Algonquin College

Risk Profile 2011-12

May 3, 2012

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1.0 Executive Summary

1.1 Introduction

In today's environment, the need for effective risk management to promote good governance and demonstrate accountability is critical. Algonquin College ("the College") wants to clearly understand its key risks and ensure that appropriate mitigation plans are in place. Within this context, the objective of this initiative was to develop a Risk Profile for the College to more formally define the current risks to which the College is exposed. These risks can also be seen as opportunities for improvement and development or activities that the College should be undertaking (i.e. missed opportunities). The purpose of this Risk Profile is to enable management to identify and understand the potential risks to the achievement of the College's objectives and to determine the exposure to these risks given current controls, enablers and/or mitigation activities. In addition, the Risk Profile is a key tool in the strategic planning process, enabling the College to make informed decisions based on risk information.

The assessment of risks presented in this report is a reflection of the organization's risks at this point in time. The Risk Profile will need to be continuously managed and monitored by management to enable the organization to proactively address its risk exposure.

1.2 Approach

The process used to develop the Risk Profile followed a recognized methodology for risk assessment. Using the College's previous risk profile as a starting point, a risk universe was developed (refer to Appendix C) to facilitate the identification of key risks/opportunities through a series of interviews with executive-level managers (i.e., President, Vice Presidents (VPs), Deans, and Directors). In addition, online surveys were created in order to capture risk information from a broader set of the College's Managers and Directors. The information collected through the interviews and online surveys was analyzed, in order to identify key risks for the College within the broader risk universe. With the key risks identified, a risk assessment workshop was held with the College's executive-level management in order to assess the impact and likelihood of the identified risks.

1.3 Overall Results

Based on the risk assessment process, six key risk areas have been identified that require continued focus given the potential risk exposure:

- **IT Infrastructure:** Inadequate information technology (e.g. hardware, networks, software, people and processes) to effectively support requirements and maintain the College's competitive advantage.
- **Knowledge Management:** Knowledge management practices are insufficient/inappropriate in order to support informed decision making and otherwise maintain the corporate memory of the College.
- **Program Development:** Resource requirements, potential demand, and time to deploy are not sufficient to develop and launch new academic programs.
- **Automated Services:** The College does not take advantage of automated services available or automated services provided do not meet client expectations or demonstrate a level of client service acceptable to the College, including at peak times.
- **Labour Relations:** Poor relations or changes occur within the work environment that lead to conflicts involving labour unions, thereby disrupting normal operations.
- **Change Readiness:** Employees are unable to implement process and program/service improvements quickly enough to keep pace with changes in the marketplace.

1.4 Next Steps

The College's senior management recognizes that developing the Risk Profile does not complete the risk management process, as key risks identified need to be managed on an on-going basis. The recommended next steps for the College are to:

- Approve the Risk Profile, confirming which risks are acceptable to the organization and which are not, and thus require focused management attention;
- Identify and put in place "risk owners" who will be accountable for conducting further "root-cause" analysis of the high exposure risks, complete identifying and implementing relevant risk mitigation activities to provide tangible feedback on the College's risk exposure on an ongoing basis; and,
- Implement a process using existing governance structures for ongoing monitoring and reporting on the progress of risk mitigation activities and results. This would also include the development of a risk management policy.

2.0 Introduction and Approach

2.1 Background

In today's environment, the need for effective risk management to promote good governance and demonstrate accountability is critical. The College wants to clearly understand its key risks and ensure that appropriate mitigation plans are in place. Within this context, the objective of this initiative was to develop a Risk Profile for the College to more formally define the key risks to which the College is exposed.

The purpose of the risk assessment process undertaken was to enable management to identify and understand the potential risks to the achievement of the organization's objectives and to determine the exposure to these risks. The risk assessment process conducted was designed to assist management in developing strategies to address those risks considered to be most significant to the successful achievement of the College's objectives. As a critical component of the corporate planning process, the risk profile will be used as the foundation for additional key documents, such as the Risk-based Internal Audit Plan (RBAP).

The assessment of risks presented in this report is a reflection of the organization's risks at this point in time. The Risk Profile will need to be continuously managed and monitored by management to enable the organization to proactively address its risk exposure.

2.2 Importance of Risk Management

In today's environment, there is a need for effective risk management to promote good governance and demonstrate accountability. Enterprise Risk Management is a comprehensive and systematic approach to understanding, communicating and managing risk from an organizational perspective. Enterprise risk management provides a clear and structured approach to identifying, assessing and documenting key risks in order to apply due diligence in managing and mitigating risks on an ongoing basis. Having a clear understanding of key risks allows an organization to measure and prioritize them and take the appropriate actions to reduce exposure.

Risk: A risk is defined as something that could impact the College's ability to execute its strategies and/or achieve its objectives, either because there are some activities that the College may not be doing well, or because there are activities that the College should be undertaking (i.e. missed opportunities).

Risk Management: Risk management refers to a coordinated set of activities and methods that is used to direct an organization and to control the many risks that can affect its ability to achieve objectives.

Generically, the risk management process can be thought of as a series of inter-connected and inter-related steps that are repeatable and verifiable. It offers a systematic way to structure the identification, assessment, response, communication and monitoring of significant risks through an established governance structure. In addition to assisting individuals in their day-to-day decision-making, such a process can also bring a strategic and comprehensive focus to addressing the broader key risks that require sustained attention by senior management in any organization.

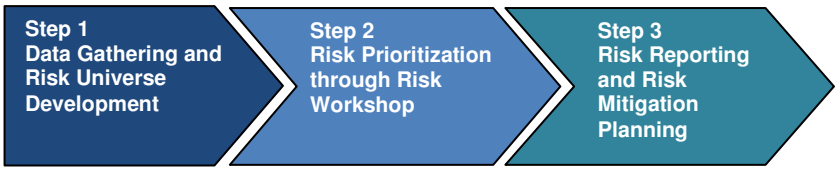
In the risk management process, it is important to maintain an appropriate balance between managing negative impacts of risks while also establishing a culture of strategic risk-taking in seeking opportunities to be innovative.

Risk management can have other benefits for the organization, including:

- improving performance through more informed priority setting, decision-making and resource allocation;
- contributing to building a risk-smart workforce and environment that allows for innovation and responsible, informed risk-taking while ensuring legitimate precautions are taken to maintain public trust, and ensure due diligence;
- assessing if appropriate controls and enablers are in place to mitigate the potentially adverse impacts of risk; and,
- Enhancing the ability to prepare for various circumstances and increasing the stability of operations.

2.3 Overview of Approach

The approach to determine the College's risk profile is described in detail in **Appendix A** and consisted of three distinct steps, as illustrated below:



The process followed a recognized methodology for risk assessment. Key risks/opportunities were first identified through interviews with executive level managers (i.e., President, VPs and Directors). This step assisted in the development of Algonquin's Risk Universe, which included detailed risk statements (see **Appendix C**). Following this, a risk assessment workshop was held with the College's executive-level management to assess the impact and likelihood of the identified risks (Step 2). Information gathered from the workshop and discussions is included in **Appendix B**, as well as a Heat Map in **Appendix D**. A list of risk workshop participants is included in **Appendix G.**

3.0 Risk Assessment Results

The following section provides a high level overview of the results of the risk assessment process.

3.1 General Risk Results

As illustrated in Table 1, sixteen risks were assessed and discussed at the risk assessment workshop held on April 2, 2012. A total of 6 risks (out of 16) were rated by participants as high risks, indicating that the executive-level management group perceived these risks as having a high probability of occurrence and/or a considerable negative impact if they occurred. These risks were found to be in some of the College's key business areas, including a concentration in the "Empowered People" pillar from the strategic plan. Findings suggest that the controls and activities in place specifically for these risk areas were not considered by management to be sufficient.

Approximately a third of the risks received a 'medium' rating (5/16) and a 'low' rating (5/16). The medium exposure risks were concentrated in applied education and training as well as in the financial sustainability area. This indicated that financial planning and monitoring processes and processes around program deployment and development could be improved.

Areas with a 'low' rating, primarily in the students and staff category, were perceived to be adequately managed; the risks within this category were not likely to occur, or if they occurred, they would not have a significant impact on the College.

Table 1: Overall Risk Assessment Results

Risk Category	Specific Risk	Overall Risk Result
Applied Education and Training	Program Offering/Mix	**Medium**
	Program Development	**High**
	Enrolment Targets	**Medium**
	Experiential Learning	**Medium**
	Physical Infrastructure	**Low**
Financial Sustainability	Budgeting and Planning	**Medium**
	Business Productivity	**Medium**
	IT Infrastructure	**High**
Student and Client Success	Recruitment Criteria	**Low**
	Retention	**Low**
	Automated Services	**High**
Empowered People	Innovation	**Low**
	Recruitment & Retention of Faculty, Staff and Administrators	**Low**
	Change Readiness	**High**
	Labour Relations	**High**
	Knowledge Management	**High**

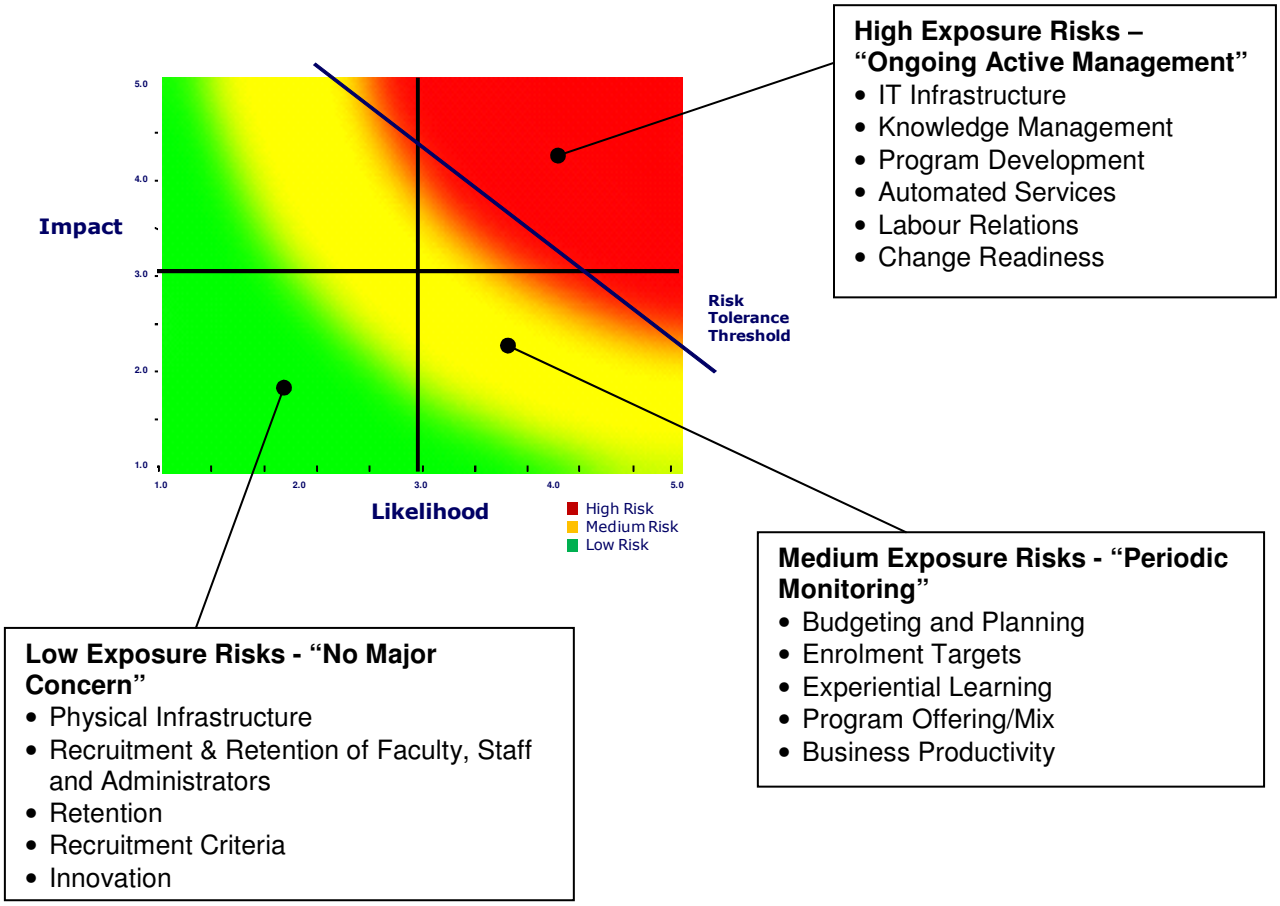
Note: Refer to **Appendix B** for discussion on specific risks, with a risk heat map provided in **Appendix D**.

3.2 Risks Requiring Immediate Attention

The 'Risk Heat Map' (Figure 1) plots the same risk information in a graphic format. Risks in the upper-right hand quadrant of the heat map (i.e. high impact and high likelihood) were considered 'high' risks to which the College has the greatest exposure. As such, these risks require immediate attention through the development of risk mitigation strategies and on-going monitoring. Risks in the yellow and green zones indicate moderate and low vulnerability, respectively.

The risk tolerance of an organization is the willingness of the organization to accept or reject a given level of residual risk. Risk tolerance may vary across the organization, based on the operating environment, stakeholders, etc., but should be clearly understood by the individuals making risk-related decisions on a given issue. Clarity on risk tolerance at all levels of the organization is necessary to support risk-informed decision-making and foster risk-informed approaches. On the following risk heat map, the six risks assessed as high risks have been deemed by the College's management as high priority risks requiring immediate attention. While medium and low risks still warrant attention, initial efforts should be focused on managing the high risks. Senior management should validate and confirm their risk tolerance threshold on an ongoing basis.

Figure 1: Algonquin College Risk Heat Map



IT Infrastructure

Risk Category	Risk and Risk Definition	Risk Level
Financial Sustainability	Inadequate information technology (e.g. hardware, networks, software, people and processes) to effectively support requirements and maintain the College's competitive advantage.	**High**
Management Identified Practices[1]: Identified practices used to mitigate this risk included A commitment to becoming a Digital College through the strategic plan and strong IT leadership. This includes a focus on a 3 to 5 year technology plan that takes into account the enrolment projections and the shift to digital delivery of class content and learning experiences. Work has also been done in realigning the development of pedagogical content with delivery needs. Enhanced network, process and solution monitoring, analysis and alerting are also being installed to help ensure compliance with Service Level Agreements and performance objectives.		

Management noted concerns with the current IT infrastructure and the ability of IT systems to continue to meet the College's needs. Participants noted that there is a tendency within the organization to maintain existing manual processes as opposed to re-designing processes (i.e., potentially introducing new IT systems) to increase efficiency and effectiveness. In that context, it was suggested that the number of manual processes could be greatly reduced through automation and improved integration of IT systems. The discussion also emphasized that successful implementation of large IT projects have to consider the total cost of systems ownership, including ongoing maintenance and upgrade costs. Furthermore, a key point that surfaced during discussions was to consider the end-users within the IT infrastructure risk. This meant providing the proper IT systems training for the staff. The driving point for this was that if the end-users do not properly use the available technology, IT infrastructure will be perceived as dysfunctional and lacking and the College will not be able to move forward in its Digital College direction. Discussions also underscored the fact that the College does not adequately integrate IT knowledge requirements in the hiring process, potentially leading to a staff that does not take full advantage of the current IT systems.

Knowledge Management

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	Knowledge management practices are insufficient/inappropriate in order to support informed decision making and otherwise maintain the corporate memory of the College.	**High**
Management Identified Practices: Identified practices used to mitigate this risk included: College data is retained within the applications that capture / generate the data, but support for decision making and analysis is not readily accessible at this time. Through the broad mandate of the Business Intelligence group within IIRTS, initiatives are underway to catalogue, federate and make available improved data for decision making within the 2013-14 timeframe. Capture and retention of knowledge outside core operating systems remains an open priority for the College.		

In relation to the Digital College initiative from the College strategic plan, knowledge management was cited as being a high risk area, given its critical nature in making informed decisions. Participants noted that the main challenge was gathering and summarizing relevant and insightful business knowledge from

[1] Management identified practices listed in this report are examples only and are not meant to represent a complete list of mitigating practices. A key responsibility of risk owners will be to identify the remaining relevant mitigating practices.

numerous decentralized legacy systems. Comments indicated that the right data was captured by the College's systems but the difficulty was in extracting the data from various scattered sources. The lack of a cohesive knowledge management system also impacted other processes such as enrollment targets, where enrollment numbers can sometimes be difficult to synthesize, as well as processes that require any sort of student/program statistics. In addition, participants noted that knowledge of the College's systems and processes is not adequately captured from employees. This risk is exemplified by the fact that several employees that are critical knowledge sources for some legacy systems are on the verge of retirement. In other words, key business knowledge is not adequately retained from employees and the College could lose this knowledge when these employees leave the College.

Program Development

Risk Category	Risk and Risk Definition	Risk Level
Program Development	Resource requirements, appropriate demand, and time to deploy are not sufficient to develop and launch new academic programs.	**High**
Management Identified Practices: Identified practices used to mitigate this risk included: The College has the right resources to generate and develop good program ideas. In addition, there are budgeting tools used in order to estimate program development costs, as well as models that test the financial viability of Algonquin's offerings. A formal Labour Market Analysis for new Ontario College and Degree programs under consideration was conducted.		

Management noted several concerns with the current program development process, primarily citing concerns with the available budget for course development as well as the current approach to program development. The issue centers around the fact that program development dollars are tied to annual one-time investment requests and are not included in the base budget. Participants noted that there is currently no established budgeting process for program development and that aside from a nominal amount of funds provided at the start of the fiscal year when the budget is approved, additional funding is primarily granted in the summer, just as the main resource for the process (faculty) leave for summer vacation. The participants also noted that not enough analytics are conducted for program planning purposes. There have been challenges in integrating diverse delivery methods (mobile/online/hybrid) with the College's offerings and developing programs with both the global and local student in mind. Constantly changing demographics and student profiles have to be taken into consideration in program development. Lastly, financial sustainability and viability is also an important factor that the current program development process overlooks on occasion.

There were suggestions made by participants that program development within the College should be modeled closer to an R&D department. This program development 'R&D' function would operate throughout the year in order to discover and deploy programs that are in currently in demand, as well as manage existing programs in order to ensure program relevancy.

Automated Services

Risk Category	Risk and Risk Definition	Risk Level
Student and Client Success	The College does not take advantage of automated services available or automated services provided do not meet client expectations or demonstrate a level of client service acceptable to the College, including at peak times.	**High**
Management Identified Practices: Identified practices used to mitigate this risk included: Automated services already established in the registrar's office and awareness of automated benefits is increasing in the College. In recent years, automated services have been given a high priority in the strategic plan and resources have been		

devoted to the development and implementation of automated services in more areas of the College.

Despite already having some automated services established and pockets of success with automated services within the College, the College struggles when implementing services that reduce manual processes and increase client satisfaction, both for external (students) and internal (staff, administrators and faculty) clients. In addition, comments indicated that automated services do not always maintain an acceptable service standard during peak times. Participants recognized that there are a high number of manual processes within the College and the time-consuming nature of these processes impede any potential change initiatives within the College. Management perceived the successful integration of automated services as an essential 'building block' that will enable staff to have more flexibility to both participate in, and lead, change initiatives. Comments also underscored the fact that any automation efforts have to be well planned and executed, and that the true increases in efficiencies have to be derived from new systems and processes, as opposed to implementing a new system/process that requires the same, if not more amount of an employee's time.

While there have been improvements in this area, management emphasized that there are still opportunities for improvement which would help to lower the risk exposure. It was suggested that further investigation into the current processes within the College would help identify inefficiencies where automation could improve business processes. The College must also recognize that although automation will typically reduce manual effort and time, there is still a requirement to allocate ongoing resources to administer and maintain these new automation systems (that is, total lifecycle costing).

Labour Relations

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	Poor relations or changes occur within the work environment that lead to conflicts involving labour unions, thereby disrupting normal operations.	**High**
Management Identified Practices: Identified practices used to mitigate this risk included: Management continued to conduct regular Union-College Committee meetings, meets with our Support Staff union, and meets with union executives on a regular basis to discuss any "issues of the day". Management has also attempted to meet with the faculty union executive, but in 2012 only 2 meetings have occurred and requests for additional meetings have not even been acknowledged. Management remains committed to improving this negative working environment with our faculty union executive.		

Management feels that the current labour relations environment, especially with the faculty union, is not ideal. Comments also underlined that the collective agreements with faculty do not offer sufficient flexibility in terms of IT innovation within the classroom. Furthermore, the current labour relation environment also has a negative impact on productivity. Participants have also indicated that there is a potential reputational impact when labour relations are discussed in the media.

Comments have indicated that several aspects of this risk are contingent on potential government legislation, but since this risk is mostly outside of the College's control, the College should carefully monitor legislative developments and prepare for any potential impacts.

Change Readiness

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	Employees are unable to implement process and program/service improvements quickly enough to keep pace with changes in the	**High**

	marketplace.	

Management Identified Practices:

Identified practices used to mitigate this risk included: smaller College campuses have an ability to adapt to change more quickly than the larger campus. The College has also established a Faculty Innovation Fund/Center that provides resources as well as a forum in which faculty are able to experiment with and initiate new ideas and technologies. In addition, the College has established a Business Process Review function that works with departments to improve and streamline existing College processes.

Management has noted that the College's ability to change with fluctuating student demographics and employer demands is a critical success factor for the College. The participant comments outlined several factors that contribute to the College's inability to change rapidly. The first factor cited was the reluctance to change engrained in the College's culture. An organization-wide change initiative would help shift the culture towards one that is more change oriented. The other factor that surfaced from discussions is that employees are often too encumbered with day-to-day tasks in order to properly lead and participate in change initiatives. This point was also discussed in the automated services risk. As mentioned previously, improved implementation of automated services would help free up employee time for change initiatives.

Participants have also outlined a perception that change initiatives from lower to middle management are sometimes suppressed and change initiatives have a tendency to be directed by upper management in a top-down manner. This sentiment ties into a theme that surfaced during the risk workshop; the College is a hierarchical organization. Change within the College also seems to be directed by senior management. Mitigation strategies included orienting the College towards becoming a more horizontal organization. Furthermore, it was suggested that staff should have more autonomy and responsibility in completing their tasks. In other words, staff should be provided with high level goals and the tools to get there. This would allow staff the flexibility to change and innovate in order to best reach those goals.

Medium Risks

It is also important to underscore that, of the 16 risks addressed during the workshop, 5 were rated as 'medium', suggesting that these areas could also present impediments to the College if left unattended or if circumstances change. For these 'medium' risks, management has determined that given recent improvements in many of these areas to reduce exposure to the organization, strategies, enablers and controls exist to adequately manage these risks to an acceptable level of exposure. Management has nonetheless acknowledged that further improvements could be made to further mitigate 'medium' risks.

While it may be tempting to attempt to monitor and mitigate medium risks to the same extent as high risks, leading practices recommend that risk management efforts be focused on a limited number of risks presenting the highest exposure, and be aligned with the organization's risk management capacity. As risk mitigation practices become sufficiently established to reduce the exposure of 'high' risk areas, management intends to turn its attention to addressing the medium and low risks.

It is recommended that risks in the areas of **budgeting and planning, enrollment targets, experiential learning**, **program offering/mix** and **business productivity** be monitored and examined more carefully once the 'high' risk exposure areas have been sufficiently addressed. This monitoring should include updating the risk profile on a regular basis to determine if high risk areas have changed.

4.0 Next Steps/On-going Risk Management

While the College has undertaken a risk assessment and is now in the process of identifying required risk mitigation activities, there are additional activities which should be undertaken to implement a comprehensive risk management program, and to help ensure the program is sustainable and provides value to the organization. The key activities which should be considered include establishing a clear risk management governance structure, clarifying ownership and expectations for the management of 'high' exposure risks, establishing and executing on a reporting and monitoring strategy for key risk exposures, and continuing to evolve the risk management program overall.

When planning the steps ahead, it is imperative that senior management considers the inter-linkages between the assessed risks. The College will require a dialogue to discuss the relationships and horizontality of the risk exposures when developing a comprehensive approach for mitigation.

4.1 Establishing a Clear Risk Management Governance Structure

The design of a robust architecture for risk management begins with a clearly understood governance model which includes a clear risk management policy as well as clarity of risk management-related roles and responsibilities. These elements are critical to building the foundation needed for ongoing effective risk management implementation.

The College does not currently have a formal risk management policy but the development and implementation of a policy would be a crucial next step. A risk management policy is intended to provide clarity on the requirements of the risk management program and to promote a common understanding and vocabulary regarding risk management. A risk management policy can include details on the College's risk culture, definition of terms (e.g. risk indicators, mitigation practices, etc.), roles and responsibilities, required risk management activities, and required communication to both senior management and the College.

It is also critical to clarify risk management-related roles and responsibilities. Roles typically include multiple levels of management as well as the organization's governing body. Preferably, a Chief Risk Officer (CRO) or executive champion/sponsor would be nominated in order to drive the ERM program forward. Example descriptions of roles and responsibilities in a risk management governance structure are included in **Appendix E.**

4.2 Clarifying Ownership and Expectations for the Management of 'High' Exposure Risks

The critical next step in the College's risk management development involves taking the results of the risk assessment and identifying appropriate mitigation strategies to lower the exposure of the high risks. A critical success factor to accomplish this is the identification of a risk owner for each of the high exposure risks. Risk owners are identified as the individuals who are deemed ultimately accountable for the effective management of specific risks. The primary responsibility of a risk owner is to coordinate organizational efforts and action plans related to their assigned risk. Risk owners are typically responsible for completing a risk register template for their assigned risk, performing the 'root cause' analysis to understand the factors driving the risks, and reporting periodically on the status of mitigation actions/steps taken to reduce the risk exposure. A risk register template typically includes information such as:

- **Risk Definition and Assessment –** includes the definition of the risk (including root-cause analysis to ensure there is clarity to the drivers which are causing the risk to be high exposure) and the results of the risk assessment. It should be noted that the root-cause analysis is a critical first step in determining what the required risk mitigation activities should be (since it is imperative to have a clear understanding of what is driving the risk to be high exposure, in order to be in a position to determine what the required risk mitigation strategies need to be).

- **Summary Comments –** provides high-level analysis of the status of the risk and any progress on key mitigation plans. The risk owner can also provide comments on their level of confidence in existing practices/actions and/or any outstanding issues. Recommendations on other mitigating strategies that might be required to further reduce risk can also be included.
- **Overview of Current Practices –** includes any comments by the risk owner on actions/plans which are in place on an ongoing basis and are operating effectively.
- **Current Mitigation Plans/Actions** – summarizes mitigating plans or actions which have been put in place by management to reduce the potential risk exposure. For each mitigation plan or action there is assigned accountability, a targeted completion date, and status on the progress achieved to-date. The risk owner is responsible for providing an update on the progress on the mitigating plans/actions.
- **Risk Indicators –** identified key measures or metrics used by management to track the effects of mitigating strategies on reducing the risk exposure. A risk indicator can be something which senior management can actively control, or cannot control but still chooses to monitor. A significant, prolonged change in these indicators would indicate that the potential risk exposure may have changed. Key risk indictor information captured on the risk template includes target and actual metrics, a tolerance level / range which is acceptable to management, and a comment on whether the actual result is sufficient achievement of the target. Both leading and lagging indicators should be considered.

An example risk register template has been included in **Appendix F**.

4.3 Establishing and Executing on a Reporting and Monitoring Strategy for Key Risk Exposures

Establishing a strategy for risk monitoring and risk reporting ensures that risk management remains a topic of discussion for the management team, provides a forum to challenge risk mitigation activities and status, and provides a mechanism to ensure that key stakeholders are updated regularly on risk exposures.

To ensure continued emphasis on risk management, it is generally recommended that risk updates be added as a standing agenda item at selected senior management meetings. During this agenda item, the identified risk owner for a specific risk would provide an update on the status of the risk and progress on key mitigation practices/actions. Risk owners would also address the level of confidence in existing practices/actions and/or provide recommendations on other mitigating strategies that might be required to further reduce the risk exposure. The senior management team would challenge the results to ensure they were comfortable with the conclusions being reached about the ongoing risk exposure levels.

In addition to reporting to senior management, the Audit Committee / Board of Directors should also receive periodic updates from senior management on the organization's risk exposures (e.g. bi-annual update on 'high' risk exposures, annual update on the risk profile).

An example risk reporting strategy has also been included in **Appendix F**.

4.4 Other Risk Management Implementation Considerations to Continue to Evolve the Risk Management Program

Updating the Risk Universe

The Risk Universe is intended to be a "living" document that will evolve and change as the College evolves. Updating and revising the Risk Universe and reviewing the risk profile on a regular basis (e.g. annually) is considered to be a leading practice.

Communication and Training

A critical component of any risk management program relates to communication and training to help educate the participants in the risk management process. This should range from senior-level, strategic presentations, to more detailed training sessions for those facilitating and participating in specific risk management activities. Communication/training material can be developed and delivered to staff on general risk management concepts, benefits, and application (including integration with ongoing day-to-day processes). Ongoing communication and training can also be used to reinforce the fact that risk is everyone's responsibility collectively. This will also help to promote a culture of risk responsibility and awareness. The implementation of a risk management program should address these types of change management considerations.

Integration with Planning Processes

The risk profile can provide important context when making resource allocation and strategic planning decisions. In budgeting and planning, risk information can be used as a factor in determining the relative priority of any planned initiatives or expenditures. Ideally, efforts and resources should be focused on reducing the College's risk exposure. In the budgeting and planning process, priority can be placed on initiatives which help address or reduce a high or medium risk to the College.

Integration with Internal Audit Activities

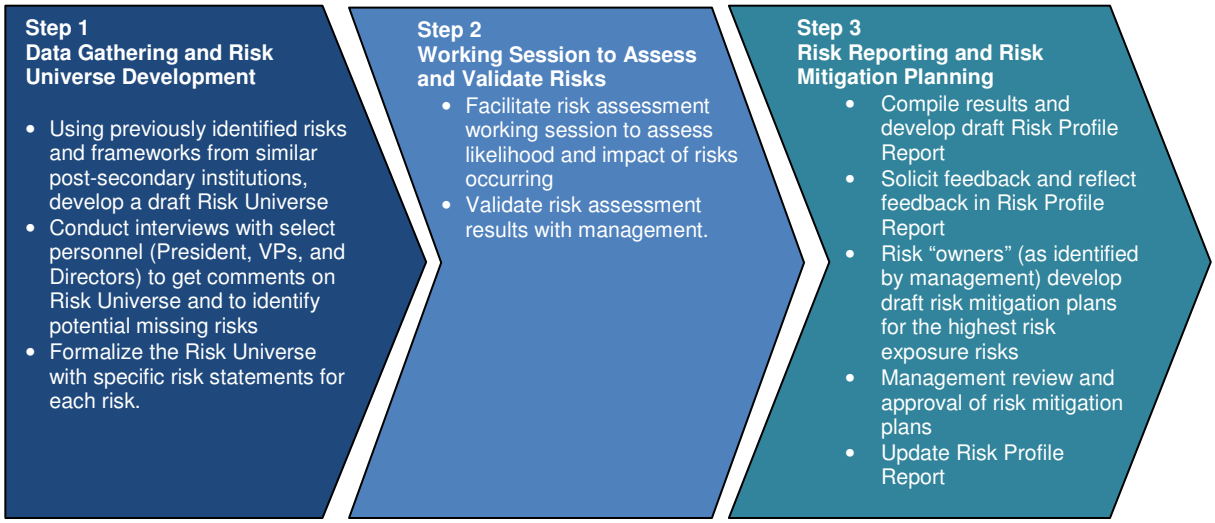
The risk profile serves as a valuable input in the internal audit risk-based audit planning process and development of the annual internal audit plan. A key role of internal audit is to provide senior management with "re-assurance" that management's assessment and perception of risks and control effectiveness is indeed accurate. For example, for risks which were assessed as high impact and low likelihood, the role of internal audit can be to review and test the risk mitigation controls and practices identified by management and provide management with qualitative and quantitative data on the adequacy and effectiveness of those risk mitigation controls. Integrating risk management results with internal audit activities is therefore critically important.

Cascaded Risk Management

For select risks and risk areas, as noted previously, it is often beneficial to further break the risk down into sub-components in order to help identify root causes, risk drivers, and contributing factors. This analysis can be facilitated by the risk owner but likely will need to include other stakeholders and subject matter experts from the organization. This analysis will help the risk owner and management to identify and prioritize the critical issues which are considered to be the root causes/sources of the risk, and thereby identify required risk mitigation strategies and potential risk indicators. When the risk owners complete their risk registers, this type of activity should be considered. Additionally, there may be benefit to doing this type of cascaded risk analysis for particular areas or programs within the organization (e.g. particular support functions, or key funding programs, etc.), and providing the results of these more operational risk assessments as input into the organization's more strategic risk profile process.

Appendix A - Approach and Methodology

The following illustrates the approach and methodology being used to develop and act on the College's Risk Profile:



Step 1 - Data Gathering and Risk Universe Development

For the first step in developing the Risk Profile for the College, a draft 'Risk Universe' was compiled, using previously identified risk categories and risks from similar post-secondary institutions. The draft Risk Universe represented a list of potentially significant risks that could be faced by the College. Feedback on this draft Risk Universe was sought from members of the College's executive-level management team through interviews and online surveys. Interviews were conducted with the President, VPs and directors (n=7). In discussions with the College's management team, the draft Risk Universe was refined to clarify the risks and/or identify any critical risks that were missing. Online surveys were also conducted in order to gather perspectives on the risks from Algonquin's management. The Risk Universe included a broad list of possible risks that could impact an entity similar to Algonquin College. A finalized Risk Inventory, consisting of the top 16 risks from the Risk Universe, was developed which reflected the input provided.

Step 2 - Working Session to Assess and Validate Risks

Risk Assessment Workshop and Validation
A risk assessment workshop was conducted with the executive-level management team. The focus of the risk assessment workshop was to assess the risk exposure related to each of the risks identified in the Risk Inventory in order to determine and prioritize those risks which are of higher priority and require further mitigation by management.

During this session, each of the risks was evaluated, using the following criteria:

- **Likelihood** - Given the controls and practices in place today, how likely is it that this risk will occur?
- **Impact** – What would be the impact on the College's ability to meet its goals and objectives if this risk were to occur?
- Anonymous voting technology was used to allow all participants to assess each of the individual risks. The following five point scales were used to assess both likelihood and impact for each risk. A list of risk workshop participants is included in **Appendix G.**

Table 2: Likelihood Criteria

Level	Descriptor	Description
1	Remote	The event is very unlikely to occur – controls / practices in place today are working as intended, all the time, and completely address the risk.
2	Unlikely	
3	Possible	The event may occur at sometime – controls / practices in place today often do not work effectively to completely address the risk.
4	Likely	
5	Virtually certain	The event is very likely to occur – controls / practices in place today are absent or are not sufficient to completely address the risk.

Table 3: Impact Criteria

Level	Descriptor	Damage & Liability	Operational Disruption	Reputation impact
1	Negligible	• Disclosure of personal information • Financial loss of <$1M	• Minor disruption of classes/serv ces • Minor operational & adm nistrative setbacks	• Setbacks in build ng student and/or staff trust • Some unfavourable media attention • Some unfavourable observations by review groups
2	Minor			
3	Moderate	• Loss or disclosure of sensitive student or staff Information • Financial loss $1M to $3M	• Disruption of some classes/services for 10-30 calendar days • Delays to planned projects • Some loss of corporate knowledge • Some underachievement of objectives	• Some loss of student and/or staff trust • Negative media attention • Criticism by review groups
4	Major			
5	Catastrophic	• Loss or disclosure of highly sensitive student or staff nformation • Financial loss > $3M • Serious injury	• Disruption of classes/serv ces > 35 calendar days for large numbers of students • Signif cant underachievement of objectives • Loss of key corporate knowledge	• S gn ficant loss of student and/or staff trust • Public/media outcry for removal and/or changing o the governing body • Strong criticism by review agenc es

Following the risk assessment workshop, a heat map of the top risks was presented to the College's management to validate the risk assessment results.

Step 3 - Risk Reporting, Establishing Risk Tolerance and Risk Mitigation Planning

The objective of this step in the project was to summarize the results of the risk assessment process in a Risk Profile report (i.e. this document). The Algonquin College Risk Profile captures the insights and information gathered through the initial interviews and the risk assessment workshop. The profile presented in this report is a snapshot of the organization's risks, including key risks that should be mitigated by management to enable the organization to achieve its objectives and results.

Based on the results of the risk assessment process, the College's senior management established its risk tolerance level, agreeing that the six risks assessed as 'high' exceed the College's risk tolerance and therefore require immediate attention. The critical next step in this process, as noted previously, will be to assign risk owners for each of the organization's high exposure risks that require ongoing and active

management. The primary responsibility of a risk owner is to coordinate organizational efforts and action plans related to their assigned risk. This step is ongoing at the time of the creation of this Risk Profile document.

Appendix B - Discussion on Risks

This appendix includes detailed descriptions for each of the risks in the Algonquin College Risk Inventory, and summarizes comments and discussion raised by participants in relation to each of the risks. These comments provide an overview of some of the perceptions, existing controls and mitigating actions, and key factors that influenced the risk assessment, helping to put the risk assessment results into context for the College.

The risks presented below have been categorized in terms of risk exposure, ranging from high to low.

Note: Management identified practices listed below are examples only and are not meant to represent a complete list of mitigating practices. A key responsibility of risk owners will be to identify the remaining relevant mitigating practices.

High Exposure Risks

IT Infrastructure

Risk Category	Risk and Risk Definition	Risk Level
Financial Sustainability	Inadequate information technology (e.g. hardware, networks, software, people and processes) to effectively support requirements and maintain the College's competitive advantage.	**High**

Perspectives on the Risk:
Management noted concerns with the current IT infrastructure and the ability of IT systems to continue to meet the College's needs. Participants noted that there is a tendency within the organization to maintain existing manual processes as opposed to re-designing processes (i.e., potentially introducing new IT systems) to increase efficiency and effectiveness. In that context, it was suggested that the number of manual processes could be greatly reduced through automation and improved integration of IT systems. The discussion also emphasized that successful implementation of large IT projects have to consider the total cost of systems ownership, including ongoing maintenance and upgrade costs. Furthermore, a key point that surfaced during discussions was to consider the end-users within the IT infrastructure risk. This meant providing the proper IT systems training for the staff. The driving point for this was that if the end-users do not properly use the available technology, IT infrastructure will be perceived as dysfunctional and lacking and the College will not be able to move forward in its Digital College direction. Discussions also underscored the fact that the College does not adequately integrate IT knowledge requirements in the hiring process, potentially leading to a staff that does not take full advantage of the current IT systems.

Management Identified Practices:
Identified practices used to mitigate this risk included: A commitment to becoming a Digital College through the strategic plan and strong IT leadership. This includes a focus on a 3 to 5 year technology plan that takes into account the enrolment projections and the shift to digital delivery of class content and learning experiences. Work has also been done in realigning the development of pedagogical content with delivery needs. Enhanced network, process and solution monitoring, analysis and alerting are also being installed to help ensure compliance with Service Level Agreements and performance objectives

Knowledge Management

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	Knowledge management practices are insufficient/inappropriate in order to support informed decision making and otherwise maintain the corporate memory of the College.	**High**

Perspectives on the Risk:
In relation to the Digital College initiative from the College strategic plan, knowledge management was cited as being a high risk area, given its critical nature in making informed decisions. Participants noted that the main challenge was gathering and summarizing relevant and insightful business knowledge from numerous decentralized legacy systems. Comments indicated that the right data was captured by the College's systems but the difficulty was in extracting the data from various scattered sources. The lack of a cohesive knowledge management system also impacted other processes such as enrollment targets, where enrollment numbers can sometimes be difficult to synthesize, as well as processes that require any sort of student/program statistics. In addition, participants noted that knowledge of the College's systems and processes is not adequately captured from employees. This risk is exemplified by the fact that several employees that are critical knowledge sources for some legacy systems are on the verge of retirement. In other words, key business knowledge is not adequately retained from employees and the College could lose this knowledge when these employees leave the College.

Management Identified Practices:
Identified practices used to mitigate this risk included: College data is retained within the applications that capture / generate the data, but support for decision making and analysis is not readily accessible at this time. Through the broad mandate of the Business Intelligence group within IIRTS, initiatives are underway to catalogue, federate and make available improved data for decision making within the 2013-14 timeframe. Capture and retention of knowledge outside core operating systems remains an open priority for the College

Program Development

Risk Category	Risk and Risk Definition	Risk Level
Program Development	Resource requirements, appropriate demand, and time to deploy are not sufficient to develop and launch new academic programs.	**High**

Perspectives on the Risk:
Management noted several concerns with the current program development process, primarily citing concerns with the available budget for course development as well as the current approach to program development. The issue centers around the fact that program development dollars are tied to annual one-time investment requests and are not included in the base budget. Participants noted that there is currently no established budgeting process for program development and that aside from a nominal amount of funds provided at the start of the fiscal year when the budget is approved, additional funding is primarily granted in the summer, just as the main resource for the process (faculty) leave for summer vacation. The participants also noted that not enough analytics are conducted for program planning purposes. There have been challenges in integrating diverse delivery methods (mobile/online/hybrid) with the College's offerings and developing programs with both the global and local student in mind. Constantly changing demographics and student profiles have to be taken into consideration in program development. Lastly, financial sustainability and viability is also an important factor that the current program development process overlooks on occasion.

There were suggestions made by participants that program development within the College should be modeled closer to an R&D department. This program development 'R&D' function would operate throughout the year in order to discover and deploy programs that are in currently in demand, as well as manage existing programs in order to ensure program relevancy.

Management Identified Practices:

Identified practices used to mitigate this risk included: The College has the right resources to generate and develop good program ideas. In addition, there are budgeting tools used in order to estimate program development costs, as well as models that test the financial viability of Algonquin's offerings. A formal Labour Market Analysis for new Ontario College and Degree programs under consideration was conducted.

Automated Services

Risk Category	Risk and Risk Definition	Risk Level
Student and Client Success	The College does not take advantage of automated services available or automated services provided do not meet client expectations or demonstrate a level of client service acceptable to the College, including at peak times.	**High**

Perspectives on the Risk:
Despite already having some automated services established and pockets of success with automated services within the College, the College struggles when implementing services that reduce manual processes and increase client satisfaction, both for external (students) and internal (staff, administrators and faculty) clients. In addition, comments indicated that automated services do not always maintain an acceptable service standard during peak times. Participants recognized that there are a high number of manual processes within the College and the time-consuming nature of these processes impede any potential change initiatives within the College. Management perceived the successful integration of automated services as an essential 'building block' that will enable staff to have more flexibility to both participate in, and lead, change initiatives. Comments also underscored the fact that any automation efforts have to be well planned and executed, and that the true increases in efficiencies have to be derived from new systems and processes, as opposed to implementing a new system/process that requires the same, if not more amount of an employee's time.

While there have been improvements in this area, management emphasized that there are still opportunities for improvement which would help to lower the risk exposure. It was suggested that further investigation into the current processes within the College would help identify inefficiencies where automation could improve business processes. The College must also recognize that although automation will typically reduce manual effort and time, there is still a requirement to allocate ongoing resources to administer and maintain these new automation systems (that is, total lifecycle costing).

Management Identified Practices:
Identified practices used to mitigate this risk included: Automated services already established in the registrar's office and awareness of automated benefits is increasing in the College. In recent years, automated services have been given a high priority in the strategic plan and resources have been devoted to the development and implementation of automated services in more areas of the College.

Labor Relations

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	Poor relations or changes occur within the work environment that lead to conflicts involving labour unions, thereby disrupting normal operations.	**High**

Perspectives on the Risk:
Management feels that the current labour relations environment, especially with the faculty union, is not ideal. Comments also underlined that the collective agreements with faculty do not offer sufficient flexibility in terms of IT innovation within the classroom. Furthermore, the current labour relation environment also has a negative impact on productivity. Participants have also indicated that there is a potential reputational impact when labour relations are discussed in the media.

Comments have indicated that several aspects of this risk are contingent on potential government legislation, but since this risk is mostly outside of the College's control, the College should carefully monitor legislative developments and prepare for any potential impacts.

Management Identified Practices:
Identified practices used to mitigate this risk included: Management continued to conduct regular Union-College Committee meetings, meets with our Support Staff union, and meets with union executives on a regular basis to discuss any "issues of the day". Management has also attempted to meet with the faculty union executive, but in 2012 only 2 meetings have occurred and requests for additional meetings have not even been acknowledged.
Management remains committed to improving this negative working environment with our faculty union executive.

Change Readiness

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	Employees are unable to implement process and program/service improvements quickly enough to keep pace with changes in the marketplace.	**High**

Perspectives on the Risk:
Management has noted that the College's ability to change with fluctuating student demographics and employer demands is a critical success factor for the College. The participant comments outlined several factors that contribute to the College's inability to change rapidly. The first factor cited was the reluctance to change engrained in the College's culture. An organization-wide change initiative would help shift the culture towards one that is more change oriented. The other factor that surfaced from discussions is that employees are often too encumbered with day-to-day tasks in order to properly lead and participate in change initiatives. This point was also discussed in the automated services risk. As mentioned previously, improved implementation of automated services would help free up employee time for change initiatives.

Participants have also outlined a perception that change initiatives from lower to middle management are sometimes suppressed and change initiatives have a tendency to be directed by upper management in a top-down manner. This sentiment ties into a theme that surfaced during the risk workshop; the College is a hierarchical organization. Change within the College also seems to be directed by senior management. Mitigation strategies included orienting the College towards becoming a more horizontal organization. Furthermore, it was suggested that staff should have more autonomy and responsibility in completing their tasks. In other words, staff should be provided with high level goals and the tools to get there. This would allow staff the flexibility to change and innovate in order to best reach those goals.

Management Identified Practices:
Identified practices used to mitigate this risk included: smaller College campuses have an ability to adapt to change more quickly than the larger campus. The College has also established a Faculty Innovation Fund/Center that provides a resources as well as a forum in which faculty are able to experiment with and initiate new ideas and technologies. In addition, the College has established a Business Process Review function that works with departments to improve and streamline existing College processes.

Medium Exposure Risks

As risk mitigation practices are sufficiently established to reduce the 'high' risk exposure areas, management intends to turn its attention to addressing the medium and low risks.

Budgeting and Planning

Risk Category	Risk and Risk Definition	Risk Level
Financial Sustainability	Resource allocation is inappropriate or inconsistent / misaligned with the College's strategic plan and priorities.	**Medium**

Perspectives on the Risk:
Participant comments in this area have outlined that a reasonable budget approach is followed where the College's primary operations are funded from grants and tuition revenues. In addition, there has been progress towards aligning the budget with the strategic plan. Management has also indicated that the current budgeting process is overly manual, and does not involve enough analysis, another symptom stemming from the College's suboptimal knowledge management practices.

Participants have suggested a few mitigation strategies. One of these strategies involves prioritizing classroom activities and learning as the budget priority. Services that don't directly support learning should be challenged further and be based on other sources of funding. Another suggestion called for additional training and better orientation regarding budgetary and fiduciary responsibilities. There were also comments regarding potentially decentralizing the budget further, and giving each department more autonomy and responsibility in setting and meeting budgeting goals.

Management Identified Practices:
Identified practices used to mitigate this risk included: The College has a good budgeting model where primary operations are funded with grant and tuition revenues.

Enrolment Targets

Risk Category	Risk and Risk Definition	Risk Level
Applied Education and Training	Enrolment targets across all programs are not satisfactorily met or are based on unrealistic or incomplete assumptions.	**Medium**

Perspectives on the Risk:
Management has indicated that historically, enrolment targets have been driven by budgeting and funding needs – due to the fact that government funding is granted on the basis of enrolment. Participants have noted that enrolment figures should be based on current student and industry trends, and that there is a lack of information for both of those data points. Comments were made that enrolment projections are currently felt to be well monitored and forecasted and the College's diverse mix of programs does provide some hedging against large enrolment swings in one program area. In addition, there have been difficulties in obtaining an accurate figure for current enrolment, due to the decentralized state of multiple legacy systems.

Management Identified Practices:
Identified practices used to mitigate this risk included: A strong College history of and commitment to accurate enrolment forecasting and adequate monitoring; there is also a strategic enrolment committee in place.

Experiential Learning

Risk Category	Risk and Risk Definition	Risk Level
Applied Education and Training	The College does not provide sufficient/suitable experiential learning opportunities, including applied research.	**Medium**

Perspectives on the Risk:

Management noted that the College has an ambitious goal in this area. A goal of the College's strategic plan is for all students to have some sort of exposure to experiential learning during their studies at the College. This strategic goal raises the exposure for this risk. Participants noted that the College is currently not providing adequate experiential learning opportunities in some programs. Management has suggested that the College has to build the right facilities and workplace/placement partnerships in order to fulfill this strategic goal. In addition, the student and industry demand for experiential learning is high and the College needs to devote more resources into this area in order to pursue these opportunities.

Management Identified Practices:
Identified practices used to mitigate this risk included: For the majority of programs, a relevant experiential learning offering exists.

Program Offering/Mix

Risk Category	Risk and Risk Definition	Risk Level
Applied Education and Training	The mix of programs offered by the College does not adequately reflect demand, diversity, employee trends, and/or financial sustainability.	**Medium**

Perspectives on the Risk:

Management has noted that the approach to evaluating and altering the program offering/mix has not been in the context of a long term and holistic perspective. This is partly due to the fact that the college is currently lacking a cohesive knowledge management system. This is further accentuated by comments indicating that there are creative program ideas from staff and faculty but the process is not responsive enough to implement these changes. In addition, the College needs to keep the long term in mind and needs to consider how best to prepare students for jobs that don't even exist today.

Management Identified Practices:
Identified practices used to mitigate this risk included: Strategic Program Review has been conducted to evaluate the program offering and the process to phase out out-dated/low demand programs has already begun.

Business Productivity

Risk Category	Risk and Risk Definition	Risk Level
Financial Sustainability	Innovation and improvements to business processes are not effective in optimizing business productivity.	**Medium**

Perspectives on the Risk:
Comments have indicated that several aspects of this risk stem from the current labour relations environment. More specifically, due to collective agreements in place with certain faculty/staff, it is more difficult to increase the productivity/utilization of these faculty/staff. In addition, the faculty's workload can be more easily measured for some functions but it is more difficult with other departments. This is important because staff utilization is an important aspect of business productivity.

Management has also noted that as a mitigation measure, a review should be considered to look at where efficiencies could be achieved and where excess paperwork could be eliminated where value is not added.

Management Identified Practices:
Identified practices used to mitigate this risk included: Faculty has a standard workload formula that takes into account hours of teaching as well as number of students with measurable productivity.

Low Risk Exposures

Physical Infrastructure

Risk Category	Risk and Risk Definition	Risk Level
Applied Education and Training	Inadequate infrastructure (e.g. lecture rooms, residences) to effectively support the current and future requirements of the College in a controlled, cost-effective and efficient manner.	**Low**

Perspectives on the Risk:
Management has noted that the College currently uses its property in a very space-efficient manner. The College also has a good idea of future demand and is actively anticipating that demand with its new buildings. The concerns that were cited included a large deferred maintenance liability, as well as the proper maintenance of legacy heating and cooling systems. In addition, the College has to consider how technology will integrate with the physical infrastructure of the campus in order to move forward in its digitally-driven College strategic initiative.

Management Identified Practices:
Identified practices used to mitigate this risk included: Strong infrastructure planning resources and the current expansion of the College are taking future needs into account.

Recruitment & Retention of Faculty, Staff and Administrators

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	The College cannot attract and retain the necessary faculty, staff and administrators with the passion, credentials, skills, and experience to effectively deliver on the College's mission and strategic directions.	**Low**

Perspectives on the Risk:

The comments made by participants noted that the College has done a good job of retaining the right staff but that there is currently a challenge in attracting the right talent at the senior management level. There is a shallow talent pool and the quality of potential candidates is declining. Burn-out is also a problem among front line staff. Academic chairs often face an unbalanced workload/pay ratio, compared to unionized faculty.

Participants have noted that the part time workers are usually one of the first budget cuts to be made. The potential unionization of these workers could lead to very significant costs for the College. In some areas, it has also been difficult to recruit part time workers due to wages that the College can't compete with.

Management Identified Practices:
Identified practices used to mitigate this risk included: the current HR system and succession/leadership planning initiatives.

Retention

Risk Category	Risk and Risk Definition	Risk Level
Student and Client Success	The College is unable to foster a culture and implement practices that promote student retention.	**Low**

Perspectives on the Risk:
Management has noted that retention has improved in recent years, due to various initiatives that the College has implemented but it remains a key risk that is to be closely monitored. Comments have also

surfaced the issue of the government moving towards providing funding on a retention basis and the College has to be prepared for such a shift.

Comments have indicated that most initiatives that the College implemented have not been on a College-wide scale and that large initiatives should be closer examined for potential benefits. In addition, A College-wide commitment is necessary in order to move towards improving retention rates. More collaboration is needed between student support services and faculty.

Management Identified Practices:
Identified practices used to mitigate this risk included: orientation activities, tutors, student/guidance councillors, student satisfaction surveys and early student contact.

Recruitment Criteria

Risk Category	Risk and Risk Definition	Risk Level
Student and Client Success	The College does not develop recruitment criteria that targets students best able to succeed.	**Low**

Perspectives on the Risk:

One of the main points that surfaced during discussions was the uncertainty about whether the College should remain an accessible institution or only target students best able to succeed. There have also been comments about changing demographics and performance indicators within students. Once again, the right knowledge management tools would help mitigate this risk further, by allowing management to properly gauge the most relevant performance indicators for each program.

There have also been comments that the College's programs lack flexibility in that students will have difficulty switching programs mid-stream. In addition, there is a general sentiment that students coming from high school are less prepared than before; the question is what should be done to prepare for such students.

Management Identified Practices:
Identified practices used to mitigate this risk included: The College Strategic Enrolment Committee is currently reviewing recruitment practices.

Innovation

Risk Category	Risk and Risk Definition	Risk Level
Empowered People	Current management models and initiatives do not adequately foster a culture of innovation and entrepreneurship within the staff.	**Low**

Perspectives on the Risk:
Management has indicated that innovation is partly stifled by the College's legacy systems. In addition, there is also no culture of continuous improvement at the College. The current hierarchical atmosphere within the College does not optimally foster innovation. Even though there has been success in fostering innovation within academic staff, several participants have noted a perception that innovation only happens from senior management in a top-down context.

Comments have noted that even though innovation has the potential to be disruptive, it could prove beneficial on a smaller scale. Suggested mitigation strategies have indicated that innovation should be integrated with the processes and the services the College and that distributed leadership could be beneficial in order for staff to take responsibility and start to truly innovate from the bottom up.

Management Identified Practices:
Identified practices used to mitigate this risk included: No specific mitigation practices were discussed.

However, the College has established a Business Process Review (Value Stream) function with an administrator who works with various College departments to improve processes and eliminate non-value add activities.

Appendix C - Risk Universe

A Risk Universe is a tool which is used to facilitate the risk assessment process and becomes the basis for documenting, assessing and monitoring risks.

The Risk Universe represents the "portfolio" of risks to be managed by the College at any given point in time. It is based on the principles of enterprise risk management and as such considers all types of risks across the organization. It is intended to examine both threats and opportunities in the context of an organization's mandate, objectives and available resources. The Risk Universe forms the basis of a systematic and disciplined approach to comprehensive risk management.

The purpose of the Risk Universe is to:

- Identify significant existing and potential external and internal risks influencing the organization's policy and management agenda;
- Provide a common means of classifying and communicating risk across the organization through a consistent "risk language";
- Provide a structure for the assessment, reporting and monitoring of risk on an ongoing basis; and
- Assist in demonstrating accountability to Government officials.

Ultimately, the Risk Universe will allow the College to demonstrate that it has a structured and comprehensive risk management program, and will assist the College in assessing its key risks and managing them to an acceptable level of exposure.

Algonquin College Risk Universe

The Algonquin College Risk Universe includes five risk categories and a total of 40 risks. The Risk Universe is shown below:

Risk Category	Specific Risks and Risk Definition
1 - Applied Education and Training	**1.1 - Program Offering/Mix** The mix of programs offered by the College does not adequately reflect demand, diversity, employee trends, and/or financial sustainability.
	1.2 - Program Development Resource requirements, appropriate demand, and time to deploy are not sufficient to develop and launch new academic programs.
	1.3 - Program Acceptance College programs do not reflect student/employer demand, or do not provide relevant degree experience.
	1.4 - Enrolment Targets Enrolment targets across all programs are not satisfactorily met or are based on unrealistic or incomplete assumptions.
	1.5 - Performance Measurement Inadequate program performance metrics or ineffective program performance measurement practices do not adequately evaluate program performance and

Risk Category	Specific Risks and Risk Definition
	allow for corrective measures to be implemented.
	1.6 - Industry Partnerships Failure to capitalize on partnering & fundraising opportunities or expand the College's engagement with industry.
	1.7 - Experiential Learning The College does not provide sufficient/suitable experiential learning opportunities, including applied research.
	1.8 - Community Connections Inability to develop centers of excellence or program clusters that take advantage of local community strengths.
	1.9 - Physical Infrastructure Inadequate infrastructure (e.g. lecture rooms, residences) to effectively support the current and future requirements of the College in a controlled, cost-effective and efficient manner.
2 - Student and Client Success	**2.1 - Recruitment Criteria** The College does not develop recruitment criteria that targets students best able to succeed.
	2.2 - Student Experience / Satisfaction Social/academic activities and student orientation programs do not adequately engage students or foster a sense of belonging amongst students.
	2.3 - Retention The College is unable to foster a culture and implement practices that promote student retention.
	2.4 - Client Services The quality of client services delivered to students does not meet expected standards set out by the College.
	2.5 - Automated Services The College does not take advantage of automated services available or automated services provided do not meet client expectations or demonstrate a level of client service acceptable to the College, including at peak times.
	2.6 - Security College security measures fail to prevent damage or injury to students, staff and/or property.
	2.7 - Diverse Delivery Channels Inability to keep pace with, understand, or respond to the evolving needs of students for educational content accessible through various delivery channels (mobile, hybrid and online).
	2.8 – Outreach The College is not able to leverage social media and other collaborative tools in order to engage existing and prospective students in a positive manner.
	2.9 - Access to Knowledge/Tools Students do not have access to the knowledge, skills, training and tools they

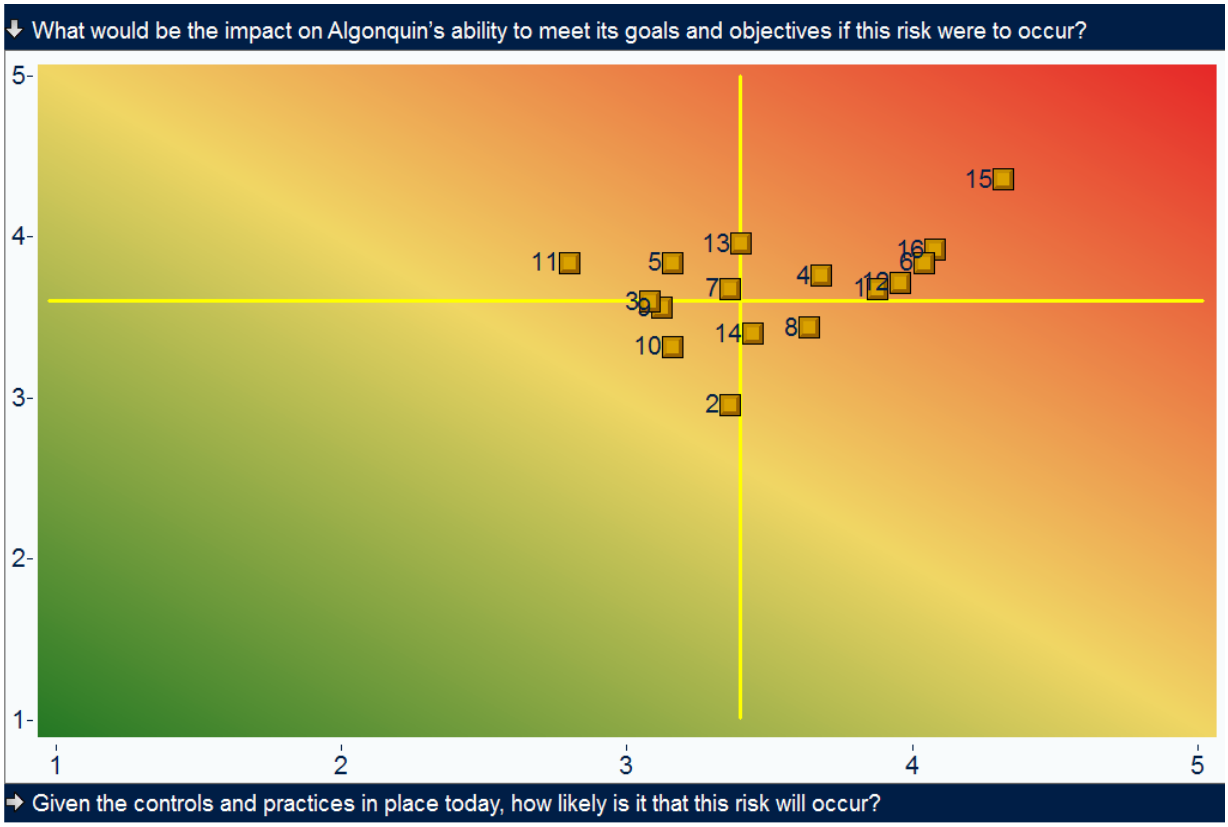
Risk Category	Specific Risks and Risk Definition
	require to thrive in today's digitally connected world.
3 - Empowered People	**3.1 – Innovation** Current management models and initiatives do not adequately foster a culture of innovation and entrepreneurship within the staff.
	3.2 - Recruitment & Retention of Faculty, Staff and Administrators The College cannot attract and retain the necessary faculty, staff and administrators with the passion, credentials, skills, and experience to effectively deliver on the College's mission and strategic directions.
	3.3 - Leadership Development Faculty and staff are not effectively led or provided with development opportunities that are required to thrive in a fast-changing college environment.
	3.4 - Succession Planning The College fails to identify and develop key personnel for succession planning purposes and does not effectively plan for resignations and retirements.
	3.5 - Communication and Collaboration Ineffective communication results in messages that are inconsistent or does not help to build employee engagement and collaboration.
	3.6 - Performance Management Individual performance is not adequately measured/captured or performance evaluation is imbalanced or not aligned with the College's strategies and objectives.
	3.7 - Change Readiness Employees are unable to implement process and program/service improvements quickly enough to keep pace with changes in the marketplace.
	3.8 - IT Efficiency IT systems are not properly implemented to create operational efficiencies or increase automation.
	3.9 - Knowledge Management Knowledge management practices are insufficient/inappropriate in order to support informed decision making and otherwise maintain the corporate memory of the College.
	3.10 - Labor Relations Poor relations or changes occur within the work environment that lead to conflicts involving labor unions, thereby disrupting normal operations.
4 – Financial Sustainability	**4.1 - Partner Investment** Inability to develop and manage partnerships with government, industry, alumni and individuals in support or academic programs, student financial aid and facilities investment.
	4.2 - Budgeting and Planning Resource allocation is inappropriate or inconsistent / misaligned with the College's strategic plan and priorities.
	4.3 - Business Productivity

Risk Category	Specific Risks and Risk Definition
	Innovation and improvements to business processes are not effective in optimizing business productivity.
	4.4 - Capital / Revenues Inability to secure sufficient capital and/or seek out alternative revenue sources to reduce dependency on government funding.
	4.5 - Investment Selection The College is unable to create a suitable investment decision framework or fails to adequately measure all costs and benefits of investments.
	4.6 - Sustainability The College fails to embed sustainable practices in accordance with the College's Sustainable Strategy Framework.
	4.7 - Government Commitment The College does not adequately anticipate and/or provision for fluctuations in levels of government funding, threatening the College's capacity to offer competitive programs and services.
	4.8 - Student Financial Capacity The College does not adequately anticipate and/or provision for fluctuations in levels of government funding, threatening the College's capacity to offer competitive programs and services.
	4.9 - IT Infrastructure Inadequate information technology (e.g. hardware, networks, software, people and processes) to effectively support requirements and maintain the College's competitive advantage.
	4.10- IT Investments Investment in IT systems is conducted in a manner that is not aligned with goals, sustainable, cost-effective or well-controlled.
	4.11 - Information Reliability Limited reliability in data or the quality and consistency of information for decision-making, both within and external to the College.
	4.12 – Access Failure to adequately restrict access to confidential/personal information (data or programs) may result in unauthorized access and use of information, or overly restrictive access to information may preclude personnel from performing their assigned responsibilities effectively and efficiently.

Appendix D - Risk Heat Map and Voting Results

Risk Heat Map

The following is the heat map that was generated on the April 2, 2012 risk workshop. The corresponding risks for the positions on the heat map follow below, in the voting results.



Risk Workshop Voting Results

Below are the voting results from the April 2, 2012 risk workshop. The numbers beside each risk correspond to their position in the above heat map. The total risk score was calculated by multiplying the average voting results of the risk likelihood and impact. The risks were then prioritized and categorized based on the risk score.

Risk Name	Average Impact	Average Likelihood	Risk Score (I*L)	Risk Rating
(15) IT Infrastructure	4.4	4.3	**18.8**	**High**
(16) Knowledge Management	3.9	4.1	**16.0**	**High**
(6) Program Development	3.8	4.0	**15.5**	**High**
(12) Automated Services	3.7	4.0	**14.7**	**High**
(1) Labour Relations	3.7	3.9	**14.3**	**High**
(4) Change Readiness	3.8	3.7	**13.8**	**High**
(13) Budgeting and Planning	4.0	3.4	**13.5**	**Medium**
(7) Enrolment Targets	3.7	3.4	**12.4**	**Medium**
(8) Experiential Learning	3.4	3.6	**12.5**	**Medium**
(5) Program Offering/Mix	3.8	3.2	**12.1**	**Medium**

Risk Name	Average Impact	Average Likelihood	Risk Score (I*L)	Risk Rating
(14) Business Productivity	3.4	3.4	**11.7**	**Medium**
(9) Physical Infrastructure	3.6	3.1	**11.1**	**Low**
(3) Recruitment & Retention of Faculty, Staff and Administrators	3.6	3.1	**11.1**	**Low**
(11) Retention	3.8	2.8	**10.8**	**Low**
(10) Recruitment Criteria	3.3	3.2	**10.5**	**Low**
(2) Innovation	3.0	3.4	**9.9**	**Low**

Appendix E - Risk Governance Roles and Responsibilities

The following are suggested roles and responsibilities of key risk management governance stakeholders.

Table 3: Description of Roles and Responsibilities

Stakeholder	Roles and Responsibilities
President	• Has overall accountability for risk management within the College. • Sets the tone for risk management and also participates in risk identification and assessment processes. • Contributes to and reviews and approves risk mitigation strategies.
Audit Committee	• Provides oversight for risk management. • Provides independent input on what constitutes good practice in risk management. • Receives regular updates from senior management on risk exposure, risk mitigation strategies, progress and issues.
Senior Management Committee	• Oversees management's implementation of an appropriate Risk Management program to manage the risks related to the College's business strategy and objectives. • Receives regular reporting on risk exposure, risk mitigation strategies, progress and issues. • Considers implications of risks and risk management activities to determine whether risks are being appropriately addressed. • Endorses and monitors the effectiveness of Risk Management policies and tolerances. • Annually reviews and approves the Risk Management strategy, and policies. • Ensures the appropriateness of risk governance and infrastructure. • Monitors for significant changes to Algonquin's Risk Profile.
Chief Risk Officer (CRO) or equivalent	• Aligns risk management and deploys the strategy across the College. • Ensures the integration of Risk Management with strategic planning and management decision processes. • Maintains a current view of the risk profile, analyzes, consolidates and reports. • Develops and recommends Risk Management policies. • Develops and ensures the effective execution of risk assessment, measurement and monitoring processes.
Risk Owners	Individuals who own, and therefore are deemed accountable for the effective management of one of the specific risks. Risk owners are responsible for: • Setting direction and monitoring the continual effectiveness of risk mitigating strategies relating to their assigned risk. • Obtaining information and feedback from Management & staff, the Chief Risk Officer (or equivalent), Internal Audit, third parties and other sources on whether the risk mitigating strategies put in place are effective.

	• Develops action plan, coordinates efforts, and integrates with other projects to ensure that management of their specific risk is effective. • Monitors and reports on status.
VPs, Directors and Managers	VPs, Directors and Managers are responsible for risk taking and managing their own risks. Responsibilities include: • Applying processes, practices, models and standards established by the Risk Management function to identify, assess, manage and report on risks. • Application of risk-aware thinking in day-to-day activities. • Consideration for the College's current risk profile when conducting planning and budgeting activities.
Internal Audit	Responsible for independently evaluating the effectiveness of the Risk Management processes and practices and for providing assurance on the adequacy and operation of internal controls to senior management. Internal Audit: • Evaluates and recommends improvements on the effectiveness of the Risk Management processes. • Reviews and assesses the effectiveness and integrity of controls and mitigating practices for key risk exposures. • Liaises with external auditors to minimize redundancy and ensure efficiency of risk assurance activities.

Appendix F - Risk Reporting Template

The following is an example of a risk register template which can be used in the risk reporting process:

Risk Category	Specific Risk	Risk Owner

Risk Definition (including root-cause analysis to identify risk drivers)	Last Risk Assessment		Current Risk Assessment	
	Impact	High	Impact	Medium
	Likelihood	High	Likelihood	Medium
	Overall	**High**	**Overall**	**Medium**

Summary Comments on Risk Vulnerability

- {High-level analysis of status of the risk (i.e. risk indicator results) and progress on key mitigation plans
- Comment on level of confidence in existing practice/actions and/or any outstanding issues
- Recommendations on other mitigating strategies that might be required to further reduce risk}

Overview of Current Practices

- {Comments describing key ongoing practices that the College engages in to address this area}

Current Mitigation Plan(s)	Accountability	Target Completion Date	Progress versus Plan

Risk Indicators	Last Actual	Current Actual	Trend (up/ down/unch.)	Target	Met (yes/no/ on track)
			Up		Yes
			Down		No
			Unchanged		On Track

The following is an example of a risk reporting strategy.

Risk Level	Senior Management Response	Role of Risk Owner	Risk Reporting to Senior Management Team	Risk Reporting to the Governing Body
High	Actively discuss and assess rigour of current mitigating actions. Identify any additional mitigating actions.	Individual assigned by risk to document mitigating actions and practices, monitor, and report on risk.	Includerisk discussion as a Senior Management Team standing agenda item and discuss at selected Senior Management Team meetings.	Bi-Annual
Medium	Periodically monitor and discuss any changes.	Individual assigned by risk to monitor changes. Risk function coordinates with risk owners to gather updates on risks as required. Escalate/de-escalate risks if status changes	Only changes in an individual medium risk which could potentially cause it to move to the high risk level are reported to Senior Management Team (as required). A formal bi-annual discussion is conducted with Senior Management Team.	NA
Low	NA	No risk owner is assigned. Risk function monitors status.	Only reported/discussed at Senior Management Team if the risk function or Senior Management Team considers the risk level has changed to high. On an annual basis, senior management should refresh the strategic risk assessment.	NA

Appendix G - Risk Workshop Participants

A risk workshop was held on April 2, 2012 with the following participants:

- John Tattersall
- Duane McNair
- Cathy Dempsey
- Rob Powell
- Joy McKinnon
- Michel Savard
- Misheck Mwaba
- Denyce Diakun
- Doug Ouderkirk
- Gerry Barker
- Kathryn Moore
- Jane Trakalo
- Mark Hoddenbagh
- Laura Stanbra
- Kevin Latimer
- Dave Donaldson
- Michael Sparling
- Karen Foster
- Deborah Rowan-Legg
- Brenda Rothwell
- Murray Kyte
- Glenn MacDougall
- Peter Mackie
- Kent MacDonald