



Information Technology Governance & Collaboration Framework

Enabling effective decision-making and collaboration at Memorial

Office of the Chief Information Officer

Version 1.0

Draft Revision History		
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1. Overview

An effective governance and collaboration framework ensures the *right people* are talking to each other with the *right information* to make the *best decisions* possible. Memorial's IT Governance and Collaboration Framework defines organizational structures and processes enabling academic, administrative and IT leaders to make informed decisions based on institutional objectives. This recommended framework was developed by the IT Governance Working Group, a committee of Vice Presidents Council. Appendix A lists the working group members and Appendix B outlines the framework development process to date.

The goals of the framework include improved alignment of IT strategy and investment to Memorial's academic mission and priorities, and improved IT decision-making across the university.

With Memorial's IT Governance and Collaboration Framework:

- Decision-making will be transparent and aligned to overall university priorities, while considering individual unit and campus requirements, and respecting Memorial's multi-campus model.
- Representation from appropriate stakeholders will be incorporated to inform decision-making.
- Appropriate assessments of investment decisions and technology solutions will be conducted.
- Coherent planning and decision-making will occur.
- Resource allocation will be better understood and more efficient.
- Less-resourced areas will have improved access to IT support and tools.
- Risk associated with technology solutions will be reduced, improving the ability to comply with legislation and protect information.

This framework is a step towards improving IT decision-making and planning through collaboration. It will be reviewed regularly and updated as required. The framework aims to facilitate coordinated planning to increase success and to ensure the optimal use of limited resources.

2. Principles for IT Governance and Collaboration at Memorial

IT Governance and Collaboration at Memorial is based in [Memorial's Core Values](#) of integrity, excellence, responsiveness, accountability and collegiality.

Effectiveness

IT governance and collaboration enables the most effective use of IT resources. Decisions are made by balancing short term and individual requirements with those that are longer-term or that may affect the entire institution. The needs of learners, educators, researchers, administrators and other members of the community are key considerations in IT decisions.

Partnership

Effective IT governance and collaboration depends on strong partnerships. The strengths of a federated IT service delivery model and a multi-campus structure will be leveraged to create synergies, consider the impacts of decisions on individual units and the university as a whole, reduce duplication of effort and solutions, and share best practice.

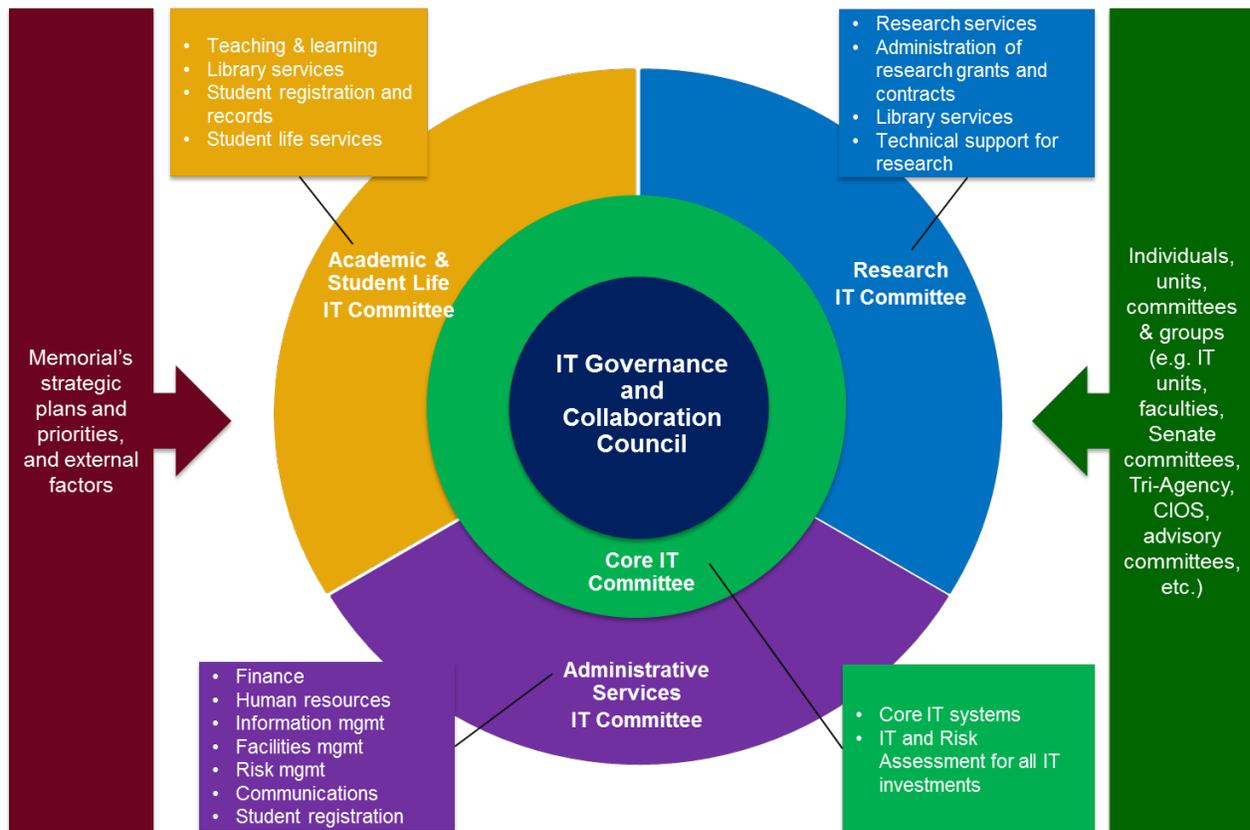
Stewardship

IT investments and priorities are determined within the governance and collaboration framework, in which coherent decisions lead to sustainable solutions. IT investment is considered using common criteria and is prioritized according to common principles.

3. Framework Structure

The IT governance and collaboration framework structure is designed to enable the discussion of initiatives, challenges and priorities within a functional context. There are four committees representing the areas of academic and student life, research, administrative services, and IT infrastructure. The IT Governance and Collaboration Council, a committee of Vice-Presidents Council is chaired by the CIO and comprised of the chairs of the four committees and other key stakeholders. It is the body accountable for recommending IT policies, strategies and overall IT governance.

In addition to the committees within the formal framework, other committees and councils exist which will provide input, propose initiatives and have an impact on IT governance and collaboration at Memorial. These include, for example: Deans Council, the Senate Committee on Teaching and Learning, the Senate Committee on Research, and the Joint Managers Group, among others.



3.1 IT Governance and Collaboration Council

Authority

The IT Governance and Collaboration Council is established under the authority of Vice-Presidents Council (VPC) as a subcommittee of VPC. It is the senior body accountable for recommending university IT policies, strategies and overall governance. Its purpose is to oversee and make improvements to the university's IT Governance and Collaboration Framework and to provide advice and make recommendations to the CIO or Vice Presidents Council with respect to IT at Memorial.

Mandate

The Council is responsible to:

- Ensure decisions are aligned strategically with institutional priorities
- Provide stewardship for those components of the university's IT investment portfolio which are within the parameters of the IT Governance and Collaboration Framework
- Receive and address key issues, decisions, and recommendations from the IT governance and collaboration committees, and other relevant committees and councils
- Refer issues, questions and plans to IT governance and collaboration committees for further study, review and/or recommendation
- Finalize investment decisions and make recommendations to the CIO
- Determine the overall priorities by combining the prioritized investment portfolios from each of the IT governance and collaboration committees
- Ensure that the framework is regularly reviewed and improved, as required
- Provide regular updates to Dean's Council on IT investments, policies, and plans

Membership

Chair

The Chair shall be the Chief Information Officer of Memorial University. The Associate Vice-President Finance and Administration, Marine Institute will serve as Interim Chair until the appointment of a new CIO.

Council

- Chairs of each of the IT governance and collaboration committees
- Associate Vice-President (Finance and Administration), Grenfell Campus
- Associate Vice-President (Finance and Administration), Marine Institute
- Associate Vice-President (Research)
- Representation selected by Deans' Council*
- Chief Operating Officer, Faculty of Medicine
- Director, Centre for Innovation in Teaching and Learning
- Director, Information Management and Protection
- University Librarian
- Director of Student Life
- Director of Research Grant and Contract Services
- University Registrar
- Director of IT Services, St. John's Campus

- Associate Vice-President (Academic), Programs, Complement Planning and Development
- University Access and Privacy Officer, Office of the CIO
- Director of Operations, Office of the Vice-President Finance and Administration
- Manager of Strategy, Planning and Liaison, Office of the CIO (non-voting)

* Representatives will be selected by Deans' Council after consultation about objectives and requirements. Representatives on the ITGC Council will serve a two-year term and provide regular updates to Deans' Council.

Input

The committee will seek expertise and receive recommendations from the following, including but not exclusive to:

- Executive
- Senate
- Senior Academic and Administrative Group (SAAG)
- Leadership Group (Grenfell Campus)
- Executive Forum (Marine Institute)
- Senior Management Committee, Faculty of Medicine

Support

The Manager of Strategy, Planning and Liaison, Office of the CIO provides administrative and logistical support by serving as the Secretary to the Council and custodian of the Council's records.

Operations

Agenda Setting

Agendas shall be developed by the Secretary, in collaboration with the Chair. Agenda items shall be solicited in advance of the meeting from Council members. Agendas shall be circulated to Council members at least 5 working days prior to Council meetings. A standing agenda item will include a review of the overall IT investment portfolio, including any new proposals added to it.

Frequency of Meetings

The Council meets four times per year during October, February, May and August, or upon the call of the Chair.

Decision Making

Formal decisions are determined by consensus. For critical decisions on which consensus cannot be reached, decisions will be made by a majority vote. A majority of the committee is required for a quorum.

Reporting

The Council will report to VPC quarterly, or at the request for VPC. The Council will provide an annual report to the University Community.

3.2 Academic and Student Life IT Committee

Authority

The Academic and Student Life IT Committee is a subcommittee of the IT Governance and Collaboration Council. Its purpose is to recommend and prioritize academic and student IT investments (new and enhancements) that align with the operational and strategic needs of the university.

Mandate

The Academic and Student Life IT Committee discusses priorities and requirements for systems used in teaching and learning such as (but not limited to) computer labs, educational technology, and student administration and support systems. Responsibilities include:

- Develop and maintain an inventory of IT products and services used for academic and student life
- Evaluate and determine the priority of IT investment proposals within the Academic and Student Life IT Investment Portfolio
- Propose IT policies, standards, guidelines, and procedures related to academic and student support
- Foster communication and share expertise on IT issues and practices

Membership

Chair

The Chair shall be selected by the committee and serve a two-year term. The first Chair of the Committee will be the Director Centre for Innovation in Teaching and Learning.

Committee

- Up to three representatives selected by Deans' Council*
- One representative from each:
 - Office of the Registrar
 - Student Life
 - Student Residences
 - Centre for Innovation in Teaching and Learning
 - Faculty of Medicine
 - Grenfell Campus
 - Marine Institute
 - Memorial Libraries
 - Ancillary Operations
 - IT Student Services Advisory Committee
 - MUN Student Union
 - Graduate Student Union

* Representatives will be selected by Deans' Council after consultation about objectives and requirements.

Term

The IT Governance and Collaboration Council, in consultation with units from which members are appointed, will appoint Committee members for an initial two-year term, with the potential to be renewed for one additional term of one year. Members may also be re-appointed, replaced or staggered by the IT Governance and Collaboration Council to ensure continuity.

Input

The committee will seek expertise and receive recommendations from the following, including but not exclusive to:

- Senate Committee on Teaching and Learning
- The Commons Management Committee
- Units/unit heads
- University Access and Privacy Officer

Support

An Office of the CIO staff member provides administrative support to the Committee by serving as the Secretary and custodian of the Committee's records.

Meetings

Agenda Setting

Agendas shall be developed by the Secretary, in collaboration with the Chair. Members of the Committee may propose agenda items to be discussed in Committee meetings. Agenda items may also be suggested by anyone in the university community (e.g. non-committee members) by directly contacting the Chair or the Office of the CIO. Agendas shall be circulated to Committee members at least 5 working days prior to Committee meetings. A standing agenda item will include a review of new investment proposals received since the previous meeting.

Frequency of Meetings

The Committee shall meet bi-monthly or upon the call of the Chair.

Decision Making

Formal decisions are determined by consensus. For critical decisions on which consensus cannot be reached, decisions will be made by a majority vote. A majority of the committee is required for a quorum.

Reporting

The Committee will report to the IT Governance and Collaboration Council monthly, or at the request of the Council.

3.3 Research IT Committee

Authority

The Research IT Committee is a subcommittee of the IT Governance and Collaboration Council. Its purpose is to recommend and prioritize research IT investments (new and enhancements) that align with the operational and strategic needs of the institution.

Mandate

The Research IT Committee focuses on the varied needs of researchers at Memorial including, but not limited to research data centres, high performance computing services, support systems, tools, and data storage and backup. Responsibilities include:

- Develop and maintain an inventory of IT products and services used for research
- Evaluate and determine the priority of IT investment proposals within the Research IT Investment Portfolio
- Propose IT policies, standards, guidelines, and procedures related to research
- Foster communication and share expertise on IT issues and practices

Membership

Chair

The Chair shall be selected by the committee and serve a two-year term. The first Chair of the Committee will be the Director Research Grant and Contract Services.

Committee

- Up to two representatives selected by Deans' Council*
- Up to two representatives selected by Senate Committee on Research
- One representative from each:
 - Research Grant and Contract Services
 - CREAT, CRC and CFI Services
 - Memorial Libraries
 - Marine Institute
 - Grenfell Campus
 - Faculty of Medicine
 - Office of the CIO
 - ACENET
 - IT Student Services Advisory Committee
 - Graduate Student Union

* Representatives will be selected by Deans' Council after consultation about objectives and requirements.

Term

The IT Governance and Collaboration Council, in consultation with units from which members are appointed, will appoint Committee members for an initial two-year term, with the potential to be renewed for one additional term of one year. Members may also be re-appointed, replaced or staggered by the IT Governance and Collaboration Council to ensure continuity.

Input

The committee will seek expertise and receive recommendations from the following, including but not exclusive to:

- Senate Committee on Research
- Faculty Councils
- CREAT, CRC and CFI Services
- Centre for Health Informatics and Analytics (CHIA)
- Research units at Marine Institute
- Units/unit heads
- University Access and Privacy Officer

Support

An Office of the CIO staff member provides administrative support to the Committee by serving as Secretary and custodian of the Committee's records.

Operations

Agenda Setting

Agendas shall be developed by the Secretary, in collaboration with the Chair. Members of the Committee may propose agenda items to be discussed in Committee meetings. Agenda items may also be suggested by anyone in the university community (i.e. non-committee members) by directly contacting the Chair or the Office of the CIO. Agendas shall be circulated to Committee members at least 5 working days prior to Committee meetings. A standing agenda item will include a review of new investment proposals received since the previous meeting.

Frequency of Meetings

The Committee shall meet bi-monthly or upon the call of the Chair.

Decision Making

Formal decisions will be determined by consensus. For critical decisions on which consensus cannot be reached, decisions will be made by a majority vote. A majority of the committee is required for a quorum.

Reporting

The Committee will report to the IT Governance and Collaboration Council monthly, or at the request of the Council.

3.4 Administrative Services IT Committee

Authority

The Administrative IT Committee is a subcommittee of the IT Governance and Collaboration Council. Its purpose is to recommend and prioritize administrative IT investments (new and enhancements) that align with the operational and strategic needs of the institution.

Mandate

The Administrative IT Committee prioritizes and identifies requirements for systems that support finance, budget, human resources, pensions, facilities management, development/advancement and ancillary operations. Responsibilities include:

- Develop and maintain an inventory of IT products and services used for administrative services
- Evaluate and determine the priority of IT investment proposals within the Administrative Services IT Investment Portfolio
- Propose IT policies, standards, guidelines, and procedures related to administrative services
- Foster communication and share expertise on IT issues and practices

Membership

Chair

The Chair shall be selected by the Committee and serve a two-year term. The first Chair of the Committee will be the Associate Vice-President Finance and Administration, Marine Institute. However, the Director of Operations, Office of the Vice-President Finance and Administration will be the Interim Chair until the appointment of a new CIO.

Committee

- One representative from each:
 - Office of the Vice-President Finance and Administration
 - Office of the Vice-President Academic and Provost
 - Office of the President
 - Human Resources
 - Finance and Administration
 - Facilities Management
 - Office of the Chief Risk Officer
 - Marine Institute
 - Grenfell Campus
 - Faculty of Medicine
 - Alumni Affairs
 - Office of the CIO
 - Office of the Registrar
 - Marketing & Communications
 - Centre for Institutional Analysis
 - Budget Office
 - Office of Public Engagement
 - Department of Technical Services

Term

The IT Governance and Collaboration Council, in consultation with units from which members are appointed, will appoint Committee members for an initial two-year term, with the potential to be renewed for one additional term of one year. Members may also be re-

appointed, replaced or staggered by the IT Governance and Collaboration Council to ensure continuity.

Input

The committee will seek expertise and receive recommendations from the following, including but not exclusive to:

- IT Services
- Joint Managers Group
- Units/unit heads
- University Access and Privacy Officer

Support

An Office of the CIO staff member provides administrative support to the Committee by serving as Secretary and custodian of the Committee's records.

Operations

Agenda Setting

Agendas shall be developed by the Secretary, in collaboration with the Chair. Members of the Committee may propose agenda items to be discussed in Committee meetings. Agenda items may also be suggested by anyone in the university community (e.g. non-committee members) by directly contacting the Chair or the Office of the CIO. Agendas shall be circulated to Committee members at least 5 working days prior to Committee meetings. A standing agenda item will include a review of new investment proposals received since the previous meeting.

Frequency of Meetings

The Committee shall meet bi-monthly or upon the call of the Chair.

Decision Making

Formal decisions will be determined by consensus. For critical decisions on which consensus cannot be reached, decisions will be made by a majority vote. A majority of the committee is required for a quorum.

Reporting

The Committee will report to the IT Governance and Collaboration Council monthly, or at the request of the Council.

3.5 Core IT Committee

Authority

The Core IT Committee is a subcommittee of the IT Governance and Collaboration Council. Its purpose is to recommend and prioritize IT infrastructure investments (new and enhancements) that align with the operational and strategic needs of the institution.

Mandate

The Core IT Committee is responsible for providing and/or coordinating technical reviews to ensure technology solutions align with Memorial's information technology and information management policy and standards framework and practices.

The Core IT Committee focuses on enterprise IT infrastructure which encompasses centrally coordinated, shared IT services that provide the foundation for the university's IT capability. These services include the networks (wired and wireless), firewalls, security, data centres, virtual and physical servers, storage, databases, enterprise directories, and applications used across the university such as DNS, DHCP, videoconferencing tools, authentication systems, and email. This Committee provides an opportunity for increasing efficiency, adopting best practices, complying with legislation, and reducing risk by defining IT integration and standardization requirements, and enabling shared services across the university.

Additional responsibilities include:

- Develop and maintain an inventory of core IT products and services
- Evaluate and determine the priority of IT investment proposals within the core IT Investment Portfolio
- Propose IT policies, standards, guidelines, and procedures related to core IT and/or information protection and security
- Foster communication and share expertise on IT issues and practices
- Provide and/or coordinate technical, operational and compliance reviews
- Decision-making for IT architecture, practices, policies and operations
- Plan for future infrastructure requirements

Membership

Chair

The Chair shall be the Director, IT Services, St. John 's Campus.

Committee

- Director, Information Management and Protection
- Director, IT Services, Grenfell Campus
- Manager, Information and Communications Technology, Marine Institute
- Director, HSIMS, Faculty of Medicine
- Associate University Librarian, HSL & LITS, Memorial Libraries
- Manager, Operations, CREAT
- Associate Director, Centre for Innovation in Teaching and Learning

- Director, Centre for Health Informatics and Analytics
- Systems Manager, Department of Computer Science (Labnet)

Input

The committee will seek expertise and receive recommendations from the following, including but not exclusive to:

- CIOS IT Forum
- Identity and Access Management Advisory Committee
- University Access and Privacy Officer
- Units/unit heads

Support

An Office of the CIO staff member provides administrative support to the Committee by serving as Secretary and custodian of the Committee's records.

Operations

Agenda Setting

Agendas shall be developed by the Secretary, in collaboration with the Chair. Members of the Committee may propose agenda items to be discussed in committee meetings. Agenda items may also be suggested by anyone in the university community (e.g. non-committee members) by directly contacting the Chair or the Office of the CIO. Agendas shall be circulated to Committee members at least 5 working days prior to Committee meetings. A standing agenda item will include a review of new investment proposals received since the previous meeting.

Frequency of Meetings

The Committee shall meet monthly or upon the call of the Chair.

Decision Making

Formal decisions will be determined by consensus. For critical decisions on which consensus cannot be reached, decisions will be made by a majority vote. A majority of the committee is required for a quorum.

Reporting

The Committee will report to the IT Governance and Collaboration Council monthly, or at the request of the Council.

4. IT Investment Decision-Making

All IT investment decisions should be made in accordance with the [Principles for IT Governance at Memorial](#) and the [IT Project Approval Policy](#) (recommended to be revised). Certain types of investment decisions should not be made unilaterally, and require the input of a broad set of appropriate stakeholders to ensure alignment with university priorities, appropriate risk management, and overall accountability.

4.1. IT Investment Categorization

Category 1 IT investments are those that are not significant at a level which makes them meet any of the criteria for Category 2 IT investments. Category 1 investment decisions may be made at the unit level in accordance with purchasing and other applicable policies and practices.

Examples of Category 1 IT investments include desktop computers and peripheral devices, mobile devices (e.g. laptops, smartphones and tablets), websites or web applications that do not require authentication or databases, and lab-based software and hardware.

Category 2 IT investments require an IT investment proposal that is reviewed and approved within the IT Governance and Collaboration Framework through the investment review processes. IT solutions are also reviewed to ensure alignment with Memorial's IT and information management policies, standards and practices.

Category 2 investments meet one or more of the following criteria:

- Requires more than 20 person days of effort from Office of the CIO resources
 - This includes time required from
 - IT Procurement Office for procurement;
 - Information Management and Protection to complete the appropriate security and/or Cloud assessments;
 - Information Access and Privacy to complete privacy assessments; and
 - IT Services to analyze, design, configure and/or customize a solution.
- Requires integration with core university networks and/or infrastructure
 - This includes IT investments that require
 - Modifications to network configuration and design
 - Changes in security practices, settings and/or rules
 - The movement of large amounts (e.g. TBs) of data over the network
 - Access to data centre services (servers, storage, databases, etc.)
- Requires data and/or system integration, and/or sharing of data between multiple campuses, units, communities and/or systems
 - This includes IT investments that require
 - Integration with enterprise authentication systems
 - Data integration with systems of record (e.g. Banner, Campus Card) or administrative systems
 - The creation and management of accounts for access management
 - Online payment functionality

Examples of Category 2 IT investments include servers and data storage and backup; networking and telecommunications equipment, software and services; software to be installed on servers in the enterprise data centre and require data integration with systems of record or administrative systems; cloud-based services that require data integration with systems of record or administrative systems; products or services that has (or potentially has) broad use across the university; services and products that require firewall changes; new data centres or consolidation of existing data centres.

4.2. IT Investment Review

Category 2 IT Investments require the completion of an investment proposal which is evaluated by the relevant governance committee(s). Proposals may come from individuals, units, governance committees and/or other groups within Memorial. Proposed IT investments are selected and prioritized based upon the following criteria:

- How well proposal aligns with university priorities and needs
- Addresses legislative compliance
- Duplication of business solution
- Funding availability (one-time versus ongoing)
- Implementation effort
- Benefits of business solution
- Institutional risk

The IT Governance and Collaboration Council will receive the prioritized investment portfolios from the four governance committees, and combine them to determine the overall priority of proposed IT investments.

Once an IT investment proposal is approved, the proponent works with the Office of the CIO to determine the technology solution, if it has not been identified. During this process, business requirements are reviewed, existing potential solutions are discussed, data requirements are identified, and the end-user experience (if relevant) is determined. Additionally, a technical, operational and compliance review takes place to ensure the technology solution aligns with Memorial's IT and information management environment. During this process, relevant security, cloud and privacy assessments are completed; network requirements and integration requirements determined; licensing requirements and budget identified; and a plan for technology sustainability developed.

Appendix C contains a flowchart describing the review of Category 2 IT investments.

Appeals - Decisions of the IT Governance and Collaboration Council may be appealed to the CIO.

Exceptions - There will be situations where IT investments will need to take place and undergoing the standard IT investment review process will not be feasible. In the case of emergencies (e.g. a new function requires investment in technology quickly) and opportunities (e.g. funding becomes available from an external source with tight timelines and/or spending restrictions), a proponent must inform the appropriate Committee so that the exception can be documented. The Committee will then notify the IT Governance and Collaboration Council.

5. Policy Review Recommendation

It is recommended the [Information Technology Project Approval Policy](#) be updated and new procedures established to reflect the recommendations within this document. Consultation with the university community on the IT Governance and Collaboration Framework will take place in accordance with the university's Policy Framework Process. A *Proposal to Revise a Policy* will be provided to VPC for approval.

Appendices

Appendix A

IT Governance Working Group Members

Shelley Smith
Chief Information Officer (Chair)

Sean Cadigan
Associate Vice-President (Academic), Programs, Complement Planning and Development

Gary Bradshaw
Associate Vice-President, Administration and Finance, Marine Institute

Scott Porter
Associate Vice-President, Administration and Finance, Grenfell Campus

Su Cleyle
University Librarian

Jennifer Porter
Interim University Registrar

Steve Greene
Director, Information Technology Services (St. John's Campus and Enterprise IT Services)

Jennifer Massey
Director, Student Life, Office of the Deputy Provost Students

David Miller
Director, Research Grant and Contract Services

Cathy Vardy
Vice-Dean, Faculty of Medicine

Robert Wells
Interim Director, Centre for Innovation in Teaching and Learning

Sarah Arnott
Ex-Officio - Manager Strategy, Planning & Liaison, Office of the CIO (Support)

Appendix B

Background and development process

In June 2016, Shelley Smith, Chief Information Officer presented to Vice Presidents' Council (VPC) on why Memorial needs improved IT decision-making and collaboration. At the time this document was written, IT strategy and investment is prioritized and implemented by individual units and campuses. IT investment decisions are often made without adequate assessment or consideration for long term costs and impacts; there is significant duplication and lost opportunity for efficiency or sharing of tools and resources; units with independent resources make independent decisions and units with less access to resources are underserved. Many stakeholders have no transparent way to influence decision-making about IT investment and priorities.

In November 2016, VPC formed the IT Governance Working Group to develop a framework for transparent and effective IT decision-making. From January to March 2017, the working group met on a regular basis to develop a draft framework for consultation.

During the development of the framework, a significant amount of best practice research and consultation was conducted, including:

- Attended an EDUCAUSE workshop titled *Building Successful IT Governance, Portfolio, and Project Management Processes* in October 2015
- Conducted a survey of existing IT governance frameworks at several universities, including Queen's University, University of Victoria, University of British Columbia and University of Manitoba
- Compiled and read a variety of reference material including the [Higher Education IT Governance Checklist](#) and other EDUCAUSE resources, and a variety of research briefs from the Educational Advisory Board's IT Forum
- Discussed and consulted with Dr. Taylor Holubar, Senior Analyst, EAB Strategic Research, Educational Advisory Board

Appendix C: Standard IT Investment Review

