



# **AN INTERTHINK CONSULTING WHITE PAPER**



## Effectively Managing Government Projects

### **A DISCUSSION OF THE REPORT OF ONTARIO'S SPECIAL TASK FORCE ON THE MANAGEMENT OF LARGE-SCALE INFORMATION & INFORMATION TECHNOLOGY PROJECTS**

#### **CONTENTS:**

- Introduction
- The Ministry of Government Services Task Force
- Validating The Findings
- Highlighting The Recommendations
- Realizing Results
- Conclusions

by:  
**Mark E. Mullaly, PMP**  
President, Interthink Consulting Incorporated  
markm@interthink.ca

# Introduction

## The Unique Challenge of Government Projects

It is a nearly universally accepted truth that large IT projects – in fact, most large projects – often struggle to succeed. It is also a nearly universal truth that the reasons that they struggle are incredibly common – we know them, we can recite them, we advocate solutions for them, and yet the problems persist. Large scale IT projects are almost by definition messy, high risk and uncertain. What we seem to struggle with is the organizational will to concretely address the problems in a comprehensive, substantive and lasting manner.

Government IT projects are no less likely to fail, and in some ways are even riskier. The government environment offers some unique challenges that private sector organizations do not. Administrative heads of ministries and departments are often politically appointed, moving from portfolio to portfolio with the ministers or government representatives with whom they most closely work. Government IT projects are often of a significant scale, and are tied up in the much larger transformation effort of service delivery and process change, but are still being managed as primarily IT projects. As well, there are two very conscious and distinct streams of project opportunities – one administrative, as the organization identifies continuing improvement and enhancement activities, and the other political, tied to the imperatives and priorities of the elected government of the day.

One advantage that government projects do have, however – as least from the perspective of gaining insights into how projects are managed and what to do and not to do – is that when they fail, they fail publicly. Theoretically, all projects are learning opportunities. The value of a post implementation review is as a 'lessons learned' exercise that offers us opportunities to identify how to improve future project delivery. If a private sector organization has a significant project failure, however, they are more likely to sweep it into the closet and forget about it than they are to pick apart the bones and figure out what happened. Even where this occurs, the likelihood of sharing those learnings outside of the organization's walls is highly unlikely.

Government project failures, however, become a matter of public record. The post implementation reviews are public documents, and as taxpayers we have the right to request access to the information to understand how government resources are being spent. Every once in a while, a more exhaustive investigation is conducted that looks more deeply and tries to understand the systemic challenges that lead to repeated project failures.

## Expanding Our Understanding

In July of 2005, the Ontario provincial government in Canada received the results of such an investigation. The Special Task Force on the Management of Large-Scale Information & Information Technology Projects specifically set out to understand some of the significant project failures that Ontario has encountered and what can be done to manage them differently. The Task Force was comprised of a high profile team with the credentials to make sure it was done well. Led by a former Auditor General of Canada, the team also consisted of the CIO for Hong Kong (also a former ADM in the Canadian government), the President of the University of Waterloo, and the Dean of the Richard Ivey School of Business and former CEO of Lucent Technologies in Canada.

This panel conducted an extensive review of 21 government IT projects that ranged in size from \$1 million to \$500 million. They reviewed practices in other jurisdictions throughout the world, and interviewed more than 80 individuals. They identified what they found that led to the most significant problems, and made recommendations of what can be done to improve them. The Ontario government published the report in the public domain – you can view it at:

<http://www.mgs.gov.on.ca/english/ministry/releases/nr072805.html>

For anyone that is familiar with project management challenges, the results will not be surprising in terms of the actual findings and recommendations that are made. The only real source of surprise – if you can call it that – is that the underlying problems that are identified in this report are the problems

that have been identified and discussed many times before. The inescapable conclusion that must be drawn is that either we aren't serious about taking actions on the problems preventing project failure, or what we are trying to do to resolve them isn't working.

For the most part, the findings demonstrate that the recipe for project failure is pre-mixed from the outset. Projects are too large and complex; their scope does not embrace the full magnitude of change required to ensure they are successful; governance and leadership is scattered, inconsistent and not committed to seeing through the change; projects are initiated without a clear business case; and the project managers and team members do not have the expertise and authority necessary to successfully deliver and the capacity to deliver all that the organization chooses to take on.

Stemming from the findings, the recommendations are certainly appropriate and reasonable. The Task Force recommends creating an executive position for project delivery, managing smaller projects, ensuring there is a solid business case, establishing a professional project management capability and limiting the number of significant initiatives taken on during any given period. These recommendations are all logical, sound and reasonable. The challenge is that they are not new, and have certainly been made before. The inescapable conclusion is that either the past messages they have fallen on deaf ears, or that where the messages have been heard the solutions have been only partially implemented or partially embraced.

Certainly, it is not the objective of this white paper to devalue in any way the work of the Task Force. It is an important contribution to any organization – not just the government of Ontario – in understanding why large-scale project failure still occurs. It is important as well in that it reinforces just how prevalent the problems they identify continue to be today, despite previous efforts to address them. And it is important in that the recommendations that are made are sound. The devil, however, is in the details. It is how the recommendations are responded to that is important: what is put in place, how it is put in place and the expectations that are set as a result. While the recommendations are valuable, what organizations really need is a much more specific understanding of how to respond to and adopt them– if you will, recommendations about the recommendations.

This white paper has been developed to provide those recommendations. It looks beyond the fundamental problems and recommendations to examine the challenges that organizations typically encounter in implementing these solutions. Most importantly, it explores the practices that actually lead to effective and lasting change in project management and project governance practices. It is not designed to critique the findings of the Task Force report, so much as it is intended to augment it and provide a guide for taking action based upon its recommendations.

## About Interthink

Founded in 1990, Interthink Consulting is the only company in Canada, and one of only a handful in the North American marketplace, that specializes exclusively in Organizational Project Management consulting. An organizational change consulting firm that focuses on the creation of effective project organizations, our customers come from a variety of industries. While our consulting practice began in supporting information technology organizations, our consulting and processes have been applied in many other disciplines and industries, including communications, finance, insurance, construction, utilities, and engineering.

Our services focus exclusively on the promotion and development of project management capabilities within our customer organizations. We provide the solutions that answer three key questions that our customers face daily in managing their projects in an organizational context:

- Are we doing the right projects?
- Do we have the correct tools and processes to successfully deliver these projects?
- Are we attaining the desired and promised results from our projects?

In this capacity, we have assisted numerous organizations in improving the results of their projects through the provision of assessment, audit and post implementation review services. Our assessment services are widely recognized for their comprehensiveness and rigour, and Interthink Consulting is a

recognized leader in project management assessment. We have invested extensively in conducting industry-leading research into organizational project management best practices, providing us an unmatched understanding of current industry capabilities and the impacts of project management on ensuring effective project results.

Our maturity model and Organizational Project Management Baseline Study, an extensive benchmarking effort that we have sponsored and conducted for the last 8 years, is widely recognized and valued and provides an extensive base of understanding of organizational project management practices and their insights. To date, we have assessed and benchmarked more than 650 organizations from around the world. As well, we were recently awarded in partnership with Athabasca University a one-million dollar research grant by the Project Management Institute (PMI) to conduct a comprehensive assessment of the value of project management; this is the largest research grant ever awarded in the field of project management.

This expertise and experiences has provided us with a firm understanding of best practices in managing projects as well as expertise in implementing project management capabilities. We are able to bring a fact-based approach to understand current capabilities, and insights into effective strategies that are grounded in research and practical experience. In developing this paper, we draw on both our expertise and our extensive experience working with private and public sector organizations to offer relevant and grounded perspective and recommendations.

# The MGS Task Force

## Objective

The Special External Task Force on the Management of Large-Scale Information and Information Technology Projects (the Task Force) was founded in response to the continuing reality that large-scale IT projects continue to exceed planned budgets and schedules, fail to deliver on their expected benefits, lose support and momentum and do not follow through in delivering on promised results. By the estimate of the Task Force, 40% of projects fail to meet their plan in some way.

Admittedly, this statistic falls short of some estimates of IT project failures, although for many such reports there is a risk of exaggeration in order to draw attention to their findings. While this has been unarguably successful in creating visibility for some consultants, it is also disingenuous at best and dangerous at worst in that it creates a false picture of current reality. The Task Force findings actually align quite well with our research findings, which indicate that approximately 2/3rds of projects are delivered on target within a margin of +/-10%.

To address these challenges and propose solutions to more effectively manage large scale projects within the Ontario government, the Task Force was charged with researching and developing recommendations on approaching the following disciplines in managing government projects:

- Procurement
- Project management
- Project governance
- Accountability mechanisms

## Task Force Composition

The Task Force was comprised of a panel of four individuals:

- L. Denis Desautels, Chair of the Task Force – Auditor General of Canada from 1991-2001, and Executive in Residence at the School of Management, University of Ottawa.
- Howard Dickson – Government Chief Information Officer, Hong Kong and former ADM, Information Management, Department of National Defence.
- David Johnston – President, University of Waterloo and former Chair, Information Highway Advisory Council.
- Carol Stephenson – Dean, Richard Ivey School of Business and former President and CEO, Lucent Technologies.

## Approach

The Task Force undertook a review of 'large' I&IT projects. While the concept of a large project can be ambiguous, the task force used the following attributes to define these projects:

- **Requiring significant process redevelopment, procurement and systems development to complete.** In other words, the projects are involved in business transformation – they are not simply to 'build systems' but are to transform how a particular process, function or business operates, with part of this transformation enabled through the use of Information Technology. What is also important to note here is the involvement of extensive procurement activities – the majority of systems development projects undertaken within government are managed using external consulting and contract resources, rather than being staffed and delivered internally.
- **Multi-million dollar in scope.** While this sets a lower threshold of project size from a financial perspective, the projects above this threshold can range widely in size. Indeed, of the 21

projects reviewed by the Task Force, the size ranged from \$1.3 million to \$500 million. The average project budget was \$120 million, including six projects that were \$150 million or more and three that exceeded \$350 million in size. The total investment spending of the 21 projects reviewed was \$2.529 billion.

- **Multi-year in scope.** The multi-year nature of projects is of particular significance in government, due to the nature of the budgeting process. The end of the fiscal year (usually 31 March) represents a hard but artificial boundary for funding. While there is no legal or accounting reason that organizations should not engage in or fund multi-year projects, the process of budget management in a government context means that funds not spent in a specific year are 'lost'; they do not roll over to the subsequent budget year. As a result, projects that span the fiscal year boundary must try to precisely estimate the funds required in each period; estimating too high results in irrational efforts to spend the money before the fiscal year end or accrue it into the subsequent period, while forecasting too low can result in project teams pausing until funding resumes. While this is to a lesser extent a problem in some private sector organizations as well, it is purely a product of the accounting cycle rather than serving any larger business purpose.
- **Have a major impact in the delivery of government business.** By their nature, therefore, these projects represent significant, real and likely disruptive change. Changes to how business is delivered generally results in changes to business processes, to employee and management roles and to how external stakeholders relate to and interact with the organization being changed. These projects are not simply 'rolling out a system' – they are changing the expectations and behaviours of people at all levels, inside and outside of the organizations. To be effective, management of expectations of all stakeholders being impacted – whether the impact is seen as positive or negative – is essential.

The Task Force reviewed each of the 21 projects, as well as commissioning studies on leading information technology management practices in other government jurisdictions and on the gap between Ontario and other jurisdictions in terms of information technology management practices. Finally, the Task Force interviewed 80 respondents, including senior managers within the Ontario Public Service (OPS), private sector firms experienced in working with large I&IT projects for the Ontario government, and published experts in IT project management.

# Validating The Findings

## Project Size

The findings of the Task Force with respect to project size can be summarized in three essential points:

- Most I&IT projects are larger than they often appear, as they include not just the development or customization of a system but also the transformation effort required to manage the underlying business process changes and the impacts those changes entail. While change management and business transformation are an inherent part of any significant I&IT undertaking, this aspect of the project is often overlooked and not managed with the same degree of rigour.
- Larger projects are seen as being particularly prone to delays and cost overruns, and these are believed to increase exponentially beyond a certain size. Projects that are managed as smaller sub-projects of less than a year are viewed as having greater success, particular where they are gated – completion of one phase or deliverable must be demonstrated and approved prior to commencement of subsequent work.
- Portfolio management can be a tool for making better choices about IT investments by promoting executive sponsorship, understanding the relationships between projects and focussing on those projects

Each of these points is on its own entirely reasonable. Certainly, possibly the most important comment is simply the appreciation that I&IT projects are not technology projects but business projects; their purpose is not to introduce new technology, but to introduce a new way of doing business – with technology as an enabler for accomplishing that. The failure of senior management to recognize this, however, is not solely limited to government – it is a challenge that many organizations in a variety of industries face.

What is equally important to understand, however, is why these projects often get managed as 'just technology projects': project management, and responsibility for project management, often emerges from the information technology organization. With this reality, there is often a strong tendency to 'do what we know.' Management of the technology development is the primary focus for the IT organization, and one which has its own challenges. While the need to manage the technology implementation doesn't disappear, equally important is the need for the business to manage the business change. In point of fact, the business change effort should drive the technology effort, rather than the other way around. Until organizations place the business change front and centre, however, this problem is likely to remain.

The size of projects is also a factor, and the strategy of sub-dividing projects into smaller component initiatives is a proven one for creating a greater level of manageability. There can be situations, however, where the decomposition of the project can be counter-productive. The creation of multiple sub-projects to manage the delivery of an overall objective is known as 'program management'. While this produces projects of smaller and more manageable size, program management requires much stronger governance – the co-ordination of interfaces and dependencies between related projects becomes much more important. Where there are governance challenges in the first place, the move to a program management approach will exacerbate them rather than resolving them.

While the specific reasons for large project failures can be many, they can be thought of as comprising two underlying causes:

- The complexity of the project is so great that it is impossible for any one person to fully grasp the scale of the effort and the interdependencies that must be managed.
- At the outset of the project the actual requirements of the project are not sufficiently defined or stable and what is required of the solution continues to evolve as the requirements and expectations change.

Where the cause of project failure is complexity, sub-dividing the project into smaller initiatives can be of assistance in managing the scope of the effort. Just like breaking down a larger problem into smaller chunks helps us think it through, breaking down a project into smaller pieces creates a level of manageability – we reduce the size and complexity of the work to a scale that we can actually envision completing it. As much care needs to be taken in managing the breakdown and delivery of sub projects, however, to ensure that there is a common architecture, integration across all of the projects and that each project focuses on the primary goal. As well, the creation of sub-projects will not necessarily have the same impact where the challenge is one of not fully understanding the project requirements.

The majority of projects move progressively through a series of phases from start through completion. Requirements are confirmed, a solution is designed to address the requirements, the resulting product is built in accordance with the design and finally the results are implemented and the project is completed. For this approach to be effective, the requirements have to be defined fully and completely up front. Failure to do so means that as new requirements emerge, previously completed work will need to be revisited to accommodate the change. The later in the project that new requirements emerge, the more expensive these changes will be.

The simple reality for most projects is that change is inevitable, and it is extremely difficult to fully and completely define the requirements of a project up front. This is not to say that the attempt to define requirements should be abandoned, but it reinforces the need to ensure that when changes are identified they are properly managed. According to industry research conducted by Capers Jones<sup>1</sup>, requirements on systems development project typically grow by 2% per month. While this statistic may appear innocuous, the implication is that a 12 month project will grow by 24% and a two-year project by nearly half.

Given that this rate of change is simply the industry average, possibly the single greatest challenge facing larger projects today is that they do not plan for it. Project budgets are set at the outset, and while there may be contingency budgets to deal with risk, the presence of a change budget to accommodate new or evolving requirements is extremely rare. The process of managing changes is also often extremely informal; rather than managing the impacts of change on the project, new requirements are very often absorbed into the original budget and schedule, with the expectation that they can be accommodated even though the original estimates made no allowance for them whatsoever.

Finally, portfolio management can be a tool to help make better choices around which projects to undertake. It is not, however, a tool to align and manage the scope of a larger change initiative once undertaken. Portfolio management addresses fundamental issues of governance – how to effectively prioritize the project opportunities, evaluate these priorities against financial and resource capacity and ultimately determine what projects will be undertaken. While it provides a framework for on-going monitoring of the portfolio going forward, it is not a substitute for good project management. In the absence of initiatives being managed properly, portfolio management will quickly fall apart: the principle of garbage in, garbage out applies here.

More importantly, portfolio management is a mechanism for formalizing how decisions about projects get made. The process of portfolio management is designed to more objectively determine how projects are initiated and governed. For many organizations, this is a level of formality that is unfamiliar to them – senior executives more typically approve the projects that 'feel' right to them, or that have been effectively championed, without relying upon a more disciplined style of decision-making. In government organizations, a significant source of projects is in response to political imperatives; careful consideration needs to be given to how a portfolio management approach would work in this context.

## **Governance**

The findings of the Task Force regarding project governance are summarized in the following bullets:

---

<sup>1</sup> Jones, Capers (2000). "Software Project Management: Issues for 2000 the Millennium." Burlington, MA: Software Productivity Research.

- There is a significant call to streamline the project review process to improve oversight of projects while making sure that projects align with government priorities and that they are not unduly delayed by ensuring the necessary approvals are in place. As well, project reviews should be conducted at an appropriate level within the organization.
- There are no standards for organizational reporting of project initiatives underway.
- Steering committee membership is often transient; there is little continuity of oversight through the life of a project.

Probably most significant in these findings is the reality that in many government contexts the idea of 'governance' gets confused with 'bureaucracy'. The primary principle behind any governance framework is to ensure that the organization is realizing the value it desired from a project, and that the project is being managed as efficiently as possible to deliver that value. Typical attributes of an effective governance framework include:

- A clear and objective framework for identifying, evaluating and prioritizing projects.
- Periodic formal reviews of the project at key milestones or phase ends.
- Steering committee oversight of the project on a regular basis through its lifecycle.
- Evaluation of the project at completion and ensuring the framework for successful transition of the project results to operations.

Gating processes create their own risks, particularly in government. While the principle of a gating review is to ensure progress and accept the deliverables of the previous phase, these often become a significant delay to the project as a whole, imposition of additional bureaucracy in an effort to increase certainty and avoid accountability, without providing any additional real value. As a result, the project is unduly delayed and can run an increasing risk of failure as it lurches from gate to gate.

Optimally, a gate review should be an efficient formal acknowledgement of the work that has been conducted to date. To accomplish this successfully demands an on-going awareness of the project progress by the sponsoring executives through effective, on-going status reports. What this requires is some level of standardization around how and when status reports should be produced, and what they must contain at an appropriate level of detail to ensure 'no surprises' between each of the gate reviews on the project.

In terms of steering committee participation and involvement, continuity is certainly desirable, but it is insufficient. What is essential in terms of governance is that organizational executives champion the change represented by the project to the organization. Most projects – not just those that are large or in the domain of I&IT – are initiated to create change. It is the responsibility of the executives charged with oversight of the project to ensure that the results will support the objectives and goals of the organization. Equally important is ensuring that the results of the project are utilized in a way that ensures delivery of the intended benefits sought in undertaking the project.

## Leadership

The findings of the Task Force with respect to leadership are summarized in the following bullet points:

- There is often less than full dedication to delivery of individual projects. This is a result of the conflicting demands upon the time of senior public servants, mobility between positions, and the tendency to start planning for the next role to ensure a 'safe landing' before the current project is complete.
- Organizations do not recognize the role of business transformation in I&IT projects, with leadership often coming from the IT function rather than the business. These projects suffer from lack of organizational resolve and oversight and from an absence of political and executive sponsorship for their completion. Based upon feedback heard by the Task Force,

only where there is commitment to the change, understanding of its complexities and commitment to provide the required funding and resources are these efforts successful.

It is unfortunate that the findings of the Task Force with respect to leadership focus more on the project manager than they do the organizational executive. There is no question that anyone charged with the management of a major I&IT project must assume a leadership role. Of far greater importance, however, is the leadership of the organization in championing the project and embracing its results. Where major projects struggle today, the root causes often reflect a lack of clear, consistent and decisive decisions in support of the project effort.

There is no question that the findings the Task Force does identify are relevant, however, For many government employees involved with projects, project responsibilities are assumed over and above their existing operational roles. There is little or no recognition that a major project should receive the singular focus of a person's attention, particularly where that person is involved in a project manager or team lead role.

## Project Planning

The findings of the Task Force with respect to project planning are summarized in the following bullet points:

- Business cases designed to support projects are often extremely thin, with approvals being given based upon high-level promises of savings and efficiencies without the underlying details to back them up.
- The emphasis on projects is to spend a great deal of time, effort and expense in development and implementation, with proportionally little effort invested in the up-front planning effort. The effort from project start through to the finalization of a business case is often inadequate to ensure sufficient development to promote success.
- Some jurisdictions, notably British Columbia, have experienced success by separating the design from the development phases. This has included having multiple vendors complete the design phase, and proceeding with the development based upon the best design.

The role of the business case is one that organizations in general struggle with, but particularly governmental organizations. The purpose of a business case is to express a choice in financial terms. All too often, however, business cases are less used as a tool for decision making and more as a vehicle for rhetoric and persuasion. They are more used as a tool for the marketing and justification of decisions than they are a decision making tool themselves.

The larger problem with business cases in a government context is the difficulty in developing them effectively. What is often termed a business case is little more than a project charter or proposal, with minimal financial analysis; in part this is due to the fact that government projects rarely provide a direct return. Some projects are designed to deliver cost reductions or cost avoidance through increased efficiencies, and can therefore be expressed in a more traditional format. Many significant projects that are focussed on truly transforming the delivery of government services, however, struggle to quantify benefits that will ultimately not translate into direct financial returns to the organization. While this is not to say that most projects do not have benefits, project undertaken for social or societal good are far more difficult to quantify.

The challenge in terms of up-front planning is a parallel but different problem, and one that while prevalent is not unique to government environments. The emphasis on development and implementation is in large part a product of previous projects failures. Problems and issues encountered in previous projects leads to a strong emphasis on moving as quickly as possible to the development stage of the project to start dealing with the inevitable risks and problems in current projects. This becomes a vicious circle as failure to spend time planning and designing leads to the creation of additional problems. While better planning is in fact the solution to these problems, the perspective from the trenches is that it is a non-value-adding hurdle that gets in the way of doing the 'real work' of the project.

The recommended approach in terms of separating design from development can be effective in a development environment, provided the requirements for the solution can be sufficiently defined in advance and once defined are likely to remain stable. In project environments that embrace a more evolutionary approach to defining requirements, this strategy cannot work – the process of elaborating requirements, design and development on an iterative basis precludes the separation of the design activities from the development work.

## Procurement

The findings of the Task Force with respect to procurement are summarized in the following bullet points:

- Procurement is an area that has received a great deal of attention within the public sector, but remains a source of significant problems. Many procurement strategies face challenges, including the use of vendors of record and particularly entering into joint ventures, where many aspects of the project are not known at the outset.
- Poor business plans and requirements lead to poor tendering documents, as the requirements and the expected deliverables and outcomes are typically not clearly defined.
- There has at times been an over-reliance upon vendors for project management, particularly in managing delivery and control of the project. This has been due to a lack of understanding and expertise of the technology being implemented, the project management processes that are required and the requirements for successful business process design and change management. This can result in an imbalance of responsibilities with vendor organizations.
- There is a significant difference in how public sector organizations are managed, which private sector vendors do not always fully appreciate. As a result, incorrect assumptions can be made regarding the complexity of the consultation, decision making and approval processes that can be required.
- Contracts often do not have sufficient flexibility to accommodate potential changes, risks and unknowns.

Procurement is a segment of the project management role that causes the greatest degree of frustration and difficulty in governmental organizations. Current government procurement practices have evolved in response to previous procurement abuses; they represent the aggregate accumulation of checks, controls and constraints that have been established to prevent future problems upon the discovery of past liberties. The result is a process that is cumbersome and expensive for all involved, both governments and private sector vendors alike. The challenge is that the more cumbersome and restrictive procurement policies become, the more likely they are to be circumvented, if only on the grounds of efficiency.

Making choices about how to procure large scale projects is significant. As has already been identified, the nature of large projects – particularly large I&IT projects – makes them inherently risky. Given a procurement policy biased towards the elimination of risk, the bureaucracy that often results can be overwhelming. This has the effect of trying to rigorously and concretely nail down all of the project requirements in advance of a project proceeding, and ensuring that any decisions regarding a vendor are absolutely defensible.

As has been noted in the previous section, there are already significant challenges associated with confirming the requirements of a project at its outset. Compounding this is the difficulty in appropriately anticipating and addressing the procurement-related risks where a vendor will primarily be responsible for developing the solution. The resolution of this challenge is not the creation of increasing levels of rigour and establishment of ever-greater hurdles to procurement, however, but ensuring that any procurement associated with a project has sufficient flexibility incorporated within it to be able to respond to required changes as the project proceeds.

As the Task Force quite reasonably notes, part of this challenge is a result of insufficient skill levels within government organizations to manage projects of this scale, resulting in increased reliance on

vendors to provide expertise in managing and delivering project efforts. While providing project management expertise and discipline should reasonably fall into a realm where outside expertise is required and appropriate, the danger emerges where both management and delivery responsibility fall to the same organization. Where there is an organizational interest in the work being delivered, it is extremely difficult for that organization to objectively represent the client's interests. Even where organizations strive to objectively walk this line, the perceived conflict can be sufficient to cast doubt on the degree to which government interests are being appropriately represented. Like the recommendation of separating design responsibilities from those of development, the separation of management and delivery responsibilities between different organizations can help ensure objectivity is not only realized but is also seen to be realized.

Finally, while government organizations operate differently from the private sector in a number of ways, and particularly with respect to approval and decision-making cycles, this is not to say that they should. There are a number of fundamental differences between the private sector and the public sector – particularly in the purpose, nature and role they play in providing services and solutions. The differences in decision making processes, however, is not a defining feature. As has already been noted, the delays and bureaucracy that are often encountered in approving projects is a by-product of hesitation, uncertainty and an aversion to risk and accountability. To accept this as reality, however, is to condone and promote it. Governmental organizations need to seriously rethink their governance and approval processes if only to enable them to make decisions more efficiently and reduce project delays.

## **Project Management**

The Task Force identified that improved project management maturity was viewed in those projects that were managed successfully, and that increases in maturity required improvements in both the project management skill base and human resource management practices.

### **Adequate Skill Base**

The findings of the Task Force with respect to ensuring an adequate skill base are summarized in the following bullet points:

- There has been an insufficient number of skilled project managers with experience in dealing with large technology and organizational change projects. Project management is not recognized as being a distinct and valued skill, and specialists in project management within the public sector are rare.
- There is a strong tendency to rely on external IT project management expertise rather than maintaining and developing internal project management capabilities. This is a result of both a greater emphasis on operational work and a need to keep internal staffing levels low.
- Some jurisdictions, notably Quebec, use external resources primarily as a means of third-party validation of their project management approach, rather than relying on external project managers.

Aside from the already discussed issues of leadership and governance, the findings with respect to project management skills in government organizations are probably the most important findings that the Task Force makes in its report. Historically, project management has not been a valued skill, as the Task Force notes. While this is slowly changing – as evidenced by such undertakings as the Project Management Excellence Initiative (PMEI) within the Ontario Public Service and similar activities in other jurisdictions – it is an evolution that is currently behind that of many private sector organizations.

The first thing to note about this finding, however, is that the lack of skills is also a leadership issue. Public executives have to value project management as a core competency before staff will embrace it as a career direction to pursue. Until this occurs, there will be more inclination and greater reward to staying within more traditionally recognized career paths. As project management does become more recognized and valued, however, lessons of private sector organizations undertaking the creation of a project management career path have some guidance. For those leaders with ambitions to reach the executive ranks, project management will and must become a necessary part of career development.

Executives will need to have successfully led a major undertaking as part of their overall career growth. The practical implication of this, however, is that any development path for project managers will require on-ramps into the project management role from more operational areas as staff learn and apply the skills, and off-ramps away from project management as staff continue their career development after a few years in a project role.

Until this does occur, the necessary skills to manage large-scale initiatives will rarely be a capability that is maintained in government, creating the reliance upon external resources for project management support. To the extent that management of the significant and strategic projects is outsourced, however, a vicious circle is created in that staff will not see themselves as being given the opportunity to manage significant undertakings or will ultimately leave the public service and join external firms in order to be able to experience those opportunities.

## Human Resource Management

The findings of the Task Force with respect to human resource management are summarized in the following bullet points:

- Project management is not seen as a desirable role, unlike what is encountered in other jurisdictions. This is seen as being partly attributable to the lack of an exit strategy for project managers as project assignments wind down, and the failure of the organization to provide assistance and transition support in moving between project assignments.
- The level of expertise and talent required to secure effective project managers is not compatible with the current standards for requirement, retention, promotion and succession planning.
- There is not a sufficient level of independence of project managers and teams from operational day-to-day responsibilities. Other jurisdictions that do allow for this independence have seen a greater likelihood for projects to stay on target without unnecessary distractions.
- There are currently a number of tools and methodologies underway, including the Project Management Excellence Initiative (PMEI). The PMEI recently received permanent funding, and is developing a framework based upon the standards of the Project Management Institute. Other jurisdictions have built upon basic methodologies to include other toolsets, notably around risk management.

From a human resource management perspective, the challenges of creating a project management capability are even greater. The Task Force notes the lack of an exit strategy for project managers as assignments wind down, which is critical to the extent that internal staff are assigned to large projects. The most common means of assignment for a significant undertaking is by secondment, where staff are assigned to the project for its duration and their original position is backfilled. While the commitment that is often made in support of this arrangement is to assist in the securing of a role of equal or greater responsibility upon completion of the project assignment, there are usually time restrictions on the period within which a role must be found, and often it is contingent upon the person themselves to find their next role. As well as removing focus from the project as it is reaching the critical stage of implementation, this creates a great deal of risk and uncertainty that is unacceptable to many, with the consequence that well qualified staff may avoid seeking or undertaking project assignments.

As well, a very real issue that the Task Force identifies is that – to put it plainly – the public service doesn't pay enough, reward sufficiently or provide sufficient advancement opportunities to be able to attract the senior resources necessary to manage large projects. In part, this challenge is an extension of the degree to which project management and leadership is valued by the executive, and by extension by the failure to recognize the senior levels of expertise required to successfully manage significant initiatives. Even in a sponsorship role, the involvement of senior executives is often more that of a figurehead than it is providing active leadership and guidance. The actual management of large scale initiatives, however, requires a similar degree of seniority and skill.

Finally, it needs to be recognized that the management of a large-scale initiative like those described in the Task Force report is more than a full-time job. There is no practical way to play an effective project leadership role and maintain operational responsibilities, even on an occasional basis. To accommodate this, HR practices need to provide more effective strategies for attracting and retaining senior resources in a project role and for ensuring that those in a project role are secure in their overall position in the organization. More important, however, is the need for senior executives to appreciate the importance of effective management of large-scale change programs as an internal capability, with the focus and leadership necessary to see them be successful.

## Organizational & Human Resource Capacity

The findings of the Task Force with respect to organizational and human resource capacity are summarized in the following bullet points:

- The level of governance of projects is often inadequate when compared to the level of governance that is typically applied to operations.
- Projects that exceed the expertise and understanding of government staff often become excessively reliant upon external consultants.
- Projects that are undertaken need to take into consideration the overall capacity of the organization to manage work. Not managing within available capacity often also results in the need to outsource significant aspects of transformation projects.
- There is little mobility of project resources across ministries and clusters.

While some of the Task Force findings with respect to organizational and human resource capacity overlap with the human resource management discussion previously, the overall emphasis here is entirely valid. Organizations have a much poorer understanding of their capacity and ability to undertake project work than they do their operational activities. This challenge in terms of capacity extends into all of the core dimensions addressed by projects – cost, time and particularly resource capacity.

More importantly, the largest capacity constraint facing most organizations – whether public or private sector – is not financial but people. While more extensive financial controls tend to be in place, however, there are often very few tools and methods to understand staff capacity, allocation and availability for project work. Most organizations simply do not know how much effort can be applied to project work in any given period, and who is available to conduct the work. Rather than being averse to taking on more projects, however, the resulting behaviour is often counter-intuitively to take on more projects than the organization has the realistic capacity to conduct.

Where capacity issues do emerge, there is again a tendency to rely upon external resources and consultants to manage significant aspects of projects. This creates the same challenges discussed earlier regarding truly understand the organization and its needs, and also inhibits the organization from taking ownership of the project results. The results is often projects that are done to organizations, rather than being done with organizations.

A final observation regarding the findings would be with respect to the mobility of resources across ministries and clusters. Particularly where the focus of a project is one of significant transformation, the degree to which resources are mobile and can move between clusters is an extremely important question. There is a strong belief within most ministries that the nature and focus of their projects are unique, and that resources from one ministry could not effectively contribute to a project in another ministry. Even inside individual ministries, there is a bias towards specialization that can preclude co-operation between sectors. While some of this is natural bias, and purely technical skills should be transportable, there is real need for more senior resources and particularly those leading a transformation initiative to understand the underlying business that the project is changing.

## Organizational Structure

The findings of the Task Force with respect to organizational structure are summarized in the following bullet points:

- IT within the Ontario public sector utilizes a cluster strategy which was viewed as working reasonably well in that it balances IT responsibilities and functions. As policies and directions change, the clusters should continue to evolve to support new and emerging requirements.
- The clusters should be focused primarily on the business solutions required by their customer departments, rather than the infrastructure required to support them. Standardization and centralization of infrastructure, standards, processes and methodologies should continue wherever practical and appropriate.

The second finding regarding the clusters supports their existence as a means of balancing work and efficiencies across organizations with like projects and solutions. Certainly, this approach allows for both flexibility of resourcing and certain economies of scale in supporting the on-going operations once individual projects complete. Care needs to be taken in terms of project governance, however. Where individual clusters support more than one ministry, they are in a position of balancing conflicting priorities in terms of the work that they undertake. Effective prioritization processes that can address priorities across a cluster are essential for the cluster to be effective in managing its work.

As well, the recommendation of standardized infrastructure, processes and standards can lead to continued efficiencies where the common approaches are universally appropriate. This can also support improved mobility of project resources across projects and ministries as demands require, in so far as similar approaches are being used throughout government. What is most challenging in this approach, however, is ensuring that there is sufficient buy-in and acceptance of these standards across the clusters. There can be a strong temptation in each cluster to adapt standards or adopt wholly different ones on the assumption that the way projects are done are different from area to area. While this is rarely in actual fact the case, the perception is a strong one. Ensuring acceptance of standards is essential if they are to be truly embraced.

# Highlighting The Recommendations

## Introduction

The primary recommendation of the Task Force is that "the Ontario government significantly increase the strength of its governance of major operational transformations." In other words, it should change how it goes about changing government.

Organizations are increasingly coming to the realization that the primary vehicle for transforming their businesses is through projects. By extension, the more effectively we manage our projects, particularly our larger transformation efforts, the more effectively we can introduce necessary changes to our organizations.

While the recommendations of the Task Force were specific to transformation efforts within the Ontario government, they have implications for many, if not most, government jurisdictions. The following sections explore the Task Force recommendations in detail. They also provide reflection on where the risks and challenges of implementing the recommendations may lie, and the other capabilities that will need to be present if these changes are to take hold and succeed.

## Governance

### **Recommendation 1:**

**Management board of cabinet should determine the government's capacity for large IT-driven business transformations and strictly limit the number and size of projects accordingly.**

While the need to understand and manage to capacity is absolutely essential, what must be kept in mind is that the recommendation is far easier to make than it is to realize. An organization's capacity for large-scale transformation is a product of a number of different dimensions:

- Cost and the availability of financial resources.
- Sufficient time to complete the contemplated work.
- Staff availability to support the projects.
- Staff capacity to absorb the impact of the change as the results of the project transition to operations.

What is challenging in terms of understanding the capacity for projects is that these responses will not be consistent throughout the organization, which leads to a need to elaborate on what is being meant by the government's capacity for business transformation projects. While from a financial perspective there may be a limitation on the investments that the government as a whole is prepared to undertake at a given point in time, the other dimensions of capacity will be different for different ministries and departments. Over time, individual department capacity will also vary, which means the ability to determine capacity must be a dynamic one.

Moreover, while financial capacity – in other words, the availability of money to invest in projects – tends to be both well understood and managed in organizations, the ability to measure and manage the capacity of the other dimensions is not as common. In particular, organizations tend not to have a full and complete picture of their capacity to do work, and particularly their capacity for project work. We do not measure and manage people hours in the same way that we manage our finances, leading more often to assumptions and wishful thinking about what is actually possible. Moreover, this is not a dimension that many governmental organizations are culturally able to implement – there is a widespread cultural bias against tracking and managing time that represents a significant barrier in truly appreciating the full effort available to do work.

Lastly, while staff effort itself can be measured objectively – even if it tends not to be – what is much more nebulous and abstract is the idea of the emotional capacity of organizations to absorb change. The

sense of this capacity within organizations is a much more intuitive one, and one that is strongly influenced by the environment and current culture within organizations.

Within this recommendation, the Task Force also speaks to a recommendation to keep projects short, ideally breaking initiatives into manageable units of work of ideally 12 months and never more than 24 months. Given the fact that IT projects typically grow in scope by 2% per month, this is on the face of it an entirely reasonable recommendation. The recommendation must be placed in context, however; breaking down a large initiative into 12 month chunks increases the likelihood of each project being able to be delivered more successfully. It does not increase the likelihood of success of the overarching initiative, however; in fact to a certain extent it actually adds more complexity.

The breaking down of larger initiatives into a series of smaller, related projects is generally referred to as a program. Portfolio management, which the Task Force report also discusses, relates more to the management of multiple unrelated projects that are common to a specific business entity. While many organizations successfully use both approaches, it is important to recognize that they represent different disciplines. Program management creates its own complexities, which must also be managed. Where projects are related but managed separately, the integration and alignment of management standards and interfaces between each project must be addressed. There is a need to ensure strong oversight of the full program, and that each project delivers on its expectations as well as that the component parts deliver the full solution called for within the initiative.

**Recommendation 2:**

**The sponsoring organization should commit and hold accountable senior executive leaders for the duration of the project. This requires solid political support at the ministerial level and project leadership at the deputy minister level.**

The heart of this recommendation is the role and function of senior management in projects. The effective leadership of projects requires strong sponsorship from the appropriate level within the organization, and for large transformation projects this can only be the senior levels of the organization, identified in the Ontario government report as being the minister or deputy minister.

For this role to be effective, the sponsor must be much more than just the figurehead they appear to be in many government projects. The role of transformation is to fundamentally change the business of a given ministry or department; to be effective, the top leadership has to be directly involved in the setting of objectives and operating constraints; in making critical decisions regarding the project and the changes that will be required of the organization to accommodate the project results; and in creating an environment that both allows for and expects success. This leadership role is real, significant and cannot be delegated. Creating accountability for this role is essential; what is important to recognize, however, is that the implications of the recommendation are that the top political and administrative executives within government must hold themselves accountable to the roles that they play, and to fulfilling their obligations in ensuring that the projects that they sponsor translate into real and lasting change within the organization.

**Recommendation 3:**

**Management Board of Cabinet should shorten project approval cycle times for incremental and low risk projects.**

This recommendation actually addresses two separate but related problems: the cycle times for approval, as well as the level within the organization at which smaller or lower risk projects are approved.

The stated recommendation – the reduction of approval time – is in part a product of the approval cycle and level within the organization at which a project must be presented, but it is also a result of the expectations that are placed around committing to projects. As was discussed in the findings, there can be a strong tendency in project reviews to remove risk. While this is noble in principle, the practical application tends to be the creation of ever-increasing expectations of rigour. This bureaucracy becomes

a self-sustaining activity, where the emphasis of review becomes the minutiae rather than the overarching question of the importance of a project and what it needs to succeed. While review is important, and – as is discussed later – gating processes can serve as value-adding frameworks for better decisions, the point must be kept in mind that the purpose is to make a decision, not to avoid decisions. Not making a decision is simply deciding not to decide – the imposition of bureaucracy to avoid decision making, however, is a waste of what are already very scarce resources.

Separate from the stated recommendation is the discussion of the appropriate level of approvals. The Task Force in the text of their recommendation propose raising the threshold dollar amount where a project must go to Management Board of Cabinet, in order to ensure that they focus on only the largest, riskiest and most complex projects, not every project. While the principle of this recommendation is worthwhile, there are additional dimensions which may influence where a project should be reviewed. A small project that has significant risk, or that will result in significant and far-reaching change in internal practices or external impacts, may be equally relevant for review at Management Board of Cabinet than just those that are large enough to cross a certain dollar threshold.

Even – and perhaps particularly – where projects fall below the threshold guidelines, and are approved at a lower level of the organization, consideration needs to be given to the alignment of decision making criteria throughout the organization. The devolution of approval authority can be both a blessing and a curse – a blessing to the degree that decisions are able to be faster and more responsive to project needs, but a curse to the extent that executives are unwilling to make decisions for fear of being second-guessed. Any instance where an approval at a lower level results in a visible failure, this can have the unfortunate consequence of the organization reverting back to previous modes of decision making or executives and managers avoiding making decisions to proceed in all but the most clear and positive of circumstances.

**Recommendation 4:**

**The OCCIO should continue to strengthen overall project reporting processes so as to provide management board of cabinet with an effective means to quickly assess the progress, time frame, and risk profile of ongoing projects.**

The Task Force acknowledges that the executive level reporting currently in place within the Ontario government is positive to the degree that it provides a high level overview of all project undertakings, but also recommends continuing to expand the reporting and most importantly increasing the objectivity of information presented. In particular, they recommended structuring of reporting to “encourage full and open disclosure, and not allow project reporting content to be at the discretion of the project sponsor.”

The implication of this recommendation is that someone apart from the project sponsor will determine project status report content, and that therefore the project itself be subject to independent and objective review. The implications here are in and of themselves positive, in that if implemented they would result in a much clearer, more pragmatic and realistic picture of where projects are and where problems are being encountered. The potential negatives, however, are associated with how such a capability would be implemented.

Project failures do not occur out of the blue and do not transpire overnight – they tend to be the result of a progressive series of problems that if caught earlier in many cases could be prevented, or at least responded to. The reason problems do not emerge until they are overwhelming and resolution is uncertain or improbable, however, is because bad news – or more precisely, *potential*/bad news – is often suppressed. The stigma of a project being in a ‘yellow’ cautionary status or ‘red’ problem status is often so great that project team members will go to extraordinary lengths to deny and suppress the actual status. Establishing an oversight body to objectively review projects without addressing this culture will simply result in greater efforts to suppress status information – having the opposite effect than desired – or result in the oversight body being branded as the ‘project police’, with limited co-operation, support or honest communication from project managers and teams.

**Recommendation 5:****Management Board of Cabinet and the OCCIO should ensure project post-mortems are a regular part of project oversight.**

Post-mortems – more positively referred to as 'post implementation reviews' --- represent the most essential aspect of project management in promoting continued improvement. The Task Force correctly observes that the conducting of a post-project review is important for all projects, not just those that have encountered problems or have failed. Their recommendation is that these reviews address both delivery of the intended benefits as well as identification of opportunities for continuous improvement.

While both of the dimensions identified and recommended by the Task Force are essential perspectives for any project, what is important to recognize is that they evaluate two different things, and from the perspective of two very different audiences. As such, they are most appropriately dealt with as two very separate reviews.

The delivery of benefits is fundamental to any project undertaken, regardless of size. Every project is an investment, whose purpose is to deliver some tangible outcome – a new process, product, service or capability. What the project produces, however, rarely has tangible value of itself – it is the purpose to which it is put – how it is implemented and used – that determines its true value. This benefit can only be measured in time – although it may not fully be realized three to six months after project completion, as the Task Force recommends. While an interim review could be done at this time, more appropriate would be to formally schedule a review at the point where realization of payback should have been achieved (when benefits exceed overall costs) or where the maximum promised benefits are expected to be attained.

Separately from measuring value, however, is evaluating the success of the project itself. It is a perverse irony that projects that are viewed as being successful can fail to deliver any value; equally true – if no more perverse – is that projects that are incredibly painful and awkward can still result in the delivery of actual benefits. What is essential is to understand both the degree to which the project was a success – that it delivered to its expected priority, as measured by scope, schedule and/or budget – as well as the degree to which the ultimate objectives of the project were achieved. The best time to evaluate the project itself is at the point of project completion, when it is freshest in the minds of participants, and when all project participants are still available to participate in the review. The focus of this review should be upon the degree to which the project experience was successful, and identification of what was effective and should be continued and what was ineffective and should change in future projects.

The project review can and should be conducted by the project organization itself. To be effective, however, there has to be a mechanism in place for these learnings to be shared widely within the organization, and where updates to organizational processes, standards and expectations can be made as a result. Without making any conscious choices in how to improve future projects and reflecting that in some way within the collective knowledge of the organization, the review itself is a waste of time.

The benefits review – the assessment of the value delivered by the project – should ideally be conducted independently, in order to ensure an objective review of what value was or was not delivered relative to the original business case. This provides the greatest assurance from a governance perspective that the benefits are real, and are not simply the result of hopeful accounting practices.

**Recommendation 6:****Management Board of Cabinet should establish an independent advisory committee for it to provide expert and independent advice on the issue of large IT transformations.**

The recommendation of establishing an independent advisory committee is an interesting one. Given the choice of an oversight or advisory body, the Task Force comes down clearly on the side of an advisory role, in order to ensure that management responsibility remains clearly and fully where it belongs – with the Management Board of Cabinet – and cannot be abdicated.

The recommended scope of such a committee would include an objective assessment of the feasibility, business case and risk profile of individual projects, providing independent advise on technology trends and playing an on-going review role in identifying potential problems, advising on strategies for the resolution of issues and advising on the viability of projects that are encountering difficulty.

The challenge with such a committee is that for it to be effective, its recommendations require traction, but as an advisory committee its ability to influence outcomes would be entirely dependent upon the degree to which its advice is valued and respected. Of larger concern, though, is that a standing advisory committee – particularly one that only meets on a quarterly basis, as recommended – would be challenged to provide sufficiently effective review and deliberation. Even if limited to the largest of projects, to truly understand the problems a project is encountering and the appropriate strategies for their resolution can require significant effort. As well, the sheer range of transformation projects throughout any governmental organization will require a broad range of expertise and insight.

While a standing advisory committee could be valuable, particularly from the perspective of helping to identify future trends and directions and to provide Management Board with independent feedback on transformation strategy and opportunities to further increase the value of projects being undertaken, the likelihood is that such a committee would struggle to play more of a review and oversight role.

That said, the traditional framework of project management allows for effective oversight such as that recommended through the establishment of steering committees. These governance bodies are chaired by the project sponsor, and are responsible for the oversight of a project and the attainment of its promised benefits. While they are generally comprised of senior management stakeholders representing the key stakeholders of a project, it is equally viable to include independent expert advisors in their composition. As well, because they operate in close proximity to the project they oversee, they are able to provide a much more meaningful and in-depth level of insight where they are established and run appropriately.

To be effective, however, a steering committee must commit to its role as an advocate and advisor in ensuring the project attains its goals and directing the changes to the organization that are required for the results of the project to be used successfully. This is not a figurehead position, but an active and necessary executive role. They are equally accountable for ensuring project value is realized, and for changing or stopping the project if it is not.

## Capacity

### **Recommendation 7:**

**Make project management a core competency of the OPS.**

The creation of a core competency in project management has value, but will possibly represent the greatest implementation challenge of the recommendations made by the Task Force. The recommendations propose the creation of a pool of independent project management staff that can be drawn on to support the delivery of large-scale transformation projects, with this resource pool aligned with the portfolio management function that they have separately recommended.

The implication behind this recommendation is the creation of what is known as a 'strong-matrix' structure. In essence, this is an organizational structure that can exist within a functional – or departmentally structured – organization that also creates executive visibility and accountability for project work, not just operations. For project management to be a core competency in the manner that is being recommended, a separate business unit or sector for project management would be created within each of the IT clusters, or more appropriately within the ministries themselves who own the projects.

Where a project management pool reports within the organization is an important consideration. While many of the large-scale transformation projects reviewed by the Task Force have a strong emphasis on technology, and are therefore viewed as 'IT projects', the reality is that they are business transformation projects enabled by technology solutions. The business problem is first and foremost the focus of any of these projects, and the project must be owned by the business organization. The

role of IT is as an enabler of the implemented solution, it is not the primary focus of the solution. As such, the IT organization should not and objectively can not be the owner of the project or retain accountability or responsibility for its management.

The establishment of project management as a core competency also implies project management responsibility that spans multiple levels of the organizational hierarchy, as the Task Force accurately notes. It involves recognizing that project management experience should be a necessary requirement for executives. For project management to be an effective waypoint, however, a career in project management cannot become a one way street where once taken there are limited avenues to return to a career path that leads into the executive ranks. As a result, there need to be established on-ramps into a project management role, as well as off-ramps that can be taken to move back from project management into a different operational or executive role.

**Recommendation 8:**

**Review total compensation levels for it executives and key IT roles such as project management to help attract and retain talent.**

It is a simple truth that the salary structure within the public service does not compete with that of the private sector. As a result, there can be significant difficulty in attracting skilled and talented resources into executive and project management roles. Whether closing this gap is viable within government is questionable, given the challenges that would be created by favouring one group or class of government employees over another.

It is true that some are attracted to the public services from a desire to be of service to the public good. Where gaps in income are structured and pervasive, however, long term retention of staff will become an increasing problem.

It is worth noting, however, that the majority of project management staff being engaged on large-scale projects are external consultants and contractors. The net effect of this behaviour, however, is that governments are currently paying well above the equivalent salaries that would be required to hire these skills directly. Given that projects are a pervasive and on-going mode of work in any organization, there will always be a requirement for these skills. Engaging temporary consultants to provide these services is therefore a questionable long-term strategy.

## Planning

**Recommendation 9:**

**Management Board of Cabinet should take a portfolio management approach to IT investment and management.**

While the recommendation to establish a portfolio management approach to govern investment choices is a reasonable one, the most appropriate reasons for doing so are different than those offered by the Task Force.

As noted in the discussion of the findings, there is a fundamental difference between the practices of program management and portfolio management. The 'chunking' of projects into related initiatives to promote ease and viability of management is reasonable, however these related projects must still be closely aligned with each other and an oversight capability to maintain the focus of the program is essential.

Portfolio management is instead a tool for making investment choices about disparate projects. At its core, it is a means of evaluating the full range of potential project investments against the capacity of the organization – in terms of funding, resource capacity, risk, value and the capacity for change.

A portfolio management approach is a viable means of ensuring that an organization is undertaking the right projects. Also required, however, is the means of tracking and monitoring the resulting projects and programs to ensure the selected projects are being managed the right way.

**Recommendation 10:**

**Project sponsors should invest a greater percentage of the project budget than they now do in up-front planning to ensure more robust business and project plans.**

The recommendation to invest a greater amount in up front planning is fundamental to successful project management. Partly as a result of human nature, there is often a significant pressure to bypass the planning process and get on with project. This stems from a number of biases – a preference for doing over planning, schedule pressure to get the project completed on an aggressive timeline, and the recognition that the faster the project team gets to development the more time they will have to deal with the problems they will inevitably encounter at that stage.

While planning is less valued, it is an essential practice if any organization is going to better deliver its projects. The value of planning is that it enables organizations to ensure that they can meet the timelines, that problems are anticipated and avoided and that the work of the project can proceed efficiently and effectively. The simple reality is that there is no one right timeline for a project – an aggressive date can in many instances be met. The implication is not whether the deadline is attainable, but what shortcuts must be taken, what scope reductions must occur and what risks must be assumed in order to meet the timeline. When objectively presented with this information, most executives will prefer a longer, less-risk prone timeline that allows more of the project scope to actually be delivered. Without planning, however, such a conversation is simply impossible.

As well, the role of the business case as a planning tool for government projects must be discussed. While the Task Force notes that business cases have evolved beyond simple cost-benefit models to also take into consideration feasibility, risk and strategic alignment, any well written business case should always incorporate these dimensions. More problematic, however, is the use of the underlying cost-benefit model itself as a tool for project justification in a government context.

Much of government work is about supporting a public good. As such, there is no direct return on investment, such as that which would be more often expected of a private sector project. The reality is that if there were a direct return on many governmental projects, the government would not in fact need to do them – the private sector would be naturally attracted to the opportunity for profit that such investments offer. Government investments focus instead on projects whose costs are too great or whose benefits are too diffuse to be attractive as a profitable investment. This is not to say that the projects are not of value, or that they do not produce any benefit – they just cannot be supported by the traditional bottom-line analysis most business cases call for.

As a result, a different approach to project justification is required. While numerical analysis of business case benefits is possible, many benefits – at least that do not explicitly deal with the creation of efficiencies and improvement of productivity – will be intangible. The challenge with intangible benefits is that while they can be quantified, the methodologies and assumptions can often be challenged unless agreed to beforehand, and the benefits will never materially transpire in actual revenues or bottom-line impacts. This is not to say that the projects are not important – in many instances, they may represent the most significant project contributions that governments can make – but they require a different form and type of project justification to be appropriate. Private sector methods are much less appropriate and relevant here.

**Recommendation 11:**

**Management Board of Cabinet and the OCCIO should establish and formalize a gateway review process for project approvals and funding.**

The principle of a gating or gateway review process is core to effectively stewarding project management investments. The gates that are appropriate are not a result of any standard project management approach, however, but of the product or service that the project is producing. Where standardized approaches are adopted for systems or process development, standardized gate reviews can be implemented. Where these methodologies do not exist, consideration should be given to their

development – or to appropriate review points within the project lifecycle to support effective gating reviews on an ad hoc basis.

The nature of the reviews is one of governance – the sponsor and steering committee for the project are responsible for ensuring that the project is on track to deliver its expected solution within the approved bounds of cost, resources and time, and that the results of the project are still valued and expected to deliver the anticipated business benefits. Where either of these conditions are not met or are questionable, the governance responsibility is to assess how the project can be optimized or redefined, or consider its cancellation.

What is most important from a governance perspective is that this is not a process for 'rubber stamping' a project to continue proceeding. Gate reviews are an opportunity to take stock of a project and its ability to succeed. Where success is not possible, the stigma of project cancellation or redefinition to ensure that value is delivered must be removed – otherwise the consequence is the continued investment of non-value producing resources at the expense of other worthwhile investments. Willingness to actively consider changing or canceling projects is essential to effective gating processes.

The other key consideration is the time involved in this review. Particularly on larger or higher risk projects, there can be an exceptionally strong temptation to over-analyze and second-guess previous project decisions. This is particularly true in highly risk averse cultures. While these represent important governance decisions, they must be dealt with expeditiously – any delays result in the potential for significant increases in project costs with no greater value being delivered. The longer a project is delayed, as has been discussed earlier, the greater the risk of failure or continued growth of project scope.

## Procurement

### **Recommendation 12:**

**Project sponsors and leads should prepare more thoroughly for procurement and begin only when a clear business case has been developed.**

The primary recommendation of the Task Force here is to ensure that the proper diligence has been undertaken before entering into procurement agreements, ensuring a feasibility study, business case and solution design or blueprint is in place. While there is logic in this recommendation, consideration must be given to how it is implemented.

For some projects, procurement activities may be required in order to secure external expertise or support in conducting the feasibility study, providing input into a business case or developing a design. While the intent of the recommendation is believed to more specifically reference the procurement of development resources and technical infrastructure to support projects, rigorous acceptance of this or any recommendation without consideration of its implications is dangerous.

Government jurisdictions are also increasingly looking to more progressive development approaches that adopt an iterative approach to requirements, design and development (e.g. systems development projects that adopt the Rational Unified Process or other similar 'agile' methodologies). Where such approaches are being used, it is difficult to cleanly separate the end of design and beginning of development, and there can be a strong argument made for a single consulting entity delivering support for both activities. Even where this is the case, however, a full feasibility study and business case should be in place, and there is nothing that should preclude or excuse this work from being undertaken. While the development approaches themselves may be different, the underlying project management principles and governance should remain unchanged.

**Recommendation 13:****Project sponsors should separate design from build in procurement.**

As discussed above, the separation of design and development is only truly possible where a 'waterfall' approach to product and service development is used. This is not directly a project management issue – it is related to the underlying choice of how to build the products and services that the project is designed to produce. A so-called waterfall approach is one that cascades from defining the requirements to designing a solution that meets the requirements to developing the solution to implementing it. Implicit within this process is that earlier stages are never revisited – once the requirements are done, the design is produced; once the design is complete, development is undertaken.

In situations where requirements are less clear – which will be particularly true in projects that are introducing new and innovative capabilities or re-engineering very different solutions to how the business of government is delivered – a waterfall approach becomes less relevant. As the project proceeds forward and the project team and the customer of the project learn more about the nature of the project, there is increasing likelihood that the requirements will evolve and expand. In this scenario – which is both valid and to be expected – a traditional waterfall approach will lead to considerable re-work, as the project team continues to cycle back to earlier stages of the project. A new or changed requirement identified in the development phase, for example, would result in cascading changes that could extend all the way back to the initial assumptions on which the design was based. This is in many instances a significant contributor to project delays, overruns and failed projects.

As noted in the previous recommendation, this is not to say that appropriate consideration should not be given during feasibility and business case development to the viability of the project, or that these projects should be permitted to abdicate from other project management and governance requirements. While some of the assumptions of an iterative approach require a different perspective of project management, the underlying tools, techniques and principles persevere.

**Recommendation 14:****Project sponsors and leads should ensure that the project team members who are "closest to the action" write detailed requests for proposal (RFPs) — and not the procurement leads exclusively.**

The intent of this recommendation is that the role of a Procurement organization should be an advisory one, not actually driving the procurement process. Again, this recommendation is one that is wholly logical and appropriate. As has been noted earlier, the role of any transformation project is not to transform technology but to transform the business of government, and the business in the form of the relevant department or ministry must therefore own that project. As such, the business must play a fundamental role in both defining the requirements and evaluating the proposed solutions to ensure that the most appropriate and relevant decision is made in any procurement activity.

Procurement groups can advise as to appropriate procedures and protocols, ensure appropriate contract forms are in place and that appropriate due diligence of any procurement activity occurs, but they cannot make decisions as to the relevance of solutions or vendors on behalf of the customer organization – only the business itself can do that.

**Recommendation 15:****Contracts should contain off-ramps.**

The principle of contracts containing off-ramps is fundamental, and as far as that goes the recommendations of the Task Force are appropriate. What should be noted, however, is that standard contract form typically allows for these provisions. It is rare that contracts do not provide the owner – the government – with the ability to change, revise or cancel a project, with or without cause. What is

rarer is for this option to be invoked. Once an organization becomes invested in a project, it is often emotionally and psychologically difficult to revisit the decision and realize objectively that the solution is no longer relevant.

The difficulty in cancelling or substantially revising the approach to a project is that much harder in an environment that is highly risk averse. The nature of government, given that governance is in part political and that project failures are far more likely to appear on the front page of the newspaper than they are in the private sector, means that there is a strong desire to 'get it right' the first time and a high aversion to making any concession that implies an incorrect decision having been made. As a result, there is can often be an avoidance to highlight bad news that can border on the pathological. Where even a cautionary 'yellow' on a project status report can be viewed as career-limiting, the willingness to concede that a project needs to be revised or should be cancelled altogether is simply non-existent.

For any such decision to be viable, the first thing that must be addressed is the culture of the organization, to accept that project revisions and cancellations are not only relevant but actually at times desirable. The nature of projects is that they deal with uncertainty – while a project may seem advantageous and positive even where a comprehensive feasibility study and business case has been developed, as more is learned about the requirements and the appropriate solution it may be found that the technical viability or the underlying business case us ultimately unworkable or at least less desirable than initially conceived.

**Recommendation 16:**

**Create a forum for ongoing dialogue between the I&IT industry and government senior civil servants outside the regular procurement process.**

The creation of a forum for collaboration and communication outside of the channels of the procurement process, as recommended by the Task Force, can only by positive for all. In the context of a competitive procurement, the desire for vendors to be successful and government procurement agencies to avoid all potential for lack of objectivity removes the opportunity for genuine sharing of information. By creating a forum for dialogue, vendors can better understand the needs of government and government stakeholders can take advantage of insights into capabilities, direction, trends and best practices. This allows both parties to design better solutions and government representatives to be more informed consumers of consulting and technology solutions.

What is fundamental in this recommendation, however, is that the creation of such a forum must be open and transparent. It should not turn into a marketing forum for vendors, nor should it be construed as a form of preferred vendor selection. To the degree that better insight and collaboration can be realized, this recommendation is a positive one. To the extent that it might be abused or create a perception of a lack of transparency or objectivity in the procurement process as a result, care needs to be taken in terms of defining the terms of reference and composition of such a forum.

## Realizing Results

As discussed, the recommendations outlined above in many cases offer important insights into how the management of large-scale transformation projects can be improved within the Ontario government, and offers important lessons for the government sector in general. The commentary provided within this white paper has attempted to illuminate and therefore provide greater insight into the issues being discussed, and highlight considerations that must be taken into account if the recommendations are to be effective in attaining their intended results.

Based upon our research and experience in developing effective governmental project organizations, the following two sections identify additional capabilities that are essential if the underlying objectives and intent of the Task Force recommendations are to be realized. We discuss both additional capabilities that would be required in conjunction with those of the Task Force, as well as implementation considerations necessary for the recommendations to take hold.

### Bringing The Picture Into Focus

While the recommendations of the Task Force identify core capabilities that would have a significance impact in improving the management of government sector projects, they are necessary and insufficient in and of themselves to create the full degree of change contemplated by the Task Force's report. The following additional capabilities represent underlying capabilities that must also be present if the recommendations of the Task Force can be fully effective:

- **Establishing a means of measuring resource availability and allocations.** While the recommendations of the Task Force speak to understanding the capacity of the organization to accommodate large-scale transformation projects, this requires more than just a one-time assessment. While the ability to manage the financial resources of an organization provides a granular level of budget expectations, commitments and actual expenditures, organizations have no such capability with respect to their human resources. Understanding the capacity for work across the organization is essential – not just to understand the capacity for major transformation projects, but for all administrative, functional and project activities. The challenge will be the implementation of a capability that provides truly meaningful information – this requires addressing a number of fundamental underlying cultural challenges. In particular, understanding capacity requires understanding current commitments – the amount of time being expended upon functional and administrative requirements, and the amount remaining for project work. This can only be realized with some mechanism for both budgeting and tracking effort as an organizational resource.
- **Governance criteria that defines not just approval authority but also approval criteria, to define the conditions that should be present to support project approval.** The establishment of objective approval criteria should provide a direct alignment between the strategic objectives of the organization – at either a governmental or department/ministry level. In essence, these should define the core attributes that a project should demonstrate in order to be approved, and provide a means of evaluating and scoring each project under consideration against the same criteria. As the strategic direction and priorities of the organization evolve, so will the criteria. What they provide, however, is a transparent means of identifying to the organization the kinds of projects that are most essential. As a result, those opportunities that are most likely to proceed are well understood by all stakeholders, and there should be a relatively clear understanding of whether or not an opportunity is likely to proceed well before it is presented to senior management for formal review and approval.
- **A governance body that is charged with effective oversight and accountable for the attainment of project results.** As discussed in the recommendations, a general oversight body likely would not have sufficient accountability or authority to force changes in projects or project outcomes where it is primarily established to play an advisory role. The core principles of project management, however, look to the steering committee to play a strong governance role in the oversight of an individual project effort. What is most important about this role is ensuring that the project solution is aligned with the needs of the organization, and that the

organization is prepared to accept and utilize the results of the project once it has been completed. This latter responsibility is fundamental to ensuring realization of a project's business case. It is how the results are operationally implemented and utilized that will have the greatest impact on whether the underlying business case can be achieved. The steering committee is operationally responsible for ensuring the required changes to the organization occur to allow these results to be realized.

- **A focus on value realization.** While the steering committee has responsibility for ensuring the results of any given project is attained, there needs to be a core discipline of value realization within the organization if the overall results of the full range of projects is to be attained. Just as portfolio management provides a framework in terms of evaluating and prioritizing which projects are to be undertaken, value realization provides a means of ensuring that the intended business benefits of the organization's projects are attained. In a perfect world, the business cases prepared for projects would serve as the basis for determining changes to operating budgets; where savings are promised, that should translate into a direct reduction in planned operational spending in future periods. While there are few organizations with sufficient discipline to realize this outcome today, it establishes an objective to work towards in marrying project and operational budgets together. Even so, without a conscious emphasis on ensuring that value is realized, it is unlikely that project results will be managed to ensure optimal realization of benefits. There needs to be a conscious effort within any transformation effort to ensure that the required changes take place.
- **Gating capability that flexibly responds to the types of projects and product and service development approaches being used.** While the Task Force recommendations call for the definition of a gating process, the reality is that it is unlikely a single gating process can fully support the review requirements of a full government. Gate reviews are tied to the completion of natural phases of work, which are a product of the product or service development process being utilized to deliver the project results. Where this process varies – and unless there is a common framework or methodology, it will vary considerably – it is extremely difficult to impose a single gating framework on all projects. Care will need to be taken in ensuring that gating and review standards are adaptable to the needs of each individual project or type of project that is undertaken.

## Making The Vision Take Hold

While the capabilities defined in the previous section are designed to complement the recommendations of the Task Force, it is the manner in which all of the recommendations are implemented that will ultimately determine the success of organizations in attaining improvements in project success. While the projects that the Task Force focussed upon primarily dealt with large-scale transformation efforts, the transition envisioned by the Task Force is a fundamental transformation itself and must be managed as one. The considerations given to how to realize the recommendations will be the ultimate determinant in whether projects improve or not.

The following list outlines some of the core implementation considerations that will be necessary in ensuring that the recommendations as outlined will be successful:

- **Commitment to an objective and transparent process in choosing, managing and realizing the value of projects.** One of the core underlying themes of the Task Force recommendations is the creation of transparency in how projects are initiated and managed. That this should be a core theme simply underscores the degree to which this is not the case today. The reality is that this is not unique to any organization – public or private sector. While consistency and transparency is often promoted in how projects should be managed, it is less likely to also be applied to the initiation and governance processes of project management. Part of this is a product of the audience – the decision making process in this regard primarily impacts the executive leadership of an organization. For a transparent decision making framework to take hold, they have to want it and be willing to commit to managing within it; for this to be the case, they must also see the value in managing within it. This value is real and significant, but its primary focus is the creation of organizational alignment and optimizing the use of

resources for the good of the whole, rather than the furthering of individual agendas or the reinforcement of siloed departments.

- **Creation of a culture that values – and measures and manages – the time people spend on all work, including projects.** Part of the underlying challenge in creating project management as a core competency and attracting skilled resources is the degree to which project work is valued. In the context of most government departments and agencies, functional or operational work is the predominant focus – in other words, the majority of staff already have a 'day job' that defines their core job responsibilities. Project work is typically added on top of this, with no accommodation or change in day-to-day responsibilities. The result is that projects are viewed as extras – or at an extreme, as hobbies – rather than an area of core responsibility and focus. Where conscious choices are not made about how the organization wants to allocate and expend resources, individual staff are left to prioritize the work on their plate – based upon how they are rewarded, how performance is measured or on what most interests them or furthers their career ambitions. If projects are a serious focus, then conscious choices must be made about how work is done. This requires not just managing the allocation of project assignments, but of all work assignments. Unless we can define the required effort to manage the administrative and operational commitments of the organization, we cannot quantify the capacity to undertake projects. As a result, projects will be chronically under-resourced and under-supported.
- **Establishment of the business ownership of projects.** The focus of the Task Force recommendations are on improving the management of large-scale transformation projects, but many of the recommendations speak to changes in how the IT organizations and clusters need to approach project management. Technology is an enabler to business change, but it cannot be the driver. The organizations most directly responsible for the operational delivery of services must be the organizations who own the re-definition and transformation of how those services are delivered. While technology will play a part in optimizing the efficiency and productivity of these practices and enabling collaboration and information sharing, it is the underlying business problem and its requirements that must drive all other aspects of the project. This means that the departments and ministries themselves must invest in the creation of a project management core competency, and ensure that they have the expertise, the desire and the capability to effectively manage their required change efforts.
- **Commitment to realization of the project results.** While a core part of projects success is the delivery of the products and services the project is designed to produce, that is only half the battle with respect to lasting change. The results of a project do not have value themselves, only potential value. It is the utilization of the project results within the organizations responsible for them that determine whether the potential value is translated into actual outcomes. While planning for this transition is equally within the scope of most transformation projects – identifying changes in jobs and roles, developing training programs, managing communications and articulating new processes and procedures – the realization of the value occurs only once the project is complete. As the organization starts using the results of the project, it must then manage itself in order to ensure that it is able to fully realize the intended benefits. It is the full management team of the organization – not just the project leadership – that owns accountability for whether or not success is realized.
- **Establishment of objective oversight, without such a capability becoming the 'project police'.** The Task Force clearly calls for objective oversight of projects within government, and particularly for objective assessment of the progress of the large-scale transformation projects that fall within the scope of their mandate. The recommendations envision some form of project management office that would be responsible for reviewing project progress and providing updates to the organization independent of the project manager or sponsor. While this has the benefit of being objective and separate from the project team – and can therefore at times provide a clearer perspective than that of the project team when problems do emerge – there are a number of cultural implications that left unaddressed would ultimately prevent such a capability from being successful. First and foremost, it must be recognized that any

review body would still require the active co-operation of the project team and manager in providing project status information. In an environment where problems and issues are antithetical and unacceptable to the organization, any negative information will be either suppressed or downplayed. To be effective, therefore, it is essential that organizations remove the stigma of a project encountering problems or failing. Projects are by their nature uncertain, and issues and risks will inevitably occur through their life. The question is not whether a problem will occur, but how it will be responded to when it does. Unless the environment is open and willing to hear problems and respond to them, they will be submerged until such a time as they become so large that they must be dealt with – at which point, it is almost universally too late to proactively respond to them. Even in an environment where exceptional project management capabilities exist, project problems still occur and project cancellations will be made – this is not a sign of weakness, but in fact a sign that an appropriate level of risk is being assumed by the organization.

- **A willingness to allow decisions that may result in failure.** Related to the previous point is the acceptance that perfect decision making is impossible. There is no decision-making process that will eliminate all risk and ensure full, complete and perfect information is available to the decision makers. As a result, any organization will make some good decisions and some bad ones – the goal in all instances is to win more than you lose. This is problematic in the current culture that exists in many government organizations. Because of the scrutiny and public visibility around projects and around problems, where project issues have an annoying habit of become front page news, there is a heightened level of sensitivity and risk aversion in decision making. The products of this anxiety are delays and hurdles that take the form of requests for more and more information and analysis, with little to no corresponding increase in the quality of decision making. Organizations – particularly government organizations – need to accept that imperfect decisions will occur, risks will be realized and issues will emerge. The test of effective project management is not their avoidance, but the effectiveness of the organization's response when they do occur.
- **Executives can only hold themselves accountable for the projects they choose, and the choices they make regarding how they are delivered.** While much has been mentioned within the Task Force report about the need for accountability, the level of change contemplated in the transformation projects being discussed spans the full organization. Sponsorship and leadership of large-scale transformation efforts come from the very top of the organization, and the political and administrative executives that sponsor these projects also have clear roles and accountabilities that they are responsible for. As the leaders of their organizations, however, there is little recourse beyond them in ensuring accountability is assumed and demonstrated – they must hold themselves accountable for their own behaviours and the transparency and objectivity of their decisions, as well as holding their staff and organizations accountable for the work they undertake in delivering on the projects. The willingness to assume this accountability will be fundamental to realizing all of the other recommendations discussed here.

## Conclusions

As noted at the outset, the challenges of managing government projects are often more difficult and complex than those in the private sector. The process of improving project management in a government context therefore has a greater number of complications that will need to be understood, considered and addressed in order for success to be realized. Nonetheless, there are lessons that can be learned here by any organization in how to manage its projects more successfully.

The work of the Task Force launched by the Ontario government was important in highlighting many of the challenges that must be addressed in better managing government projects, and making recommendations to do so. The goal of this paper has not been to denigrate this work, but to add to it. The foundation established by the Task Force represents a necessary base upon which to build. Our research and experience in working with public and private sector organizations reinforces the validity of the recommendations, but also identifies additional considerations that are essential if the outcomes of the report are to live up to their potential and address the underlying purpose and intent of the Task Force report.

The recommendations contained in the Task Force report and this white paper are comprehensive and considerable. For any organization to adopt them – in practice and in spirit – will require strength of purpose and will. The rewards that can be realized as a result, however, are significant. Projects are not going away. The projects that have been undertaken in recent years are large and complex, and in some instances have had a far reaching impact on how government services are delivered. To a great extent, though, they are only the beginning, and it would be folly to think that the time of large-scale projects will soon come to an end. In all likelihood, the need for change will only grow in intensity and importance, and the projects that are spawned as a result will grow in lockstep. For this reason, it is essential that organizations – all organizations – continue to commit to improving their approach and building their foundations in managing and overseeing projects. It is not too late, and the wave is not yet passed. The tide is in fact rising.

## About The Author

*Mark Mullaly has more than twenty years of project management experience, working in a variety of industries and sectors, including information technology, government, communications, utilities, insurance, finance, engineering, construction, high tech and the arts.*

*As President of Interthink Consulting Incorporated, a company based in Edmonton, Alberta, Mark has been a pioneer in the development of organizational project management capabilities. Interthink is renowned for its Organizational Project Management Baseline Study and PM:RoadMap organizational assessment tool, both of which are based on Interthink's project management maturity model. This model was developed in the early 1990s, and was one of the earliest in the marketplace. Most recently, Interthink introduced Focus:Project Manager, a project manager assessment tool that combines the dimensions of personality and skill to support the development of effective project managers.*

*Mark is a popular and engaging speaker who has been invited to address conferences across North America. His widely read column, Project Management in Practice, appears monthly on gantthead.com, and he is an instructor in project management with the School of Business at the University of Alberta. Mark is a past president of the Northern Alberta Chapter of the Project Management Institute. Together with Janice Thomas of Athabasca University, Mark is co-lead researcher of the 'Value of Project Management' research project being conducted for PMI.*