICT infrastructure.</p> <p>6. Adopt leading University practices for financial and HR planning and management, fostering greater line manager accountability in these areas.</p> <p>7. Put effective measures in place to ensure appropriate controls (e.g. for asset management) and compliance with University policy and external (e.g. license) agreements.</p>	<ul style="list-style-type: none"> • Multiple building/location access layer upgrades (e.g. Scott, Ross, HNES) • Complete border router upgrade (ongoing) • Expanded and enhanced wireless service – including access point renewal; 802.1x introduction; “AirYork Help” SSID and improved support documentation. • Upgrades for network resiliency (including Glendon WAN (carried forward)). • WAN upgrades and extensions (e.g. Nadal, Osgoode PDC, Glendon) • Simplify network through elimination of aging/obsolete services and technology (e.g. Appletalk, 802.11b) • Re-introduce IP address management delegation capability (contingent upon vendor feature availability). • Introduction of first phase of IPV6 support <p>#4 – Work with IT council on principles and standards related to IT and environmental sustainability. Identify key opportunities (e.g. local printers) (carry forward).</p> <p>Complete thin client pilot and develop plans that address opportunities for efficiencies and service improvement using thin clients.</p> <p>Deepen use of SCCM for desktop imaging and remote service delivery and improve FAS support for the MacOSX platform.</p> <p>Improved access management for active directory using Forefront Identity Manager (FIM) and pilot additional features of FIM</p> <p>Continue the incrementally roll out of VOIP service – focusing on implementations in line with renovations and moves.</p> <p>#5 - Complete upgrade of the central phone system to support VOIP</p> <p>Upgrade/restructure infrastructure supporting “central web service”</p>
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<p>6. Manage risk to the confidentiality, integrity, and availability of University data, applications, information, and communication systems.</p>	<ol style="list-style-type: none"> 1. Manage the health and sustainability of the University's software applications and making recommendations for improvement and retirement, facilitated by establishing an application portfolio management discipline. 2. Manage and monitor access to University data such as student, financial, and HR information, driven by comprehensive data classification and identity management disciplines. 3. Unify and extend University "directory services" to enable enhanced collaboration, flexibility and agility for the I.T. environment. 4. Implement systems with capabilities required for support of legislative and regulatory compliance, including privacy protection, security and industry information regulation. 5. Continually improve the security of York's information and communication systems through an information security program that includes monitoring, detection, and timely response for security incidents, regular testing for security vulnerabilities, consultation for secure system design and operation, promotion and awareness of security best practices within the University community. 6. Manage availability risk by evolving ICT capacity plans and disaster recovery plans to the changing requirements and priorities of the University. 	<p>#1 – Complete the update the current UIT application portfolio and extend the portfolio and analysis to include other University IT groups. (carried forward)</p> <p>#3 – Complete the implementation of FAS with an aim of a single active directory instance for all of York.</p> <p>#5 - Obtain and implement security awareness training.</p> <p>Implement improvements to processes for security management – centralized logging and monitoring; vulnerability management program and incident response</p> <p>Upgraded SSLVPN service and addition of mobile support.</p>
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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.