Empowering the University

This is a document intended to guide strategy and operations for information technology at Dalhousie University. It will provide a framework for ITS and information technology deployed and used across campus. It begins with a vision and guiding principles. Following are sections on what we do and how we do it.

This Plan recognizes that information technology is embedded in nearly all aspects of the university... teaching, learning, research, administration and recreation. It also acknowledges the average person has a wealth of information technology at their fingertips. Much of what used to be a distinct need for support by an IT organization is now commoditized and readily available as a consumer service. That means the IT organization needs to focus efforts and resources on technologies and strategies that lift Dalhousie toward strategic initiatives and disengage from providing services that may be offered elsewhere, cheaper, better and more efficiently. That will allow us to target finite resources where they have the greatest impact and help create an environment that helps set us apart from our comparators.

Our overall focus will be on service, advising and consulting, and the provision of networks, data, information and a communications infrastructure. In doing so, we will achieve a careful balance between the provision of information access with commensurate security protocols. We take our role in the protection of private information seriously.

Ultimately, we are not here for the business of technology. Rather, our goal is to empower the success of our constituents.
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Vision

Our vision is an Information Technology Services organization that

○ is strategically engaged with the university leadership.
○ partners with university organizations in pursuit of common goals and innovation.
○ empowers the success of those we serve.
○ invites and incorporates ongoing client feedback.
○ provides a blend of hosted and outsourced services.
○ provides consulting and project management services.
○ provides a data environment that promotes online services, good reporting and business intelligence.
○ has a strong, collaborative relationship with distributed IT support staff.
○ promotes and trains its professionals to be engaged with customers, to remain current with new and emerging technology skills, and to be accountable to the changing needs of the university.
○ practices responsible oversight of its assigned resources.
○ provides empowering tools and information.

Principles

We are guided by the following principles

○ Technologies should be aligned with the academic and business goals of the university.
○ Good stewardship over finite resources requires responsible management, both within and beyond ITS.
○ When and where feasible, applications from reliable, specialist providers are preferable and more cost-effective than in-house development and support.
○ Greater adherence to standards promotes higher levels of service and support.
○ Transactional data should be transformed to institutional knowledge.
○ The protection and security of sensitive and private information is paramount.
○ Individuals may and should be responsible for their own data and private information.
○ Responsibility for data and network security is the responsibility of everyone.
○ Technologies have short- and long-term costs. These need to be factored in when making decisions.
○ Software and hardware have life cycles. To make room for new, we need to let go of the old.
○ A strong ITS organization cannot be all things to all people. It defines core services and strives to perform them with excellence.
○ New technologies require change in habits and processes.
ITS Primary Functions

Client Services

Goal
Provide the tools and services to empower, support and promote innovation and self-service.

Objectives
- Identify and segment our client base to enable targeted offering of products and services.
- Coordinate Help Desk, repairs and desktop support for walk-in, phone-in, or click-in support.
- Continuously revitalize our product and service offerings.
- Simplify our services.
- Provide advice and consulting.
- Introduce service delivery processes that emphasize “one touch service” – resolve the issue on the spot.
- Manage expectations of clients and ITS service providers with Service Level Agreements (SLA’s).
- Continuously assess client needs and satisfaction.
- Keep the campus community informed of IT events, issues and services.

Academic Innovation & Support

Goal
Align technology and support resources to enhance innovation and greater flexibility in teaching and learning.

Objectives
- Develop an academic IT strategy by Spring 2011.
- Collaborate with Library and Centre for Learning & Teaching to enhance integrated services for faculty and instructors.
- Create a supportive environment and assign resources to experiment and absorb new and emerging technologies with application in the classroom.
- Support professional schools in accreditation processes.
- Create online forums to enhance communication with academic leaders.
Information Management

Goal
Provide secure, simplified access to online services, integrated information systems and business intelligence tools that support the operational and strategic needs of the university.

Objectives
- Establish an information management/business intelligence framework including:
  - Information management infrastructure and architecture
  - Information security
  - Legislative and regulatory compliance
  - Business intelligence infrastructure and architecture
- Align the information management strategy to Dalhousie’s strategic initiatives.
- Develop an information management and business intelligence roadmap with priorities, resources and deliverables.
- Develop an enterprise application inventory and review continuously to ensure the changing needs of the client base are being met.
- Define an ITS design methodology, development process and best practices.
- Provide project management and consulting services in support of the evaluation, acquisition, development and support of enterprise and integrated applications.
- Establish quality assurance (QA) standards and provide client QA consultation services for application development and upgrades.
- Follow the rule of ‘reuse before acquire before build.’

IT Infrastructure & Operations

Goals
Provide and contract for the systems and network architecture for reliable, secure, sustainable and responsive services upon which the university relies.

Objectives
- Provide ubiquitous access to Dalhousie networks and systems with best practices around security and protection.
- Seek cost savings through best practices and consolidation of efforts across the campuses.
- Develop server virtualization to reduce hardware, support costs and power consumption.
- Ensure appropriate identity management for constituents who access and use university information and network systems.
- Institute and maintain best practices for network security.
- Provide the IT Infrastructure, space, HVAC, UPS, monitoring and secure hosting for all Dalhousie information systems and servers, reducing distributed costs and redundant support.
- Oversee enterprise services and the network equipment to ensure the highest levels of service, consistent support and appropriate security.
○ Explore potential partnerships and/or service level agreements for new systems and acquisitions both internal and external to Dalhousie.
○ Increase hardware and system standardization by embracing industry-recommended applications and supporting mainstream, standardized equipment.
○ Maintain regional expertise and leadership in supporting ACORN, CANARIE, ACEnet and ISInet.
○ Update and test disaster recovery plans.

Unified Communications

Goal
Provide a set of dynamic tools and infrastructure to enable communication, collaboration and community within and beyond the university.

Objectives
○ Establish a dynamic, interactive and informative web environment that presents Dalhousie at its best to prospective students, faculty and staff, and external constituents seeking information from the university community.
○ Provide a rich web portal within which services, information and resources are presented based on established roles.
○ Institute one, simplified calendar system that everyone can use.
○ Provide a document and content storage management system that integrates needs of external and internal webs, along with extended use by the larger campus community.
○ Develop collaborative online workspace where students, faculty and staff may write, post, share and edit documents.
○ Establish a communications and personal information management system that allow individuals substantial tools and storage for email, calendar and personal information management, seamlessly and securely integrated for use and access anytime, anywhere, from any device.
○ Provide a versatile emergency communications infrastructure.
ITS Priorities

Culture of service that empowers the success of others

Goal
Instil a culture of integrated ITS units that are focussed on the success of our clients by understanding their needs, priorities, challenges and various perspectives.

Objectives
- Establish an ITS service training program.
- Implement systems for ongoing client feedback.
- Institute organizational and individual performance objectives that are directly tied to client satisfaction and Dalhousie’s measures of success.
- Establish cross-functional service teams that are accountable for identifying and acting upon opportunities to improve client services.
- Create and continuously refine a robust portfolio of easy-to-use communication tools and techniques, and ensure IT staff members are fluent in their use.

Project Management

Goal
Promote project management methodology to foster responsible, effective management and implementation of new technologies

Objectives
- Create a central ITS coordination role for project management training, development and coordination.
- Develop a project management training program for ITS and IT staff across campus.
- Conduct two, 3-month hybrid training sessions in project management each year.
- Serve as consultants and project managers within ITS and among other Dalhousie departments.
- Create a culture of PM with mentoring and coaching for new and aspiring project managers.
- Provide and support a scalable project management approach that can be used at both the department and enterprise level.
- Create a knowledge base environment that promotes best practices and resources for project managers and trainees.
- Develop project portfolios in key units within ITS.
- Integrate the ITS project management program with that of Facilities Management.
- Present ITS program and approach to instilling a culture of project management at AUCTC and other professional associations.
Process Integration

Goal
Improve the university’s return on investment in enterprise processes and systems through process improvement and systems implementation.

Objectives
- Facilitate business process integration
  - Promote the benefits of integration and the university wide perspective
  - Maintain an ongoing “Integration Team” to provide a forum for resolution of cross system issues
  - Advocate the usage of university-wide system standards
  - Communicate/publish process integration information
  - Manage and support the development of integrated university wide information systems projects

- Promote organizational efficiencies, continuous improvement and change management
  - Conduct business process analysis for university offices and departments
  - Establish methodology and implementation process
  - Provide ongoing training and support
  - Advocate the use of cost benefit analysis
  - Facilitate integrated process improvement efforts
  - Provide integration/analytical support for strategic/decision making activities and project prioritization initiatives.

Data Stewardship & Security

Goal
To protect the confidentiality, integrity and availability of the university's data and the systems used to store and transmit it.

Objectives
- Work with the Integration Policy Advisory Committee in ongoing reviews and execution of the Data Administration Policy.
- Perform the general custodianship of general person data used by all information systems.
- Perform biennial risk and vulnerability assessments and develop appropriate risk mitigation plans.
- Integrate information security practices and principles into IT projects and new services.
- Establish guidelines and standards for hosting and accessing sensitive and private information.
- Provide information security consulting services throughout the university community.
- Publish monthly articles on security issues and university employee responsibilities.
- Cooperate with auditors, legal experts, and others tasked with ensuring ITS meets its security obligations.
Communications

Goal
Keep the university informed of IT issues, services and events, and allow for ongoing feedback.

Objectives
- Inform the university community of changing technologies, services and other matters associated with information technology.
- Maintain an ITS blog that highlights services and issues.
- Develop internal, dynamic communication methods that keep various IT staff (both in ITS and beyond) informed and working together.
- Maintain communications infrastructure for emergency and urgent notifications to the university.
- Manage media relations for ITS.

Sustainability

Goal
Introduce continual practice and improvements in university technologies that reduce energy consumption, lower cost and manage the outflow of old technology equipment.

Objectives
- Centralize university servers in either the Killam or Sexton data centers.
- Introduce virtual memory-ware (virtualization) and transition from one server per one application.
- Expand leasing arrangements for servers and desktop computers, allowing for regular and planned equipment revitalization as well as disposal.
- Introduce thin client computing for labs and select faculty and administrative units.
- Meter energy consumption in Killam and Sexton data centers and develop incentives for energy-reduction practices.
- Explore options for harnessing heat product of data centers and utilizing it elsewhere.
- Introduce central, remote management of university desktop and lab computers to maintain control over power settings and other energy-saving practices.
- Work with Purchasing Services and the Office of Sustainability to reduce the use of stand-alone office equipment and enhance business process efficiency.
- Institute purchasing practices that promote and prioritize energy-saving products.
- Work with Office of Sustainability in the ongoing assessment and evaluation of good sustainability practices.
Professional Development

Goal
Develop our people with the skills to match current and emerging university needs, and develop career paths for growth and sustainability.

Objectives
- Facilitate career goal and objective planning with employees on an annual basis
- Develop internal, ongoing programs for IT professionals in:
  - Project management methodology
  - Customer service
- Promote professional development activities offered through professional associations.
  - EDUCAUSE
  - CUCCIO
  - AUCTC
  - NERCOMP
  - Others
- Identify and develop individuals who demonstrate potential for project leadership, manager and leadership roles.
- Target employment equity and the recruitment, retention and promotion of under-represented groups

Strategic Planning & Consulting

Goal
Provide strategic planning and consulting for university in support of strategic goals and objectives.

Objectives
- Provide needs assessment and analysis services to university departments and faculties considering new technologies.
- Write proposals and reports that provide options, solutions and recommendations based on the needs requirements.
- Engage executives at the strategic level to understand goals and objectives of the university.
- Identify areas of redundant technologies and support and develop proposals to centralize.
- Remain current with changes occurring in the industry.