

XY SYSTEMS' PROJECT MANAGEMENT OFFICE

Dave Hayley

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APPROVAL

Name: Dave Hayley

Degree: Master of Business Administration

Title of Project: XY Systems' Project Management Office

Supervisory Committee:

Dr. Aidan Vining
Senior Supervisor
Professor Business Administration

Dr. Michael Parent
Second Reader
Associate Professor and Academic Director MBA Programs

Date Approved:

December 12, 2005



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ABSTRACT

XY Systems' (XY) competitive advantage stems from reputation and an ability to build long-term relationships. Both XY and its clients benefit from their long-standing relationships. The technology industry is highly competitive and competitors will use every opportunity to tarnish XY's reputation. Recently, XY's clients expressed dissatisfaction at XY's lack of Project Management (PM) skills. In addition, XY's management cannot understand the status of all XY's projects because of XY's rapid growth. XY must improve its PM skills to protect its reputation.

Turner's Five Factors of PM provides a framework to understand the nature of PM. Client expectations and competitor PM service offerings define the components of PM that XY should offer. XY needs a Project Management Office (PMO).

Implementing a PMO will provide XY's PMs with the support, skills and direction to improve client perceptions about XY's PM services, in turn protecting XY's reputation and relationships.

DEDICATION

I dedicate this project to my family and friends who have supported me in my life and my academic ventures, especially over the last eight years. Without your support I could not have done many of the great things I feel I have accomplished.

ACKNOWLEDGEMENTS

I would like to acknowledge the academic support of Brian Paul. Brian has supported me throughout the last ten years of my academic career. Without his continued support I would never have started this program, let alone this assignment.

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LIST OF ABBREVIATIONS

AD	Application Development
AM	Application Maintenance
ARMS	A Request Management System
BCIT	British Columbia Institute of Technology
CEO	Chief Executive Officer
IT	Information Technology
BCTC	British Columbia Transmission Corporation
MAL	Ministry of Agriculture and Lands
MAG	Ministry of Attorney General
PM	Project Management or Project Manager
PMO	Project Management Office
PMS	Project Management Standards
QA	Quality Assurance
RFP	Request for Proposal
XY	XY Systems (Xavier and Yale)
VP	Vice President

1 INTRODUCTION

The intent of this analysis is twofold: to determine if XY Systems (XY) should establish a Project Management Office (PMO) and to determine the scope of services provided by the new PMO. In March 2005, the Ministry of Agriculture and Lands (the Ministry or MAL) awarded XY a three-year contract for software Application Maintenance (AM) and Application Development (AD). This contract has a Ministry option to extend the contract by another two years. XY has doubled in size by winning this contract. One year into the contract, XY's lack of a PMO represents a possible weakness for the organization and its ability to satisfy the expectations of the Ministry.

The need for a PMO has surfaced in two ways. First, top level management at the Ministry has expressed a general sentiment for more high-level communication from XY, and requested that XY increase the level of Project Management (PM) on Ministry projects. A PMO will accommodate both of these requests. Second, XY's president, who acts as the account executive for the Ministry, recognizes that the sudden growth of XY limits his ability to understand all the services XY provides the Ministry. Without a single source for project information, he cannot get a complete picture of the more than 300 projects and programs to the Ministry annually. A PMO will help address this limitation.

This analysis will describe XY's background, organization, business and culture; outline client expectations for PM; define PMO features based on recent literature; report

on the PMO standards of XY's competitors; and then discern XY's ability to provide PMO services. Finally, this analysis will make recommendations as to which PMO functions XY should initiate and provide an implementation plan for realizing these functions.

2 OVERVIEW OF XY SYSTEMS

This section will describe the organization, management, services and business model of XY, and assess how the people at XY work together. The intent of this section is to present a clear picture of XY to use as a foundation for later analysis. After defining the features of a PMO in later sections, the analysis will use the following organizational information to determine if XY can support PMO features.

2.1 History of XY

John Xavier and Graeme Yale founded XY Systems Ltd. in 1977 using the guiding principles of treating clients and employees ethically with courtesy and respect at all times. John and Graeme believed that satisfied employees engage clients more effectively, thereby promoting long-term relationships. In 2001, Scott Black, principal of Blackwell Management, joined XY as a partner, emphasizing the same guiding principles. XY has employed some individuals for over 20 years and clients have engaged XY for many years. While these long relationships partially stem from the long contract lifecycle, some client relationships last over 20 years demonstrating that John and Graeme's guiding principles have paid off.

In 1978, XY first provided services to the Ministry of Agriculture and Lands. Since then the Ministry has been XY's predominant client, with 40 XY staff employed to work on its projects. XY has developed or enhanced all of the Ministry's mission critical systems, and since 1997, XY has supported and maintained these systems.

Besides the Ministry, XY has supported IT systems for more than 75 organizations. IT support ranges from analysis, design, development, and implementation, to systems management and systems maintenance. This breadth of experience allows XY to combine its mature knowledge with advanced innovative technology. XY technologists built mainframe systems in the 70s and 80s; clients now employ XY's .net developers to replace those legacy systems. Clients receive the benefit of an innovative approach to technology that stems from an ability to assess antiquated systems accurately and deliver advanced, effective replacement solutions.

After nearly three decades, XY has flourished, growing its staff to 100 people who work with public and private sector clients throughout British Columbia. XY is able to guarantee deliverables because of their ability to retain resources required for projects. The company maintains an 80% retention rate for consultants and staff. Management plans to use this managed growth to support expansion to clients focused on the delivery of Health and Human Services throughout Canada and the United States. XY actively promotes its reputation and services to markets in Alberta, Yukon, Ontario, New Brunswick and the United States. Management believes promoting XY's track record for long-term successful relationships with clients and staff represents a key success factor for expansion.

XY reinforces its credibility by partnering with industry leaders. The company earned its IBM Advanced Business Partner status in 2000 and Microsoft Certified Partner status in 2004. Industry recognizes Microsoft Certified Partner Program as an advanced requirement for independent companies to deliver Microsoft-based IT services and products. XY consultants and employees have earned certifications such as Microsoft

Certified Applications Developer (MCAD), Microsoft Certified Solutions Developer (MCSA), Microsoft Certified Database Administrator (MCDBA) and Microsoft Certified System Engineer (MCSE). Many of these accreditations come with the .net designation.

Moving forward, XY plans to continue to leverage its strong reputation and the skills of its existing staff to increase its client base. This growth means increasing XY's base of skilled technical people while continuing to support, train and develop current staff and consultants. XY aims to remain on the leading edge of technology by providing organizations with the best people, support, service, and results clients have come to expect.

2.2 Recent Growth at XY

The last two years have drastically changed XY's operation. A company that had taken more than 20 years of sustainable growth to reach profits of \$3.5 million took a quantum leap. XY increased revenue by 95% in 2004 and by more than 40% in 2005. The organization had only seven full-time staff and a pool of 40 full- and part-time contractors in 1993. Now, XY has nearly 50 full-time staff, a dozen of whom XY hired in the last two months, and 50 contractors.

In contrast to what one might expect over a period of such growth, XY has not taken on any new clients. XY had 18, 20 and 18 clients in the years 2003–2005 respectively. Moreover, XY has increased its reliance on one customer over this same period. Most of XY's growth stems from one disproportionately large contract from the Ministry; the Ministry's direct or indirect contribution to XY's revenue has grown from 47% to 67% over this period.

2.3 XY's Senior Management

This section provides a brief description of XY's senior management team and their roles within the organization. With the exception of one new hire, this group has known one another and worked together for many years.

2.3.1 John Xavier, President CEO and Founder

John Xavier and Graeme Yale left British Columbia Transmission Corporation, (BCTC) to start XY in 1975. The tragic loss of Graeme in 1998 left John as the sole proprietor of XY. Today, John remains XY's president and maintains his role as the account executive for the Ministry and other long-term major clients. Over the last few years, John has delegated much of the day-to-day operations to his management team.

2.3.2 Scott Black, VP Business Solutions and Partner

Scott formerly owned Blackwell Technology. Like XY, Blackwell provided IT consulting to public sector agencies in the lower mainland. After partnering with XY on a contract for MAL in 1999, Blackwell merged with XY. This merger also brought Mitch White, who is profiled below, and other key personnel to XY. Scott is now the principal project manager for MAL and is involved with long-term strategic planning for the Ministry. Scott performs a key role in sales and business development, and, with John, leads the strategic development of XY.

2.3.3 Gerard Brown, VP Operations

Gerard joined XY straight out of BCIT in 1984. Gerard has been the primary PM/contract manager for the Ministry of Attorney General (MAG) for 18 years. Besides

his work with MAG, Gerard manages human resources (HR), infrastructure, office space and administration.

2.3.4 Matt O'Range, VP Business Development

XY recruited Matt, the newest member to the senior management team, in August 2005 to mimic the branding and partnering success he realised at his former organization. Matt oversees marketing, business development, proposal writing and the IT Resource Agency. The IT Resource Agency matches independent consultants and IT resource contracts. Matt has also undertaken hosting evening strategy sessions and works towards completing XY's first marketing, business, and strategic plans.

2.3.5 Janice Green, Service Delivery Manager

Janice joined XY as an employee in May 2005, but has been a friend of John Xavier for more than 20 years and has contracted for XY throughout its history. Janice manages quality; she monitors XY's services to ensure that XY meets the service levels required by contract with clients.

2.3.6 Mitchell White, n-tier Senior Architect

As a key member of XY's development team since 1998, Mitch's responsibilities include managing all client server and n-tier applications. He has acted as the architect for Ministry projects using newly adopted technology including Microsoft .Net and Oracle. He has supervised the team responsible for the development and support of these applications. He provides consulting and planning support to the Ministry business analysts, and prepares plans and estimates for enhancements on all new systems.

2.3.7 Gary Redson, Legacy Systems Senior Architect

Uniquely qualified to fill this role, Gary has provided technical analysis and systems architecture service to XY as a contractor since 1982. He developed many of the legacy systems that XY supports for the Ministry. Gary has in-depth knowledge of the Ministry's business and systems acquired over the last twenty-three years. His responsibilities include day-to-day assignment of work, consultation with the Ministry, planning and estimating enhancement work for all development related to legacy systems, and leading a team of legacy system specialists.

2.4 XY's Managed IT Services

This section describes the Managed IT Services delivered by XY. These services fall within the company's four divisions described below in section 2.5, XY's Business Model.

2.4.1 System Design

XY creates designs of IT-based business solutions for clients. Designers concentrate on the functional needs of the applications, the content of the application, the layout of reports and computer interfaces.

2.4.2 Application Design and Development

XY provides software applications based on the client's current system designs by translating the current system analysis into a technical application design. To produce the code needed to develop a new application, the developer follows the specifications prepared during the design phase of the process.

2.4.3 Database Design

XY's Oracle and Microsoft certified database administrators develop database architectures to support clients' systems. Designed database support includes modelling database architecture, programming the database, maintaining backup systems, ongoing data indexing, data imports and extracts, and working with application developers to ensure integrity of new systems.

2.4.4 System Integration/Legacy Development

XY's legacy system specialists help clients with new developments on antiquated systems. New developments require connecting antiquated systems with new technologies and development of the transition plan from legacy to new systems.

2.4.5 Registries Design and Support

Three components comprise a registry: **databases** that store information; **web applications** that allow authorized employees and service providers to manage the data; and **web services** that make information integration possible. Combined registries provide clients with a product diagnostic method for systems integration.

2.4.6 Application Maintenance

XY provides systems maintenance and support including minor system enhancement, system updates to accommodate technology changes and ongoing bug fixes. Clients purchasing Application Development services from XY often attach Application Maintenance contracts.

2.4.7 Consulting Services

XY provides IT and business research and consulting including business case analysis, IT strategic planning, trend analysis, business process analysis, change management and change impact analysis. XY's consultants also provide a full range of PM services for IT design and implementation projects.

2.4.8 A Request Management System

XY provides ARMS (A Request Management System) to support development and maintenance processes. ARMS is a web-based software application that allows clients to make requests for maintenance and development and to view the progress of outstanding requests. ARMS reports progress in terms of tasks completed and effort spent. ARMS is a XY-developed, licensed software product.

2.5 XY's Business Model

Four separate divisions of XY provide the services listed above: the Resource Agency, the Application Development (AD) team, the Application Maintenance (AM) team and Software Licensing. This section describes the business associated with these divisions, and the relative strategic value of the divisions. However, before presenting the divisions it is important to understand how XY's clients buy services.

2.5.1 XY's Client's Buying Behaviour

Understanding the business models for the divisions requires understanding the tendering process. In British Columbia, the public sector primarily contracts vendors through a request for proposal (RFP) or public tendering method for large-scale product and service contracts. Government agencies publish documents detailing services they

require from vendors. Vendors respond by a specified date with detailed plans on how they will provide the products or services. Agencies judge responses based on predetermined metrics such as price and quality, or on qualifiable characteristics such as local content or project approach.

RFPs come in three different forms: “fixed-price,” “time-and-materials” or a hybrid of the two. Fixed-price tenders have one price for the full “bill of goods” and services. Once the vendor and client agree on a price, the amount of resources used by the vendor does not affect the prices.

Time-and-materials contracts provide rates for products or services on an itemized or hourly basis. The total cost varies based on the amount of time-and-materials consumed by the client during the term of the contract.

Hybrid RFPs have some aspects that are fixed-priced and others based on time and materials. For example, a vehicle supply contract might deliver vehicles for a fixed-price and then have time-and-materials pricing for the ongoing service of those vehicles.

2.5.2 Resource Agency

The Resource Agency connects independent consultants with public time-and-materials contracts suited for their particular expertise. The requirements section for a RFP suitable for the resource agency will partially read something like the following:

The purpose of the Request for Proposal (RFP) is to select a qualified individual to provide the Ministry of Transportation, Project Management Support Services Branch with the services of a Project Manager for Project Management Applications specifically but not limited to the Capital Program System (CPS). The CPS application makes use of web-

deployed Oracle Forms and Reports in the Ministry's Application Server environment.

The proponent will work closely with the Project Management Analyst in the Project Support Services Branch Located in Victoria. The proponent will be required to maintain an office in Victoria. The services requested in this RFP are expected to be performed by one individual. The time required for the work will vary, although it generally requires 20–30 hours per week.

The term of this work is estimated to run to March 31, 2009 with a Ministry option to renew for 3 years. (Ministry of Transportation, Project Management Service, 2005, p. 5)

These RFPs can ask for PMs, Business Analysts, Database Administrators, or any other type of consultant. The contracting agency awards contracts based on defined metrics contained within the RFP. The successful proponent will score the highest based on a point system associated with desirable criteria. Table 1 contains examples of criteria included in time-and-materials RFPs.

XY generates revenue from these contracts based on the difference between the rate the contractor bills XY and the rate XY bills the final client. XY earns between \$10 and \$50 per hour on these contracts. Currently, the Resource Agency earns just under a quarter of XY's total revenue.

Table 1 – RFP Desirable Criteria

Desirable Criteria	Point
<p>Project Management Experience: As per Section X.1, the skills, qualification and relevant experience, and knowledge of the proponent.</p>	35
<p>System Management Experience: As per Section X.2, the skills, qualification and relevant experience, and knowledge of the proponent.</p>	35
<p>Clarity of Presentation: The format and readability of the proposal; to convey the proponent’s intent in a clear and concise manner.</p>	5
<p>Price: All inclusive hourly rate.</p>	25

Based on Ministry of Transportation, Project Management Service, 2005, p. 8.

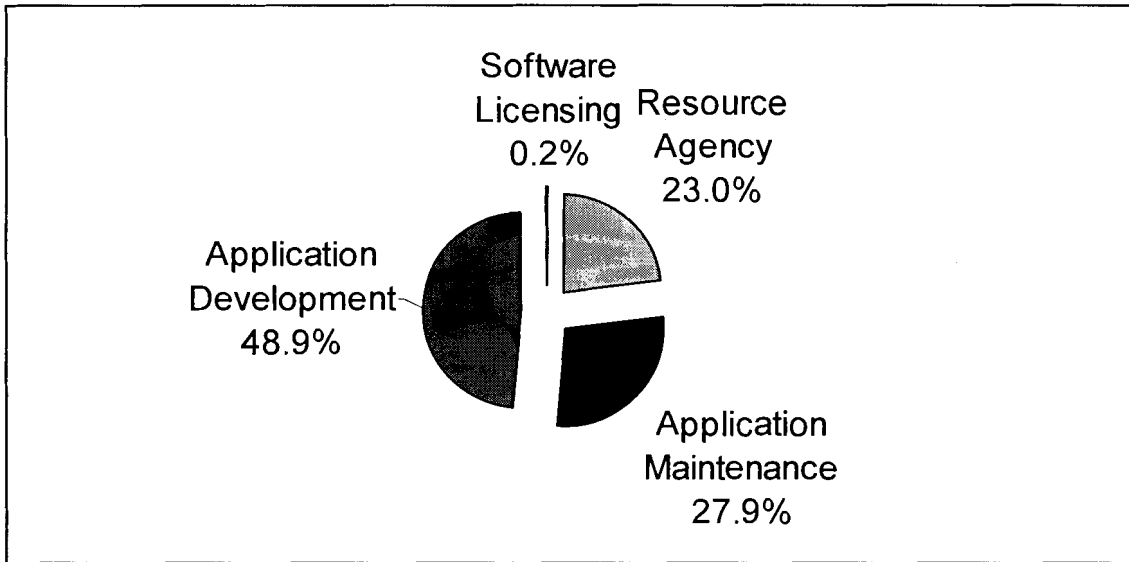
The business model described above is often referred to in the industry as a body shop. The model is recognized as unsustainable due to the lack of job security, short-term relationships and loss of corporate knowledge that typically accompanies this model. However, due to the long-term nature of the appointments with XY’s public sector clients and XY’s philosophy of treating contractors fairly, XY has managed to address these issues. Many contractors have worked exclusively for XY for more than eight years and some longer than twenty years.

Management has not decided on the strategic importance of this division. Some within management believe that the XY should separate the Resource Agency under a different brand from XY to protect XY's reputation. Others see this division as a viable testing ground for future XY employees. There is a concern that if this division does not generate the same margins as the rest of the organization, it may dilute the attractiveness of XY as a potential acquisition.

Reaching a 3:1 employee-to-contractor ratio is a goal for XY. Over the past three years the Resource Agency, which relies heavily on contractors, has grown very little. The faster growing divisions, described below, predominantly use employees. These divisions align better with the goal of having a 75% employee-based work force.

XY management created this division as a separate unit to get a better financial reporting for the unit. The availability of more data will enable XY management to better discern the importance of this division.

Figure 1– Percentage of Revenue by Division



2.5.3 Application Development

The Application Development (AD) division utilizes the employees of XY to design, develop and implement applications for clients. The specifications of these applications are defined within fixed-price contracts as described above in section 2.5.1, XY’s Client’s Buying Behaviour. The requirement sections for these fixed-price RFPs are significantly more detailed than the time-and-materials sections of RFPs described above. Fixed-price RFPs do not describe the skills of the individuals required but rather the traits and functionality of the systems required. The metrics for selection will include criteria such as depth of resources, clarity of proposal, price, time to deliver, system security, business references, organizational experience with similar projects, etc.

XY provides some AD through “standing offer” agreements. Once identified as a standing offer vendor, a government organization can purchase services from that vendor at predetermined prices. Standing offer agreements typically last between one and five

years. The process for this involves the client defining a request, the vendor providing an estimate in the form of a ROM or Rough Order of Magnitude, and, if the project is worth more to the client than the ROM, the client proceeds with the development. These projects still are fixed-price and carry the same risks.

Fixed-price projects represent a higher risk to the contractor than time-and-materials contracts; if XY underestimates the effort required, XY absorbs the costs. However, these contracts also represent higher margins; typically, all parties bidding on these contracts will build in significant contingency. AD represents the largest revenue generator for XY, generating nearly 50% of XY's revenue. Good PM can greatly affect the profitability of these projects; this especially holds true when clients combine AD contracts with Application Maintenance contracts.

2.5.4 Application Maintenance

Large system applications and databases require constant maintenance. Updates to connected technology, changes in business and software bugs can all lead to repairs and minor enhancements. Database systems need further maintenance in the form of data migration, maintenance of administrative tables, and working with developers to support new applications. Application Management (AM) contracts to supply these services. They make up just over a quarter of XY's revenue.

Government agencies award these fixed-price contracts based on descriptions of the response times to requests, support systems and tools, service availability, price, depth of resources, and transition plans if a third party currently supports the system.

AM contracts often contain bonuses for specific service levels such as short response times and efficacy of service.

AD contracts often contain an AM component for an extended period after implementation. These combined contracts represent additional risk for AD contracts. If the AD does not go well, the cost associated with AM can increase significantly.

2.5.5 Software Licensing

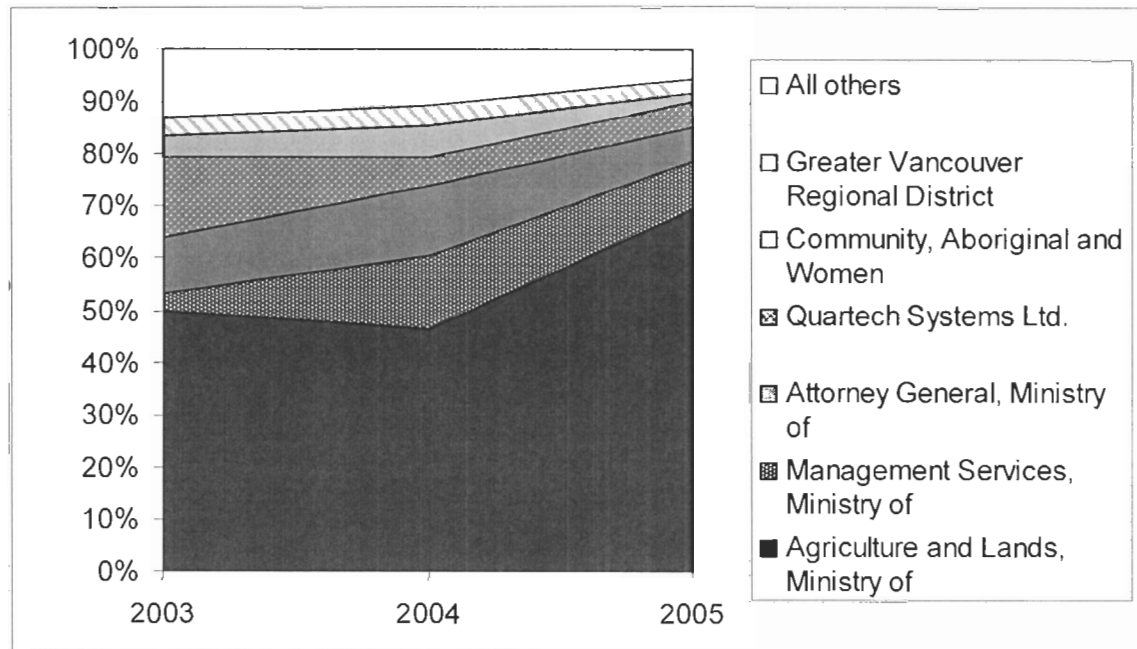
XY's marketing team created Software Licensing, the smallest division of the company, in an attempt to gain leverage for the intellectual property of XY. XY provides ARMS (see above for explanation) as a value-added developed in-house. However, this process comes with significant complexity because products developed for the government belong to the government. XY has to apply to the Intellectual Property Agency, the Ministry of Management Services, to gain intellectual property (IP) rights to an application. This process involves proving that no other organization has claim to the IP, publishing public notification of the application of ownership, and negotiating with the Intellectual Property agency for royalty rates for future sales of the IP. XY has almost completed this process for one application and has an opportunity to sell this application in Ontario. Because Software Licensing makes up only 0.2% of XY's revenue, selling a large-scale application will represent a large shift in XY's business model.

2.6 XY's Clients

More than 99% of XY's revenue comes from the public sector, with the majority of that (67% in 2005) coming from the Ministry. The next five largest clients—the

Greater Vancouver Regional District, the Ministry of Community, Aboriginal and Women, Quartech Systems Ltd. (a partner on Ministry of Education projects), the Ministry of Attorney General, and the Ministry of Management Services—together have represented 39%, 43%, and 25% of XY’s revenue over the last three years respectively. These clients have employed XY for an average of more than seven years.

Figure 2 – Percentage of Revenue by Client



Most of XY’s clients have long-standing relationships with XY. XY retains 80% of its clients each year and tends to replace the clients that do not return. Clients that stay with XY increase their business with XY by a mean of 36.7% and a median of 29%.

2.7 XY's Working Environment

2.7.1 XY's Offices

Physically, three offices comprise XY's operations, two in Burnaby and one in Victoria. The head office in Burnaby contains about 30 staff on any given day. Ten developers are located in a separate office in the same compound. XY opened the developer's office in March 2005 to accommodate growth. Due to the significant government presence in Victoria, XY opened a permanent office there in 1990. Like the Vancouver office, this office has grown significantly and now houses about ten staff and contractors. The remaining staff and contractors, about 50, work full time on client sites.

XY's rapid growth has had an impact on operations. Administration cannot keep up with demands for space, phones and computers. Four staff have moved into the head office in the last two months, and it is not uncommon for a new employee to spend time every few days looking for a place to sit and for a computer to use. To accommodate the growth, management has occasionally asked contractors to work from home while management arranges for additional space.

2.7.2 XY's Culture

The office environment is highly social, and management promotes this. Birthdays, going-away parties and other events are celebrated with social lunches in both the main and Victoria offices. The developers host a lunch outing every Friday, usually involving eating at a local ethnic restaurant; and additional social/recreational activities such as hockey games, movies or yoga happen on almost a weekly basis. Around the

office, everyone, including management, have open doors and welcome opportunities to address questions by new or existing staff.

While the environment is social and conversational, XY does promote and expect a strong work ethic. Management encourages employees to establish their own hours and to work from home if it makes more sense when scheduling an off-site meeting, and there is no strict time keeping. Some employees arrive as early as 7 am, while many stay at the office well after 6 pm, and late night strategy or brainstorming sessions occur regularly.

2.7.3 XY's People

XY's offices are exceedingly diverse. Employees come from more than fifteen different countries on four continents; people from outside North America represent more than 45% of the employees. The gender makeup at XY is less balanced. At 33%, the female representation is only slightly higher than the US statistic of 32% for women in the IT workforce (Chabrow, 2005). Contractors represent just over half of the staff, though it is difficult to distinguish between staff and contractors that have worked for XY exclusively for as long as 20 years.

Figure 3 – XY's Employee-to-Contractor Ratio

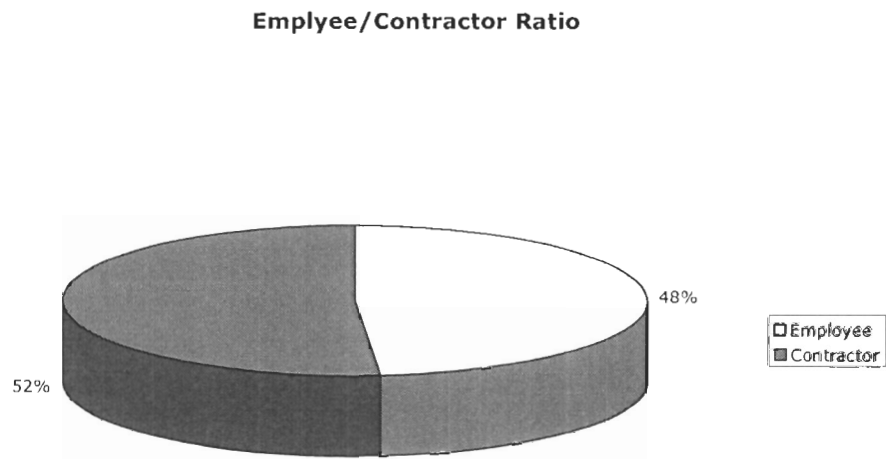


Figure 4 – XY's Male-to-Female Ratio

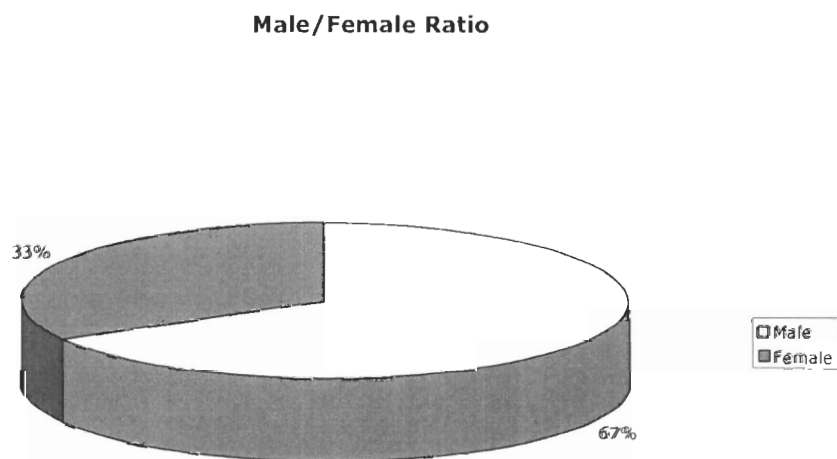
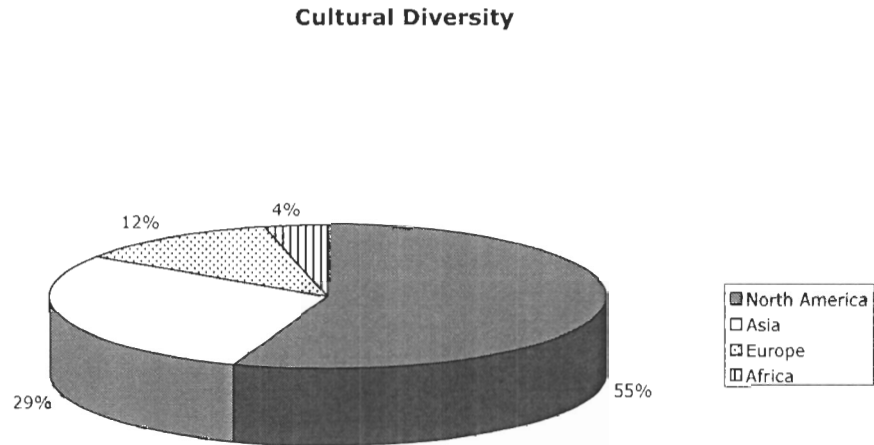


Figure 5 – XY’s Staff Continents of Origin



2.7.4 XY’s Organizational Structure

XY’s organizational structure has not kept up with the organization’s rapid growth. Management has never actively defined the organizational structure other than to give people job titles. Management recently attempted to map the organizational structure, as it currently exists. This exercise resulted in a six-page document with 24 separate diagrams.

Table 2 attempts to provide a simplified diagram of the organization in a matrix structure. The diagram, however, cannot capture the complete essence of the organization. XY will need to actively redefine their organizational structure to distance senior management from client-specific activities. This will allow senior management to focus on strategic management.

Table 2 – Organizational Chart

Executive John Xavier and Scott Black		Software Licensing	Resource Agency	Application Design	Application Maintenance	XY Internal
		Matt O'Range	JT Xavier	Mitch White & Gary Redson	Vacant/ John Xavier – Acting	Gerard Brown
Contract Management	Scott Black					
MAL	Janice Green			Group 1		
MAG	Gerard Brown		Group 2			
BCBid	Darrel Blue					
Business Development	Matt O'Range				Group 3	
Marketing	Kerri Pink					
Finance/ Admin/ Operations	Gerard Brown					

The organizational chart shows three groups to provide examples of how the matrix structure functions. The following are brief descriptions of whom the groups report to:

- Individuals working for Group 1 provide Application Development for MAL. If the employees are developers they would report to Gary Redson on technical issues and Janice Green for issues concerning the client.
- JT Xavier and the resource agency would connect an individual working in Group 2 to the contract. Once working with the client the individual will report to Gerard Brown.
- The application maintenance team in Group 3 would report to Matt O'Range until they have written the RFP. Once awarded the team reports to the application maintenance group under John Xavier.

2.7.5 Employee Benefits

XY provides its employees with standard life and long-term disability insurance, extended health and dental benefits. XY does not have any policies for pay or holidays – these are determined on a case-by-case basis. XY provides additional benefits in the form of laptops and cell phones to some staff, but management has not yet developed standard policies for these benefits.

2.7.6 XY's Values

As discussed above, XY's ownership has been committed to the building of trusting relationships with clients and workers since the company's inception. However, until recently XY had never officially communicated these values. Working towards building a strategic framework for the organization, XY's marketing group wrote a Mission and Credo for the organization that XY has since posted on its website.

Mission

Our Clients – To deliver the right answer using the right technology, by first listening to our clients and fully understanding the problem. By conducting a proper analysis for each situation, we consistently provide the right specialists, the right system (process), the right software and ultimately the right solution.

Our Team – To give our staff and consultants an opportunity to succeed and enjoy their experiences, we provide a positive and proactive environment in which there is respect and guidance. We create a forum in which our people can constantly push the envelope, build new skills, successfully complete challenging projects and be rewarded for recommending, then regularly delivering, more value to our clients.

Credo – Scott Black, Vice President of XY Systems, states:

“Giving clients what is best for them is ultimately what is best for us.” To back up this statement, we have developed clear guidelines on how to operate in the best interest of our clients:

- Treat each other with respect.
- Value the opinions of others.
- Maintain a professional demeanor.
- Prioritize a client’s budget and deadlines.
- Be a source of knowledge for clients and colleagues.
- Get clients the information they need to make informed decisions.
- Maintain the highest level of technical and business expertise.
- Recognize problems and solve them.
- Be honest and upfront.
- Maintain a positive attitude. (XY Systems, 2005)

2.7.7 XY’s Management and Strategy

XY’s owners recognize the importance of a strategic direction. The owner’s recent hires in the marketing and business development team demonstrate that. In the last six months, marketing has published the organization’s first ever Mission and Credo, and the team is currently working on the organization’s first business, marketing and strategic plans. The owners strategically identified that in order to succeed, the company needs a

plan to transition from a small “one customer” technology company to a full-service IT company. In a memo sent after a strategy session, John Xavier, XY’s President, wrote:

I believe the first step is to identify what we do well. Then we can determine if this is what makes us different and how we want to market it. If we feel that we should be moving into different products or services (e.g. portals, collaboration etc.) then what is our strategy to develop the skills and marketing to be successful.

The plan we develop will determine the things we need to do to be ready to go out there and successfully sell our products and services. (Personal communication, November 15, 2005)

XY places appropriate value on strategy and has acted in a strategic manner. Or, perhaps more aptly, XY’s strategies have been consistent with the company’s size. As a small company XY’s strategy has been largely emergent: the organization takes opportunities as they arise, applies to as many RFPs as it can handle, and takes whatever projects they win. Now as a growth company, XY’s core strategy entails putting the right processes in place, having the right people in place and asking the right questions. XY plans to use the three to five year window provided by its Ministry contract to become a big company.

Strategy is important to XY because, unlike much larger companies, they cannot afford a misstep. The end of the Ministry contract represents a one-time window to succeed and become a big company. Unlike most growth companies, they have an opportunity to spend some time in analysis. To XY’s credit the owners have adopted a reflective strategic approach, a transition from the early days of choosing paths purely by opportunity. Maintaining this new approach and empowering the rest of management to create XY’s strategic direction presents XY’s next challenge.

3 CLIENTS' EXPECTATIONS

Before analysing XY's capabilities to perform PMO services, this analysis will examine XY's clients and competitors. This section will determine which aspects of PMO XY's clients expect from XY. What follows are the specific requirements the Ministry and MAG have for documentation and communication from XY. The itemized list of documents provides this analysis with a list to compare to the documentation supplied by XY's competitors. Also included are findings from a recent XY customer survey. The survey provides insight about PM issues at XY.

3.1 The Ministry of Agriculture and Lands

The Ministry provides two thirds of XY's revenue and half of XY's projects. While the Ministry does not dictate PM methods, they do require specific documentation. The Ministry has divided its full documentation template library into four project stages: initiation, planning, execution and closing. Specifically these four stages are:

- Project Initiation:
 - Information Technology/Information Management Proposal
 - Project Charter
 - Project Approach
 - MAL Work Estimate/Proposal

- Project Planning:
 - Project Management Plan
 - Project Journal
 - Project Communication Plan
 - Corporate Privacy Impact Assessment

- Project Execution:
 - Sign-off Template
 - Meeting Minutes Template
 - Status Report
 - Change Request Form
 - Change Control Log
 - Deliverable Sign-off Form

- Project Closure:
 - Post Project Evaluation
 - Post Project Review Questionnaire
 - Post Project Evaluation Questionnaire

All projects for the Ministry require a project charter and status reports. The Ministry determines if they require additional documentation on a case-by-case basis; as the risk of a project increases the amount of documentation and communication increases.

3.2 Ministry of Attorney General

The Ministry of Attorney General (MAG) has used XY services for 22 years and has always been one of XY's top sources of revenue. Like the Ministry, MAG does not dictate methods for PM but have requirements for documentation and communication. Like the Ministry, MAG requires additional documentation based on project risk. However, MAG's method for determining risk does not change on a case-by-case basis. MAG determines risk by assigning points to projects based on scope, price, duration, level of technological integration, and relative age of the technology. Understanding how risk affects documentation levels will help XY set up a risk assessment tool and the corresponding documentation. MAG's risk progression for documentation is as follows:

- Projects defined as low risk by MAG require:
 - Project ROM (Rough order of Magnitude)
 - Project Charter
 - Progress Reports

- Projects defined as medium risk by MAG require the above plus:
 - Project Proposal
 - Project Management Plan
 - Project Approach
 - Communication Plan
 - Project Evaluation

- Projects defined as high risk by MAG require the above plus:
 - Risk Management Plan
 - Change Management Plan
 - IT Integration Proposal
 - Privacy Assessment Report
 - Project Journal
 - Project Work Plan
 - Meeting Minutes from Bi-weekly Status Meetings
 - Project Sign-off

3.3 Results of a Client Survey

In 2004, XY contracted a marketing company to survey XY's clients. XY intended the survey to determine the perception of clients, pinpoint XY's strengths and weaknesses from the clients' point of view, and understand better how to write a winning RFP response. XY provided a complete list 19 clients and the consultant was able to contact all but one (De Tracey, 2004).

Though the survey question did not focus on PM, feedback from the survey proved highly relevant to it. When asked, "From your own experience, how would you describe XY Systems in 10 words or less?" the clients responded positively including words like reliable, professional, capable and friendly. Only two of the eighteen contained negative phrases, and both concerned PM: "lacks project management skills" and "marginal organizational skills" (De Tracey, 2004, pp. 5–6).

When asked, “How do you feel XY systems could improve?” half the respondents had no comment. Of the remaining nine responses, five contained comments regarding PM (De Tracey, 2004, pp. 7–8). Clients’ concerns about XY’s PM abilities became even clearer when the survey asked, “Based on your knowledge and perception of XY Systems, what services do you see them as not being able to provide?” Four out of nine responses specifically stated that XY is not able to provide PM (De Tracey, 2004, p. 9).

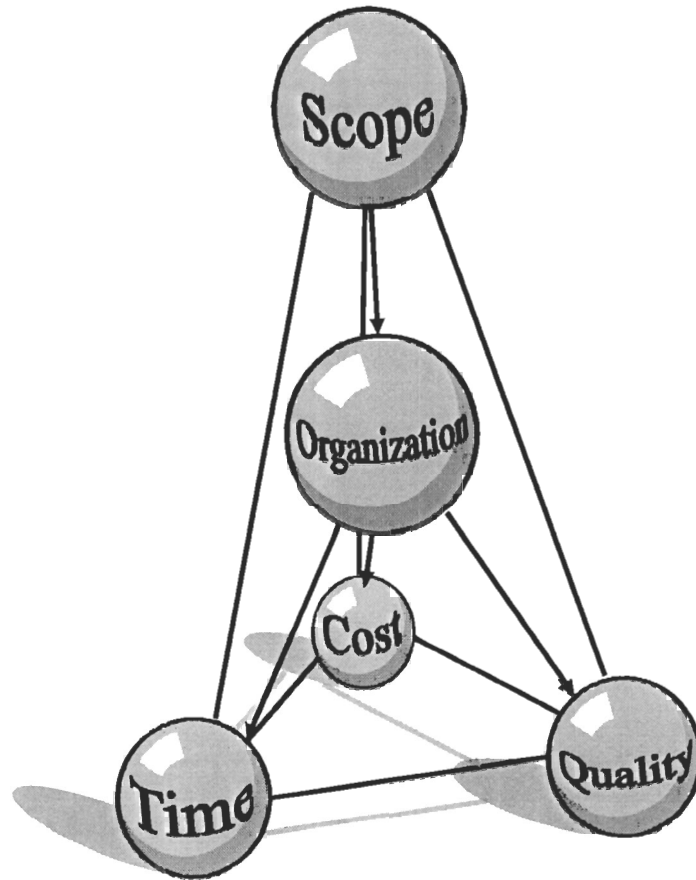
Contrary to the above concerns, two respondents stated in their answers that XY is not capable of anything except PM (De Tracey, 2004, p. 9). In the conclusion of the survey report the consultant states that “XY Systems is getting an overall favourable response from current clients who have hired them for project management services.” (De Tracey, 2004, p. 17) The consultant states that “it is [her] understanding that there are senior people at XY Systems with extensive project management experience.” (De Tracey, 2004, p. 17) I believe this disparity stems from a resource application problem. Using the Resource Agency, XY has put PMs on other organization’s projects and not client projects that have been poorly managed.

4 WHAT EXPERTS SAY ABOUT PM METHODOLOGIES

This section defines the features of IT PMO that service public sector clients. The last section described XY and their clients. Understanding best practices of PMOs will provide a framework for understanding XY's capability of providing PMO services to its clients. Turner's *Five-Functions of Project-Based Management* provides the base of this PMO framework, and this analysis complements Turner's model with concepts from recent literature, adapting Turner's model specifically to public sector IT projects.

Turner expands on the three factors of cost, time and quality that predominantly make up the focus of traditional PMO. Authors commonly represented these factors using the adage that for any given project, a client can have any two of good, fast or inexpensive. Turner suggests that these three factors represent the limits of projects. The remaining two factors in his model, managing scope and organization, represent the essential function of PM (Turner, 1993, chapter 1).

Figure 6 – Turner’s Five Functions



Based on Turner, 1999, p.8.

4.1 Quality

Managing quality means ensuring a project delivers what the customer paid for. Lean, Six Sigma, Total Quality Management, ISO9000, Pareto Analysis, Taguchi Method and many other techniques allow PMs to monitor if project deliverables meet expected standards. All these methods depend on the assumption that measurable standards exist. In public sector projects, the tender or request for proposal (RFP) largely dictates standards if they exist.

Turner maintains that to manage quality a project must have clear impartial specifications, user defined standards, historical reference (it must have components that have been provided before), employ qualified resources and have change controls put in place. Change control overlaps with scope management, which is detailed below (Turner, 1993, chapter 8).

4.2 Cost

Managing cost on a project depends on estimates. Estimates provide a basis for control, present evidence to project viability, help with securing funding and provide budgets for RFPs. Estimates are maintained throughout the duration of projects, including proposal estimate, tender estimates, budget estimates, and control estimates. Managing costs involves comparing consumed resources with an estimate of the portion of project delivered. With a service company, cost is directly connected with hours or effort spent on a contract (Turner, 1993, chapter 9).

4.3 Time

Time in this context does not refer to the hours of resources used but the amount of calendar time that passes before project completion. However, time is necessarily connected to effort due to resource scarcity. Managers predominantly use schedules to manage time. The schedule coordinates resource inputs based on availability to meet a specified deadline by organizing activities into tasks. The PM assigns each task with a start and end date and a resource based on availability. Most PMs use Gantt charts, schedules that manage interdependencies among tasks, to manage time for complex projects (White & Fortune, 2002, p. 8).

Project organizations, as opposed to public sector clients, place more emphasis on cost and time; clients tend to focus on stakeholder needs (Bryde & Robinson, 2005, p. 5). Current literature separates stakeholder need from “quality” as defined above and identifies stakeholder need as a soft aspect of projects, described in the next section (Turner, 1993, chapter 10).

4.4 Scope

Turner defines scope managing as ensuring that enough, but only enough, work is undertaken to deliver the project’s purpose successfully (Turner, 1993, p. 101). Scope management affects all three of the factors: time, cost and quality. Poor scope management can lead to reduced quality through inadequate change control, cost overruns through unnecessary effort, and late delivery through scarcity of resources resulting from the extra effort.

Scope management entails:

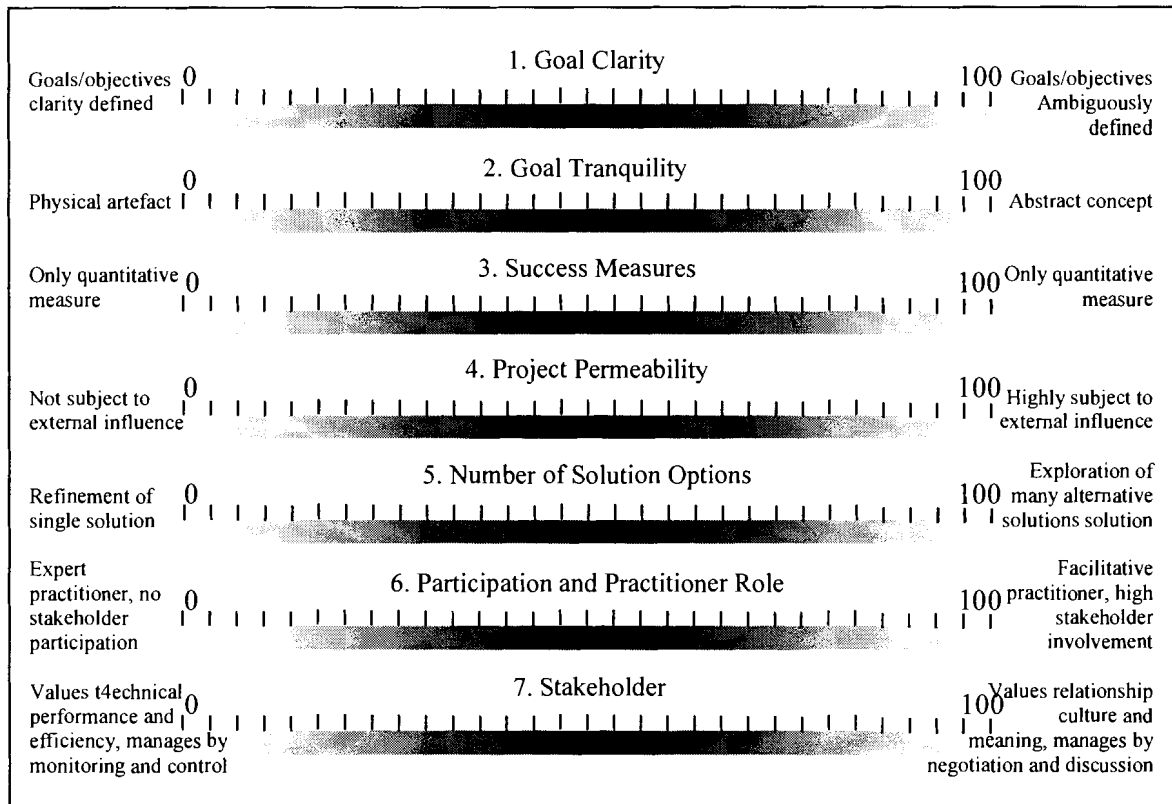
- the PM defining a solution to the project’s problem or purpose;
- the PM subdividing the solution into definable tasks and defining milestones for delivery;
- the project team performing the work;
- the PM continually monitoring work, requests and issues;
- the PM adjusting tasks and milestone to address issues as they arise while ensuring the breadth of the work does not expand beyond the original intent of the project (Turner, 1993, chapter 6).

Crucial skills for managing project scope include identifying which aspects of a project are hard or soft. The ability to do so influences project success (Crawford & Pollack, 2004, p. 645). Hard aspects – those that a PM measures against standards – are addressed with time, cost and quality management. Soft aspects, including community perception, safety, and other environmental, legal, political and social issues, affect the scope of a project.

Figure 2 shows the seven dimensions that Crawford and Pollack use to identify soft aspects of projects. Aspects that score high (close to 100) require special attention. While managing a project, the degree of softness can change as new external issues arise or new stakeholders identify themselves (Crawford & Pollack, 2004).

High stakeholder involvement, consultative nature, availability of multiple solutions and high susceptibility to external influences such as political change contribute to public sector projects having many soft aspects. Crawford, Costello, Pollack and Bentley identify public organizations as “complex, multi-stakeholder environments, especially where organizational change projects are involved.” (2003, p. 447) They state that public sector projects require flexible management and attention to soft aspects of projects. PM requires a balance between soft interpersonal skills involved with managing scope and the hard skills around managing quality. The better the PM is at identifying soft aspects and managing the hard–soft balance, the greater the chance of project success (Lee-Kelley & Kin Leong, 2003, p. 585).

Figure 7 – Depiction of Hard and Soft Dimensions Framework



Based on Crawford and Pollack, 2004, p. 650.

4.5 Organization

In the context of Turner’s model, the organization represents the business or group managing the delivery of the project. Managing the organization entails sourcing, training and allocating resources, choosing projects and ensuring successful delivery.

Changes to the organization impact all four of the other functions in Turner’s model: the organization provides the PM, which impacts quality and time of projects; provides training on PM tools impacting scope management; and determines the qualifications and rates impacting costs (Turner, 1993, chapter 7).

The PMO is the source of documentation, guidance and metrics on the practice of PM and execution. (Wikipedia, 2005)

A review of recent literature identified three types of support provided by the PMO: administration, direction and mentorship, and strategy (Dinsmore, 1999; Fleming & Koppelman, 1998; Knutson, 1998; Toney & Powers, 1997; Black & Frame, 1998).

4.5.1 Administration

- Maintain project archives – As a knowledge base, administration staff can collect and store project documentation in an archive. These documents can include project performance records, variance analyses, risk lists and contact information for project primaries. In a study by De Reyck, Grushka-Cockayne, Lockett, Calderini, Moura, and Sloper, maintaining a project archive ranked first in having the greatest impact in their organization; 90% of PMs that maintain a project archive claim doing so had a positive impact (2005, p. 531).
- Central administrative support – General administration can include a broad range of services including accounting and invoicing, messaging services, assisting with formatting documents and managing proposal writing.
- Human resource support – Administration can also provide human resource support for the PMO including recruiting, hiring, performance appraisals, job descriptions and lists of qualifications for project positions.

4.5.2 Direction and Mentorship

- Enable consultation and mentorship – PMOs, as opposed to ad hoc project organizations, allow experienced PMs to assist with employing methodologies, responding to unexpected events, and group brainstorming on complex issues.
- Knowledge sharing, through informal or formal communities within the organization, contributes to personal, project and organizational outcomes. Personal outcomes include learning, peer networking, and sourcing information. Project or group outcomes include increased trust, common language and understanding, loyalty and belonging. Organizational outcomes include development of new methodologies, idea generation, improved efficiency and reduced costs.
- Organizations can support knowledge sharing communities by allocating time and legitimizing participation in these groups.
- Provide PM standards and methodologies – The PMO can provide PMs with standards and methods to deliver projects. More standards increases project success to a point; however, pushing standards into too many aspects of projects tends to lower success (Milosevic & Patanakul, 2005, p. 188). Standardization includes templates for documents such as scope documents, project charters, status reports, communication plans, tools such as software or a web-based clearinghouse, and methods for client consultation, project evaluation and meeting facilitation. However, the central function of methodologies is to provide the approach for managing project integration, scope, time, cost, quality, human resources, communication, risk and procurement.

- Provide training – The PMO can require and support PM training and certification, such as training in proprietary methodologies, tools, and software. By working with administration, the PMO can define skills and qualification to identify individuals as junior, intermediate or senior PMs. The organization’s project success rate is connected to its ability to (a) employ experienced PMs with past successes on large projects and (b) increase the scale of the project incrementally as PM’s experience, self-confidence and efficacy increase (Lee-Kelley & Kin Leong, 2003, p. 590).

Milosevic and Patanakul point specifically to standardized PM processes, PM tools, and leadership qualification as the most important factors in ensuring project success (2005, p. 188) These findings intersect with the conclusions of Xiaoyi Dai and Wells, who identify PM standards and methods (including tools), project historical archives and PM training as the most important factors (2004, p. 529).

4.5.3 Strategic Management

- Project selection – PMOs should choose projects based on the project’s ability to meet organizational strategy, the project’s alignment with expertise of available resources, and the project’s ability to satisfy personal and professional needs of the project staff.
- Of the De Reyck et al. respondents, 88% placed positive emphasis on aligning projects to clear organizational strategy (2005, p. 531). White and Fortune found that meeting organizational objectives, support from senior management and having adequate resources allocated to a project are key to project success (2002, p. 6). They also state that a project’s fit to the organization and the consequences of the project’s

success on the performance of the business greatly affect the project's performance. A project's "fit" to the organization ensures the project's risk complements that of the organization's project portfolio (White & Fortune, p.4; De Reyck et al., p. 531). Thamhain's findings place "clearly defined organizational objectives relevant to the project" as the fourth most important factor contributing to project performance (Thamhain, 2004, p. 538).

- Thamhain's fifth place findings, "job skills and expertise of team members appropriate for the project work," align with "providing training" and "human resource support" functions of the PMO (Thamhain, 2004, p. 538). However, personal development must continue beyond recruiting and training. Ongoing personal development ensures meeting the top three factors of Thamhain's findings.
- Placed first, second and third in Thamhain's findings are "professional stimulation and challenging work environment," "opportunity for accomplishments and recognition," and "the ability to resolve conflict and problems." These factors for success indicate the importance for the PMO to choose projects that satisfy personal and professional needs of the project staff (Thamhain, 2004, p. 538).
- Project prioritization and resources allocation – the PMO should maintain a prioritization of projects throughout the project life cycle. The key to the project success is having PM personal goals, project goals and organizational goals aligned. Not doing so, or doing so improperly, can result in what Engwall and Jerbant define as "resource allocation syndrome." Misalignment among organizational goals, project goals and individual rewards cause this syndrome. Examples provided by

Engwall and Jerbant include PM pushing products into crisis states to attract more resources, and individuals sabotaging projects to increase billable hours (Engwall & Jerbant, 2003).

4.6 Summary

In public sector projects, the PM primarily manages the scope factor of Turner's model, the PMO office holds responsibility for managing Turner's organizational factor, and the RFP dictates the cost, time and quality factors that act more as limitations than manageable factors. XY's ability to provide a service described in the organization section, and the relative advantage of providing that service, will largely dictate if XY should implement this particular service.

5 THE PRIMARY ISSUE FACING XY

XY's competitive advantage is its ability to build long-term relationships. XY retains 80% of its clients annually, and the clients that stay with XY increase their spending by nearly 30%. XY also has high employee retention; XY retains 80% of its workers each year, and some consultants and employees have been with XY for more than 20 years. As XY grows and increases its services offerings, management must actively protect its relationships and thereby its competitive advantage.

The Ministry has worked with XY for more than 20 years and is XY's most important client. Currently, spending by the Ministry makes up two thirds of XY's revenue. Most of this revenue stems from a three-year contract between XY and the Ministry. The contract includes a Ministry option to extend the contract by two years.

The Ministry also benefits from the long-term relationship with XY. The Ministry extracts value from XY's employee retention. XY developed many of the Ministry's systems up to 20 years ago, and XY still employs many of the staff that designed these legacy systems. Moreover, the Ministry's support over the past 20 years has helped XY grow into a 100-person-strong, local firm. This represents a political success for the Ministry. However, the Ministry has other political pressures.

XY's competitors can apply political pressure to the Ministry. As described in the next section, many of XY's competitors also represent local success stories. These companies, which also service the Ministry, have realized successes equal to or greater

then those of XY. As in any long-term relationship, XY's services occasionally do not meet the Ministry's expectations. PM services represent the weakness that XY's competitors can to point out to the Ministry.

The Ministry's executive management team has expressed a general sentiment that XY lacks high-level communication and PM skills. This stems from the Ministry not having evidence of quality service from XY when the contract between XY and the Ministry is challenged. However, XY does not lack PM skills; XY just allocates these resources poorly.

Clients that use the Resource Agency find that XY provides competent PM services. These agency clients, however, do not feel XY has the work force to handle big projects. Clients who use XY for Application Development find the service more than satisfactory, but these AD clients think that XY lacks PM skills. XY should be able to increase its appeal to both Resource Agency clients and AD clients with better resource allocation.

John Xavier, XY's President, and account executive to the Ministry, can no longer maintain an understanding of all services provide by XY to the Ministry. Due to the recent increase in the number of services provided to the Ministry, XY now provides more than 300 separate AM programs and AD projects to the Ministry annually. While XY's AM programs are reported and managed through ARMS, XY has no central repository for projects.

The next section, section 6, looks at the Managed IT Services industry and the PM services of XY's competitors. The industry analysis will show XY and its competitor

compete. The next section will also help define the services XY should provide to its clients.

Once the next section defines the PM services of XY's competitor, section 7, Assessment of XY's Capabilities, will compare XY's capabilities with the offerings of its competitors, the recommendations of PM experts, and the expectations of its clients. This will determine what functions of a PMO XY should offer. Implementing these functions will address the Ministry's concerns and protect XY's competitive advantage.

6 INDUSTRY ANALYSIS

XY's management believes that XY's reputation and ability to build long-term relationships represents XY's competitive advantage. This section will analyze the how organizations within "Managed IT Services" selling to the public sector compete and demonstrate the value of reputation and relationship building.

Matt O'Range, XY's VP of Business Development, identified five XY competitors of varying sizes that service the public sector: Pangaea Systems Inc., Quartech Systems Ltd., Sierra Systems Group Inc., IBM Canada and Burntsand Inc. The remainder of this section uses research on these organizations to analyze the Managed IT Services industry.

6.1 Industry Competencies

Providing Managed IT Services for public sector clients has largely become a commoditized business. Price and service have become standardized across the market. Clients dictate price through the RFP process; and Microsoft, Oracle and other industry leaders have standardized qualifications for technologists. Companies gain competitive advantage based on how they manage the delivery of IT services. PM skills and relationship building skills represent the key competencies for Managed IT Services companies to excel within the public sector market. This section looks at how XY and its competitors perform at these key competencies.

6.1.1 XY's Competencies

XY is very light on PM related certification. The organization has just one employee with a PMP designation. Other related designations are also lacking, the organization's PM staff include one person with a MBA and one with a BCom, no other PM employees carry any business related professional designations. XY, however, does possess some PM skills.

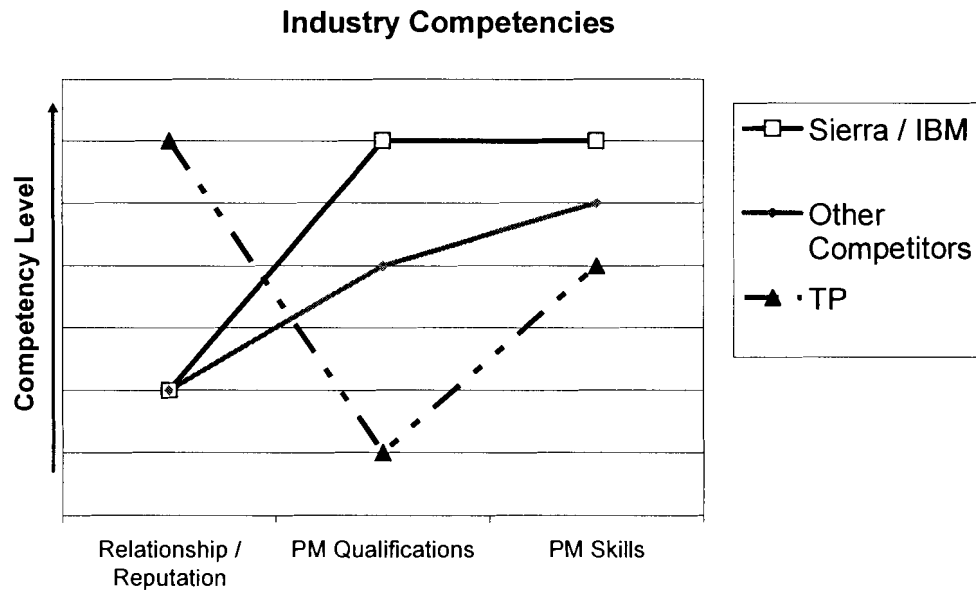
As discussed under section 3.3, Results of a Client Survey, while some customers believe XY lacks PM skills, others find XY skilled at PM. Considering these two different perceptions, XY possesses average PM skills.

XY differentiates itself on its ability to build relationships. As discussed in section 2.6, XY's Clients, XY retains clients for extended periods – some more than 20 years, XY retains 80% of its clients year to year, and these clients increase their spending at XY by about 30% each year. XY maintains a level of around 18 current customers. To do this, XY only takes on one to three new customers a year and slowly builds long-term relationships with these new customers.

This “differentiation” means that XY creates its own market niche. Once a client employs XY, the client becomes increasingly dependant on XY; XY staff gain in-depth knowledge of the client's systems; and XY can offer better service than any other Managed IT Services provider can to that client.

As discussed above, XY is strong on relationship building and reputation, very weak on PM qualifications and average on PM skills. Figure 9, displays XY performance on these attributes.

Figure 8 – Industry Competencies



6.1.2 IBM's and Sierra's Competencies

IBM and Sierra competency profiles match in figure 9. These are also the oldest and largest competitors Identified by Matt O'Range. Based on the survey information these larger competitors have more detailed training requirements than the smaller organizations. IBM and Sierra compete based on having very large pools of qualified and skill full project managers. Both these firms offer training towards Project Manager Professional (PMP) designations; and IBM has clearly defined training paths for PM to follow to progress from junior to senior PMs.

These larger organizations seem to focus on large-scale implementations rather smaller projects or ongoing support. Both of these organizations have won bids and

implemented systems with XY clients. However, when contracts come up for additional development, or for ongoing support, XY wins these contracts away from IBM and Sierra.

Though both of these organizations have provided services to the Ministry at least as long as XY, neither has developed a relationship with the Ministry as strong as XY's. On IBM's most recent contract with the Ministry, IBM subcontracted XY for the majority of the work. When that contract came up for renewal, XY won the contract from IBM. At the time of this analysis, Sierra is pursuing a contract with the Ministry. Due to Sierra's lack knowledge of Ministry systems, Ministry management made "partnering with XY" a requirement of the Sierra contract. When competing with XY, neither IBM nor Sierra are able to create the client lock-in that XY has created with the Ministry, MAG, GVRD or any other long-term XY clients.

6.1.3 Other Competitors' Competencies

XY's other competitors, Pangaea, Quartech and Burnsand, likely do not have the meet the PM accreditation and skill levels of IBM or Sierra, but these smaller organization outrank XY in these competencies. Pangaea's website presents ProjectSuccess, Pangaea's proprietary project management methodologies. As discussed below under section 6.5, Findings, Burnsand is the only smaller competitors that offer PM related training. While these organizations outrank XY's poor showing in these areas, none of these smaller organizations demonstrate their PM accreditations or skills as successfully as IBM or Sierra.

Pangaea and Burntsand have only been doing business in Vancouver since 1999 (Pangaea, 2005, Burntsand, 2002). As discussed in section 6.2.3, Threat of New Entrants, this is not long enough to have established the strong relationships. Quartech has been around since 1984 but they cannot compete with XY on relationship building (Quartech, 2003). As shown in figure 2, Quartech represents XY's fourth biggest client. Quartech subcontracts XY for XY's in-depth knowledge of Ministry of Education system. The Ministry of Education is a long-standing client of XY. Like IBM and Sierra, Quartech has not been able to create the customer lock-in with XY's clients.

6.1.4 Industry Competencies Summary

While XY lacks PM certifications and skills, XY outperforms its competitors in relationship building and customer retention. XY can increase PM skills and certification easier than a competitor can nurture long-term relationships. XY's current three to five year contract with the Ministry allows XY the time it needs to build its PM related competencies.

6.2 Industry Forces

Porter's Five Forces provides the framework for this analysis. As you will see in this section, buyer power and competitive advantage represent the most significant forces in the Managed IT Services industry. The remaining three forces of supplier, availability of substitutes and threat of new entrants are relatively weak (Porter, 1980, chapter 1).

6.2.1 Supplier Power

Managed IT Services is a predominantly service-based industry. A few suppliers provide goods, usually computer hardware and software, but these are sold directly to the

end client. This essentially removes suppliers from the industry power structure. Supplier power in Managed IT Service industry is very low.

6.2.2 Availability of Substitutes

Managed IT Services are a labour-intensive service industry. Short of the government deciding to employ its own IT professionals, there are no substitutes. The project component of Managed IT Services makes this unlikely. The public sector is a highly unionized environment making it exceedingly difficult to employ staff on an ad hoc basis. Moreover, a government's deciding to use "in-house" staff represents more of a buyer power than a substitute. Threat of substitutes is low.

6.2.3 Threat of New Entrants

Contract durations for Managed IT Services tend to last longer than three years. A vendor must demonstrate stability before a government agency will enter a long-term contract with it. To supply the government with Managed IT Services, a company does not have to be large nor are there any capital costs to entry, but the company has to have built a reputation for stability and must have been in operation for a reasonable length of time.

A new company needs experience to get experience. The reputations of organizations already in this industry represent a significant barrier for new entrants; threat of new entry is very low.

6.2.4 Buyer Power

Targeting the public sector places XY in an oligopsonistic market – a market with many suppliers and few buyers. In this type of market, the buyers set the prices and exert a disproportionate influence on the market. The use of tendering as a buying model demonstrates the buyer power. With a tender or RFP, the buyer dictates the terms of the contract and lets the suppliers bid for the opportunity to work.

Most government costs go into delivering services to the end client rather than developing the infrastructure to provide these services. IT support makes up a very small component of what the government provides. The Ministry's 2004–05 budget was \$1.5 billion. During that same year, the Ministry spent \$6.6 million on XY services. This represents 0.4% of the Ministry's budget and 67% of XY's revenue. So managed IT Services represent a very small component of government business (Ministry of Children & Family Development, 2005).

With the customer dictating all the terms, including price of contracts, supplier differentiation is very low – especially when considering that qualifications for developers and PMs have both become standardized. Customers do not judge suppliers on price but by what else they bring to the table such as reputation, stability and familiarity with the subject matter.

The one aspect that reduces buyer's power over vendors is switching costs. Extended contracts result in in-depth understanding of client systems. After a five-year contract, no other organization could support the same systems with nearly the same efficacy.

If companies do not have a good reputation or a long-standing relationship with the client, the client's power in the relationship is near absolute. According to Porter's Model, low cost relative to total system costs, low product differentiation, high competition among firms, and a low ability of the buyer to perform the service themselves all contribute to high buyer power. Thus, buyers control all aspects of the relationship, apart from the fact that long-standing vendors are difficult to replace.

6.2.5 Competitive Rivalry

Compared to the number of clients, there is an exceedingly high number of firms that provide Managed IT Services. The five competitors detailed in the next section all provide services to XY's major client, the Ministry. These five represent a small portion of the service providers in the Lower Mainland. All these organizations compete for public sector clients, a market that grows very little, if at all. The competition for public sector contracts is significant.

All competitors carry very similar high fixed costs, paying the salaries for highly trained staff, with very similar accreditation. All these organizations have invested significant resources in building their relationships and reputations; losing these represents a significant exit barrier. Every contract represents such large returns for extended periods that the strategic value of these contracts is very high. Competitive rivalry represents the greatest of the five forces in this industry.

6.3 Industry Summary

This analysis has demonstrated that the ability to build long-term relationships and an organization's reputation are both very important in this industry. Once an

organization has the qualifications and skill to work in this industry, reputation and relationships are the two traits that allow a company to succeed in this highly competitive environment.

The Ministry's concerns about XY's PM abilities need to be addressed. Given the opportunity, XY's competitors will take advantage of XY's shortcomings to tarnish its reputation. XY needs to improve its PM offerings to the level of its competitors. This will ensure XY can leverage its core competency, building relationships and a strong reputation.

6.4 Characteristics of XY's Competitors

XY's success represents a political success for the Ministry. This section will show some of XY's competitors that have had local success greater than XY. To better understand the PM services and practices offered by XY's competitors, I conducted brief interviews with the PMs from these companies. The findings of these interviews are discussed in the next section.

Matt O'Range, XY's VP of Business Development, identified five IT firms of varying sizes that service the public sector: Pangaea Systems Inc., Quartech Systems Ltd., Sierra Systems Group Inc., IBM Canada and Burntsand Inc. The remainder of this section offers some basic information about XY's competitors.

6.4.1 Pangaea Systems

Pangaea Systems has located its head office in Calgary, Alberta, since the company opened in 1993. The 160-person company also has offices in Edmonton, Victoria, and most recently opened an office in Vancouver in 1999 (Pangaea, 2005).

6.4.2 Burtsand Incorporated

Burtsand Inc. was established in 1996 and locates its head office in Toronto, with additional offices located in Boston, Calgary, Houston, San Jose and Vancouver. The Vancouver office opened in 1999. Burtsand employs 175 people (Burtsand, 2002).

6.4.3 Quartech Systems Limited

Founded in 1984, Quartech employs over 100 people. The corporate headquarters are located in Burnaby and they have an additional office in Victoria. Quartech has partnered with XY on several contracts in the past (Quartech, 2003).

6.4.4 Sierra Systems Group Incorporated

Sierra Systems was founded in Vancouver in 1996. Currently they employ nearly 1000 people in the United States and Canada. Sierra has additional offices in Austin, Calgary, Dallas, Edmonton, Fredericton, Halifax, Hartford, Los Angeles, Olympia, Ottawa, Seattle, Toronto, Victoria and Winnipeg (Sierra, 2005).

6.4.5 IBM Canada Incorporated

IBM incorporated in 1911 as the Computing-Tabulating-Recording Co. and changed its name to International Business Machines Corporation in 1924. IBM is based

in Armonk, New York. IBM Canada locates its head office in Markham, Ontario. IBM has offices all around the globe and employs 348,052 worldwide (Yahoo, 2005).

6.5 Findings

This section presents the findings from interviews with PMs from the five organizations described above. The details from the five interviews with the above companies are provided in appendix C “2005 Competitor Interview Responses.” The services detailed in the organization portion of Turner’s model provided the framework for the interview questions. The interview findings provide evidence as to which PMO functions are most important for XY’s clients. These findings include:

- All these organizations, except for IBM, provide the full breadth of administrative functions. The scale of IBM operations changes with how they operate. Other departments within IBM manage HR and proposal writing separate from the PMO.
- All five organizations promoted formal and informal networking.
- Training opportunities were more limited, with Burntsand being the only organization similar in size to XY that provided training.
- Standardized job descriptions and training paths are uncommon.
- Other than proprietary applications and MS Project, PMOs use little software.
- Document templates are common, but standardized PM methodologies and software development were both only present in the larger organizations.

7 ASSESSMENT OF XY'S CAPABILITIES

Section 3.5, Organization, detailed the services under administration, direction and mentoring, and strategic management central to a successful PMO. This section will revisit each of the PMO services described in the organization section to determine client expectations regarding each service, discern if XY's competitors offer these services, and explain whether XY has the internal capabilities to support these services.

7.1 Administration

7.1.1 Maintain Project Archives

Clients do not have any expectation of XY maintaining a project archive. However, all of XY's competitors that were interviewed maintain an archive. Maintaining a project archive contributes significantly to success rates based on recent findings described in section 3, Project Management Methodologies. (recent findings) If capable, XY should develop a project archive.

Currently, XY does not maintain a project archive. XY could initiate an archive through a manual process or a software solution. A manual process would increase the usability, as a live person would manage the archiving and the individual in charge could organize the archive as it grows. A manual process would still require a software solution due to XY's multiple offices and on-site contractors in dozens of locations.

XY has recently opened a SharePoint web portal that could provide the infrastructure to support the project archive, managed or otherwise. Time permitting, XY's staff could manage this implementation with relatively little effort.

7.1.2 Central Administrative Support

Recent findings do not provide any evidence that centralized administration adds to project success rates. Clients require invoicing, but they do not require XY to centralize this service or any other administration functions. Most competitors have centralized administration. This analysis does not provide enough evidence to suggest that XY should provide centralized administrative support. Providing this service should be a function of cost.

XY already provides administrative assistance through its finance and administration department. Finance provides central invoicing based on ARMS and presents invoices to PMs for final proof; finance also manages payroll and accounts payable for contractors. Administration provides reception and messaging services.

7.1.3 Proposal Development Support

Recent findings do not provide evidence that centralized proposal development adds to project success. All of XY's competitors provide proposal development support to the PMO except for IBM. IBM has a separate department for proposal writing. While XY clients do not require XY's PMO to be supported by proposal development, XY's marketing survey results show that special attention to proposals could increase project success for XY.

From the comments made by clients during the survey, the marketing consultant provided some specific advice for proposal development:

- Make the response enjoyable to read.
- Provide lots of whitespace and no clutter.
- Cover all aspects of the response.
- Treat the response as if the client knows absolutely nothing about XY or its abilities.
- Focus on price or value. Ultimately, value is more important than low pricing in the market, especially if XY has a strong team to complete the job and the documentation to prove it (De Tracey, 2004, p. 18).

XY provides proposal development support. The marketing department has developed templates for XY resumés and responses, and the proposal development team manages project staff through the proposal development. The team gets key content written by appropriate staff, gets all project staff to adapt their respective resumés to project requirements, and combines and edits staff responses into XY's proposal template. However, project staff often do not respond due to obligations to current clients.

7.1.4 Human Resource Support

XY's competitors provide some HR support to their respective PMOs; however, the extent of this support was not determined. The interviews revealed that these organizations do not provide standard job descriptions for progressive positions nor standardized training paths. The marketing survey concluded clients find RFP

customization important, and standardized job descriptions and qualifications may be counterproductive to customization.

There is no specific evidence in recent findings that centralized HR has value. However, high qualifications for PM staff and training for PM staff both significantly contribute to project success. Few PMs at XY have accreditation to support their significant PM experience. If XY intends to develop a competitive PMO, management may need to recruit staff with additional PM qualifications.

No one individual or group manages XY's human resources (HR). Other than benefits packages, XY does not have any central HR policies or procedures. Marketing does provide postings on the XY website, but XY often recruits on an ad hoc basis. As mentioned above, marketing also maintains a repository of standard résumés. Salary and rewards for contractors and employees are decided on a case-by-case basis. XY has recently promoted Natalie Grey to HR coordinator, and this type of work could fall within her scope.

7.2 Direction and Mentorship

7.2.1 Consultation and Mentorship

Recent findings show that formal and informal networking improve personal, project and organizational outcomes. All of XY's competitors host both types of networking events. As discussed above in Section 2.7.2 Culture, XY encourages informal networking by allotting time for informal social events. XY staff participate in social or recreational events more than five times a month. However, the Victoria and Vancouver offices only socialize together if individuals have work in the other city.

Formal networking in XY exists with the application maintenance team and management but not with PMs or any other groups. Weekly networking events would probably be too frequent due to the limited number of XY projects at any one time. However, networking or brainstorming sessions during the project lifecycle, especially at project initiation, could result in increased project success.

7.2.2 Provide PM Standards and Methodologies

Standardized PM methodologies represent the most important aspect of a PMO in terms of increasing project success. Tools, templates and methods comprise “standards and methodologies” within recent findings. No PM standards or methodologies exist within XY. Currently PMs respond to clients’ expectations for documentation and communication; beyond that, methods are left to the PM’s discretion.

Clients have very detailed requirements for document templates, and all of XY’s competitors use a variety of document templates. XY could develop a library of document templates and user guides. Developing new PM templates would complement the existing standardized proposal and résumé templates and align with marketing’s “common-look-and-feel” goal. Based on survey results XY may want to push document usage beyond client requirements to improve perceptions of project communication and PM.

All of XY’s competitors use standardized tools, predominantly Microsoft Project and proprietary costing tools. MAG, one of XY’s clients, also uses a risk assessment tool. XY could use a risk assessment tool to determine which documents apply to a

project. XY will have difficulty if they try to establish standardized tools but could accomplish this with software training and provision of software support.

Only XY's larger competitors have standardized methods for PM or managing software development. Smaller companies likely opt for flexibility over standardized methods. Standard methods that balance flexibility with service quality will be difficult to develop and would take significant time and effort.

7.2.3 Provide Training

Recent findings identify leadership qualifications as an important contributing factor to project success. Of XY's competitors, IBM provides training on their proprietary methodologies; Sierra provides training for PM towards earning their Project Management Professional (PMP) designation; and Burtsand supports any work-related training.

Currently XY management does not dictate training for most staff. However, XY does support up to two weeks of work-related training per year, and management often lays out training paths for new hires. Microsoft, IBM and Oracle certifications dictate training requirements for development staff. However, long-term project staff do not tend to maintain personal career paths to use the available training time. Once Natalie Grey establishes herself in the HR roll, XY could coordinate PM individuals training more effectively.

7.3 Strategic Management

7.3.1 Project Selection

Recent findings show that strategically choosing projects adds significantly to project success rates. XY's clients indicate that they prefer XY to align projects with qualifications of project staff. Strategic alignment in how XY's competitors select projects is inconsistent. Conversations mostly indicated that potential profit was the most important aspect and that alignment with project skills happened out of necessity; without qualified staff project offices do not win tenders.

XY watches RFP posting services and government agency contract management sites for proposals that match XY's experience. Matt O'Range, VP of Business Development, watches for projects that would allow XY to enter new markets. XY currently targets marketing towards new geographical markets including the Yukon, Alberta, New Brunswick and Ontario. This expansion focus, however, is not necessarily aligned with any particular corporate strategy. XY has not yet defined a clear corporate strategy.

Most of the proposal development XY currently undertakes falls within the Resource Agency, placing individuals within time and materials contracts. XY treats other RFPs as an opportunity to network within other markets while management defines a strategy for the organization.

Until XY defines an internal strategy, the organization can only align projects with the skills of the project staff. This tends to happen automatically when applying

through a tendering process. Typically, XY only wins tenders when its response presents the best staff qualifications.

7.3.2 Prioritize Projects

Except for application maintenance contracts that depend heavily on response times, XY does not actively rank project importance, and individuals are left to define priorities. Actively prioritizing projects emphasizes senior management support, which contributes to project success rates. This support would especially affect projects in the proposal phase that do not tend to receive support from project staff already engaged.

7.3.3 Allocate Resources

As described in the survey responses in section 4.2 Other Clients, clients that hire XY for larger projects do not feel XY has satisfactory PM skills. Clients that hire XY specifically for PM gave an “overall favourable response” when interviewed about XY’s PM service. When discussing this result with Gerard Brown, VP of Operations, he felt the results were skewed because many of the clients on our larger projects are prescriptive and do not request PM services. This demonstrates that XY management does not actively allocate PM resources.

Though some clients do not request PM on development projects, not providing these services results in client dissatisfaction. PM services are beyond the scope of many development projects. When surveyed, these same clients expressed dissatisfaction about XY’s PM skills. XY’s lack of PM skills represents the predominant area of client dissatisfaction captured in XY’s customer survey. Actively reallocating PM resources

currently used by the Resource Agency to more lucrative Application Development projects would increase client satisfaction.

Recent findings support active resource allocation, as mentioned in section 4.5.3, with a caveat: management should use caution to prevent creating an environment that enables resource allocation syndrome.

8 EXAMPLES HOW A PMO WILL BENEFIT XY

This section will provide and examples of a benefit of implementing a PMO at XY. By reassigning PMs from the Resources Agency to Application Development (AD), XY can improve its financial performance and improve customer satisfaction. In addition, aspects of a PMO contribute to employee retention. This section details how a PMO would benefit XY in these two ways.

8.1 Financial Impact of Properly Allocating Resources

XY's projects without PMs run significantly over budget. Even if XY's clients do not wish to pay for PM services, XY can increase project performance enough by prescribing a PM to justify the added expense. Table 3 shows that because PM reduces cost overruns, XY can afford to assign PMs to projects. The table contains three financial projections of a sample 100-hour contract: the project without a PM, the project with a PM paid for by the client, and a project with PM prescribed by XY.

AD projects delivered by XY, without PMs, run significantly more over budget than projects with PM. Projects without PM, on average, run 24% over budget. Projects with project managers, on average, run 8% over budget.

Table 3 – Project Performance With and Without a PM

	Without PM	With Contracted PM	With PM
Cost Overruns	24%	8%	8%
Senior Architect Hours	29	25	25
Average Cost Per Hour	\$60.77	\$60.77	\$60.77
Blended Hourly Rate	\$108.00	\$108.00	\$108.00
Project Cost	\$1,733.14	\$1,509.51	\$1,509.51
Revenue	\$2,484.00	\$2,484.00	\$2,484.00
Profit	\$750.86	\$974.49	\$974.49
Profit Lost Due to Unavailability	(\$260.71)	(\$86.90)	(\$86.90)
Subtotal	\$490.15	\$887.59	\$887.59
Developer Hours	84	73	73
Average Cost Per Hour	\$36.46	\$36.46	\$36.46
Blended Hourly Rate	\$108.00	\$108.00	\$108.00
Project Cost	\$3,074.31	\$2,677.62	\$2,677.62
Revenue	\$7,344.00	\$7,344.00	\$7,344.00
Profit	\$4,269.69	\$4,666.38	\$4,666.38
Profit Lost Due to Unavailability	(\$1,167.53)	(\$389.18)	(\$389.18)
Subtotal	\$3,102.16	\$4,277.20	\$4,277.20
Quality Assurance Tester Hours	11	10	10
Average Cost Per Hour	\$26.40	\$26.40	\$26.40
Blended Hourly Rate	\$108.00	\$108.00	\$108.00
Project Cost	\$294.62	\$256.61	\$256.61
Revenue	\$972.00	\$972.00	\$972.00
Profit	\$677.38	\$715.39	\$715.39
Profit Lost Due to Unavailability	(\$176.26)	(\$58.75)	(\$58.75)
Subtotal	\$501.12	\$656.64	\$656.64
Project Manager Hours	16	16	16
Average Cost Per Hour	\$77.06	\$77.06	\$77.06
Hourly Rate	\$95.00	\$108.00	\$0.00
Project Cost	\$1,248.37	\$1,248.37	\$1,248.37
Revenue	\$1,539.00	\$1,749.60	\$0.00
Profit	\$290.63	\$501.23	(\$1,248.37)
Revenue Lost Due to Unavailability	\$0.00	(\$37.13)	\$0.00
Subtotal	\$290.63	\$464.10	(\$1,248.37)
Total	\$4,384.06	\$6,285.53	\$4,573.06

The time spent on AD projects is divided between senior architects, developers and quality assurance (QA) Testers. 23% of project time is used by senior architects, 68% by developers and 9% by QA testers. A senior architect would work for 29 hours¹ on a 100-hour project without a PM.

XY's costs vary by position. The average rate, including mandatory employment related costs for employees, for QA testers is \$26.40 per hour (/hr). For senior architects and developers, XY's costs are \$60.77/hr and \$36.46/hr respectively.

Fixed price contracts have added risk for XY. If the project goes over budget, XY must absorb the cost. To reduce this risk, XY builds contingency into contract pricing. For time-and-materials, XY bills \$45/hr for QA testing, \$65/hr for developers and \$95/hr for senior architects and project managers. For fixed-price contracts, XY generates prices based on a blended rate of \$108/hr.

To compare the financial performance of each projection, the table includes revenue lost because of project overruns engaging individuals that could have otherwise worked on different projects. A developer working on a project with a PM ends up working an average of 8% longer than the 68 hours budgeted for the sample project, which results in \$389.18² of lost revenue.

Evaluating these financial projections also requires comparing the profit a PM would generate while working for the Resource Agency and the cost XY would incur

¹ 23% of 100 hours plus 24% due to cost overruns = 29 hours

² Profit gained from an hour of developer time \$71.54, \$108 less \$36.46 (the average hourly cost for a developer.) 8% (cost overrun) x 68 hours x \$71.54/hr = \$389.18

employing a PM on a project. PMs at XY spend an average of 15 hours managing every 100 hours of project time. If the PM spent 16 hours³ at \$77.06, it would cost XY \$1,248. That same time spent working for the Resource Agency at \$95/hr would generate \$291⁴ of profit.

All this considered, XY would benefit financially from prescribing PM to projects even if the client did not request this service. The profit from a project without a PM is \$4,384, with a PM prescribed by XY \$4,573. These results are further enhanced by considering the impacts to the subsequent Application Maintenance (AM) contract.

All AD contracts come with fixed price AM contracts. Whenever XY builds an application for a client, the client also contracts XY do to ongoing support after the development of the application is complete. Contracts vary in length from three to five years. The average AM contract is four years and one month. The annual price for supporting an application developed during a 100-hour contract would be \$1,080⁵.

AM contracts that stem from AD, and utilized PM, cost less than AM contracts that stem from AD without a PM. AM from AD contracts with PMs have a 32% contribution margin. AM from AD contracts without PMs have a 28% contribution margin. The present value for these four-year-one-month contracts are \$1,155⁶ and \$1,320⁷ respectively.

³ 15 hour x 108% = 16

⁴ (\$95.00 - \$77.06) x (15 x 108%) = \$290.63

⁵ The annual rate for AM contracts is based on a 10% of the AD price. The 100-hour contract about would cost \$10,800 (100 hours at the blended rate of \$108/hr). \$10,800 x 10% = \$1,080

⁶ Present Value(rate = (3.23/12), periods = 49 months, payment = -((28%x1080)/12), future value = 0) = \$1,155.38

⁷ Present Value(rate = (3.23/12), periods = 49 months, payment = -((32%x1080)/12), future value = 0) = \$1,320.44

Table 4 – Subsequent Financial Benefit From AM Contracts

	Without PM	With Contracted PM	With PM
AD Revenue	\$10,800.00	\$12,420.00	\$10,800.00
Standard AM Rate	10%	10%	10%
Annual AM Revenue	\$1,080.00	\$1,242.00	\$1,080.00
Average Margin	28%	32%	32%
Annual Profit	\$302.40	\$397.44	\$345.60
Monthly Profit	\$25.20	\$33.12	\$28.80
Average Length of AM Contract	4 yr, 1 mon	4 yr, 1 mon	4 yr, 1 mon
3 Month Treasury Bill (Risk Free Rate)	3.23%	3.23%	3.23%
Monthly Risk Free Rate	0.27%	0.27%	0.27%
Present Value	\$1,155.38	\$1,518.50	\$1,320.44
Project Profit Combining AD and AM	\$5,539.44	\$7,804.03	\$5,893.49

Combining the AD and AM contracts show that contracts managed by a PM outperform those without a PM by \$354⁸. That represents an increase of 6.4%⁹. As XY builds its client’s perception of XY’s PM ability, XY returns could increase its profits on unmanaged projects by 41%¹⁰ by selling these same PM services to the client.

8.2 PMO Aspects that Impact Employee Retention

While this analysis focuses predominantly on ensuring XY develops PM capabilities to fortify XY’s relationships with its clients, starting a PMO will also affect relationships between XY and its employees. Currently, XY has few human resource policies and procedures. As the organization grows, it will become increasingly difficult for management to understand employee’s needs through simple open communication. A PMO will not replace a full complement of human resource policies and procedures aligned with an organizational strategy. However, until policies, procedures or an

⁸ \$5,893.49 - \$5,539.44 = \$354.05

⁹ \$354.05 / \$5,539.44 = 6.4%

¹⁰ (\$7,804.03 - \$5,539.44) / \$5,539.44 = 40.9%

organizational strategy exists, a PMO can contribute significantly to employee retention. This section describes three ways that a PMO can contribute to employee retention.

8.2.1 Invest in Learning

The human resource aspect of the administration function of the PMO will help project staff develop training paths. Currently, XY allocates training time for all staff. XY's technologists make considerable use of this benefit. However, project staff do not. Creating training paths will increase the usage of available training time, which will contribute directly to employee retention (Price, 2005).

PMP certification includes human resource training. Project managers complete a significant portion of the people-management function within XY. Poor relationships with supervisors represent the most common reason for people leaving jobs. Increasing the PMs' human resource training will increase employee retention (Price, 2005).

8.2.2 Create Meaningful Rewards and Recognition Packages

Currently, projects successes are limited, especially for unmanaged projects. Individuals staffed on unmanaged projects do not necessarily understand if their contribution leads to achieving project goals. Projects cannot be compared to one another, and there is no one complete source of project performance. Without one source for project information, there is no way to understand how projects compare. If performances cannot be accurately measured, there can be no meaningful project related rewards. A PMO will fill this gap for XY. Moreover, implementing a PMO will increase projects financial successes and avail more resources to contribute to rewards. Cash rewards and high pay contribute directly to employee retention (Price, 2005).

8.2.3 Actively Allocate Resources

Currently, XY employees are assigned to service one client for extended periods. This affects employee satisfaction in two ways. First, once employees have learned their roll, they may not face challenges on a regular basis. As discussed above, contracts can last for as long as five years. Second, clients will not pay extra for the same individual performing the same role. XY has had an ongoing issue of trying to market junior or intermediate staff to higher-level positions as they gain experience. Even if these individuals have increased their accreditation and experience, the client's perception does not change. Actively allocating staff to a variety of clients and more challenging positions will increase satisfaction and opportunities for advancement.

9 PMO SERVICES SUITABLE FOR XY

Based on the findings of the previous sections, I will make recommendations about the PMO services XY **should** perform, which services XY **should not** perform and which services I believe XY **cannot** perform.

9.1 PMO Services Already Offered by XY

XY already provides significant services in the areas of administration and proposal development support. The **administration services** meet or surpass the requirements of XY's PMs. The proposal writing group should continue but be supported by a Project Portfolio Management application as described below. I do recommend that everyone involved with **proposal development** read the survey by the marketing consultant that provides advice on client expectations for proposals.

9.2 PMO Services Not Suited to XY's Business

Aspects of XY's business make some standard functions of PMOs unnecessary and not valuable. XY should not produce **standardized job descriptions or qualifications** for different levels of PMs. XY's customers have indicated that members of project teams should have extensive qualifications for project work, and that RFP responses should have a high level of customization.

Both IBM and Sierra Systems have developed **detailed methodologies for PM and software development management**. Doing so must reduce project flexibility.

None of the three competitors close to XY's size dictates method to their PMs. Standardized documentation and tools, used by all competitors, help ensure project success without reducing PM's control and flexibility on projects.

At this stage, XY cannot **align projects to a clear corporate strategy** because the organization lacks a definitive strategy. The organization is working on a strategic plan. For now, XY's management should continue to choose projects that will provide more options for strategic direction.

9.3 PMO Features That Will Contribute to XY's Project Success

9.3.1 Project Document Templates

XY's clients expect documentation throughout the project lifecycle. XY's major clients provide templates for many project documents. Client permitting, XY should develop PM documentation templates to cover the same details as the client templates. Doing so will support marketing's current common-look-and-feel goal. XY should also develop instructions and examples to support the templates.

9.3.2 Standards for Increased Project Documentation

XY should set standards for increased project documentation. Evidence from the XY client survey suggests that client expectations surpass contractual requirements. XY should establish minimum levels for project documentation that will exceed most client contractual requirements. If contract requirements surpass XY minimums, documentation levels should increase to contract required levels.

9.3.3 Project Risk Assessment Tool

To establish project documentation levels, XY should develop a project risk assessment tool, similar to that used by MAG. XY's tool should include Crawford and Pollack's Hard and Soft Dimension Framework as shown in figure 7. Adding this framework to the process will help XY's PMs identify project areas of concern before starting the project.

9.3.4 Formal Networking

XY should introduce formal networking and information sharing. Initially these meetings can provide a forum for brainstorming new projects. Moving forward, these meetings can promote professional development and mentoring. This group's tasks could include using the risk assessment tool. Having a group use this tool will reduce personal biases in the risk assessment process.

9.3.5 Resource Allocation

Larger projects need allocation of appropriate project resources. While using the risk assessment tool the PM group can ensure that XY allocates appropriate PM staff to projects. The PM group can make recommendations to management about resource allocation.

9.3.6 Human Resource Functions

XY needs to increase the accreditation for experienced PMs. This involves recruiting additional PMs with PM qualifications and experience, and training PMs who already work for XY. Current PMs should develop training plans to take advantage of

the training time provided by XY. This could include PMP certification and user certification for Microsoft Project.

9.3.7 Project Portfolio Management

Maintaining a project archive and maintaining an inventory of projects can be accomplished with a project portfolio. XY should develop a project web portal on XY's new SharePoint web server. A project web portal will:

- allow PM access to the project archive;
- allow management to prioritize projects continually and communicate these priorities to project staff;
- help the project development team encourage project staff to assist with proposal development;
- provide a summary of projects so XY's senior management can get a snapshot of the status of all current projects;
- provide clients a single access point to view the status of all projects; clients would have access limited to their own projects.

10 IMPLEMENTATION PLAN FOR XY'S PMO

This section provides a three-phased plan for building a project portfolio management program and the other services recommended for XY to adopt in the previous section. The three-phased approach will help the PM team develop a cohesive network while building the PMO services. Once implemented, these services will meet XY's clients' expectations.

Phase 1 - PM Networking and Human Resource Functions, months one and two

XY can implement the **human resource functions** separate from the other recommendations. Natalie Grey should assume the responsibility for helping staff map their personal training paths. When management has a clear picture of an overarching strategy for the organization, the strategy should be considered when developing the training paths. Until that time, project staff should be encouraged to pursue PM accreditation and, at the very least, encouraged to get training in a common PM tool. With no other current options, MS Project is the most common application used by competitors.

XY should form the **formal PM network** group. This group's first task should be managing the implementation of the other recommended PMO services. This process will help establish the group and bring them through the "forming" phase.

Once formed, the PM group will establish a detailed plan for the rest of the PMO implementation. The first step will be **project documentation templates**. Besides collecting existing templates from major XY clients, client representatives should be involved in the development process. This process will also employ the marketing department to help with the common-look-and-feel goal, and the writing services of either the proposal development team or XY's recently hired technical writer.

Phase 2 - Risk Assessment Tool and Increased Documentation, months three and four

The PM team can initially develop the risk assessment tool in Excel. When the PM team has established the tool's thresholds, the tool can be developed as an online application. Establishing the thresholds will involve ensuring that new increased documentation levels meet client expectations. The PM team should consult with clients throughout this process. At this stage, the PM team should also start networking to discuss new projects.

Phase 3 - Project Repository and Resources Allocation, months five and six

Committing staff to develop the SharePoint project portfolio will demonstrate that management supports the implementation of the PMO. The specifics of the program and the implementation plan should be left to the PM team to increase ownership of the applications. The repository should include different levels of access for project development staff, PM staff, XY management, project clients, and all XY's support staff, regardless of location.

The functions of the repository should include document sharing, house the risk assessment tool with the hard and soft dimension framework, catalogue project templates, enable management to prioritize projects, report to project staff if their particular projects priorities change, allow project scheduling, and produce reports on project outcomes.

11 CONCLUSION

Implementing a PMO will positively affect clients' perceptions of XY. A PMO will provide XY account executives with one source of project information to allow them to communicate better with clients. A PMO will address clients' concerns about XY's lack of PM skills by training and recruiting through the HR function. Finally, properly allocating resources, prioritizing projects and improving project documentation will all improve project performance, thereby, improving client perceptions of XY's PM.

Implementing a PMO will positively affect XY's ability to compete. A PMO will help close the gap between XY and its competitors concerning PM skills and certification. This will allow XY to better leverage its ability to build and maintain long-term relationships with clients. Additionally, a PMO will reduce XY's costs by reducing project cost overruns, and will help maintain XY's ability to retain employees as the organization grows.

XY requires an organizational strategy and human resource policies and procedures. In the end, these will allow further growth of XY's business. However, over the next few years, XY can drastically improve its business by taking the steps outlined above to implement a PMO now. The PMO can initiate organic strategic and human resource management, which can be the platform for future planning for XY. XY is in the rare position of having time. Its contract with the Ministry gives XY four years to

address these relationship concerns. Done properly, implementing a PMO will ensure XY retains the Ministry as a client for another five years.

APPENDICES

Appendix A – Yearly Sales by Client

XY Systems
Annual Sales by Customer
Fiscal year Oct 1st – Sept 30th

Client	2003	2004	2005
Agriculture and Lands, Ministry of	1,773,734	3,243,655	6,830,122
Management Services, Ministry of	127,080	982,344	919,784
Attorney General, Ministry of	383,391	934,606	643,933
Quartech Systems Ltd.	545,801	388,499	459,137
Community, Aboriginal and Women	150,452	421,494	194,877
Greater Vancouver Regional District	120,352	260,482	249,278
Corporate & Personal Property	168,871	167,125	28,476
BCTC	25,760	95,370	132,810
RECEIVER GENERAL GST	34,460	212,169	
Finance, Ministry of			177,467
Motor Dealer Council		127,724	41,521
BC Purchasing Commission	97,935		
MAXIMUS BC Health			72,588
Seven Group	570	41,805	26,725
Competition, Science & Enterprise	60,577	4,280	
Provincial Revenue	16,687	36,000	
BCAA		42,415	
Finance & Corp Relation, Ministry of	27,860	3,450	10,755
Workers' Compensation Board			36,684
Liquor Distribution Branch	26,600		
Ondatech Software Inc.			15,500
Synachor Management Inc.		12,172	
Aon Reed Stenhouse Inc.	1,065	5,380	780
Disability Management Institute			6,095
D A Townley & Associates Ltd.	5,760		
Total	3,566,955	6,978,970	9,846,531

Appendix B – 2005 Customer Sales by Division

XY Systems Ltd

Customer Sales by Division Oct 1st 2004 – Sept 30th 2005

	Total Revenue	No. Trans	Software	Resource	AM	AD
Aon Reed Stenhouse Inc.	780	2				780
Finance, Ministry of Agriculture and Lands, Ministry of Community, Aboriginal and Women	177,467	28		177,467		
Corporate & Personal Property Disability Management Institute	6,624,514 ¹¹	316		662,451	1,987,354	3,974,708
Finance & Corp Relation, Ministry of Greater Vancouver Regional District	194,877	17		194,877		
IBM Canada Ltd	28,476	7		28,476		
BCTC Management Services, Ministry of MAXIMUS BC Health	6,095	4		6,095		
Motor Dealer Council	10,755	3		10,755		
Ondatech Software Inc.	249,278	39		249,278		
Attorney General, Ministry of	205,608	25		205,608		
Quartech Systems Ltd.	132,810	14		132,810		
Seven Group Workers' Compensation Board	919,784	29			367,914	551,871
	72,588	7		72,588		
	41,521	20			41,521	
	15,500	3	15,500			
	643,933	86			354,163	289,770
	459,137	22		459,137		
	26,725	9		26,725		
	36,684	4		36,684		
Totals	9,846,531	635	15,500	2,262,950	2,750,952	4,817,129

¹¹ This number represents all revenue, both direct and indirect generated by the Ministry. \$205,608.08 of this revenue came through IBM. IBM subcontracted TP on a Ministry contract.

Appendix C – 2005 Competitor Interview Responses

	Pangaea Systems Inc.	Quartech Systems Ltd.	Sierra Systems Group Inc.	IBM Canada	Burntsand Inc.
Do you provide project management?	YES	YES	YES	YES	YES
What administrative features does your PMO provide?					
Central project archive	YES	YES	YES	YES**	YES
General administrative support	YES	YES	YES	NO	YES
Proposal development support	YES	YES	YES	NO***	NO
Human resources support	YES	YES	YES	NO	YES
What Direction/Mentoring features does your PMO provide?					
Formal peer networking or information sharing	YES	YES	YES	YES	YES
Training	NO	NO	YES*	Internal	YES
Informal network events	YES	YES	YES	YES	YES
Standardized Job descriptions for junior, intermediate and senior rolls	YES	NO	NO	YES	NO
Defined Training Path to progress through Rolls	NO	NO	NO	YES	NO
Does your PMO prescribe standardized software					
If yes what programs do you use?	MS Project	MS Project Proprietary Q1	MS Project Primavera	IBM1	MS Project B1
Does your PMO prescribe standardized Costing Tool					
If yes what tool do you use?	MS Project	NO	Proprietary	Proprietary IBM2	Proprietary

Does your PMO prescribe Standard Documentation						
Communication plan	YES	NO	YES	YES	YES	YES
Project Charter	YES	YES	YES	YES	YES	YES
Scope Document	YES	YES	NO	NO	YES	YES
Proposals	YES	YES	NO***	NO***	YES	YES
Progress reports	YES	YES	YES	YES	YES	YES
Resumés	YES	YES	NO****	NO****	YES	YES
Risk Management Plan	YES	YES	YES	YES	NO	NO
Change Management Plan	YES	YES	YES	YES	NO	NO
PMO method	NO	YES	YES	YES	NO	NO
SDLC Management	NO	YES	YES	YES	NO	NO
When choosing project						
Does your organization actively align projects with clear organizational strategy?	NO	YES	YES	YES	YES	YES
Does your organization actively align projects with the skill and abilities of the project staff?	YES	YES	NO	NO	NO	YES
Does your organization actively choose projects that will challenge and stimulate project staff?	YES	NO	NO	NO	NO	YES

* Towards earning a PMP

** Provided by a separate department

*** Sales are performed by separate business unit

**** HR provided by separate business unit

B1 Proprietary document repository

IBM1 - risk management tool

- various tools for creating project plan and estimates

- system corp. project management software

- project control book repository software

- financial tracking spreadsheet

IBM2 Not enforced

Q1 Proprietary development platform

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