Assessing Outsourcing Opportunities for New Projects

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Executive Summary

Many businesses strive to be more nimble so that they can quickly adjust to the markets' ever-changing demands. Businesses often form partnerships with vendors for outsourcing purposes to allow them to focus on high-value added business activities. Within each business it can be difficult to determine which projects to keep inhouse and which to outsource; for this reason decision frameworks are used. A mature and proven framework identifies opportunities for outsourcing with maximized benefits and minimized risks. A Canadian bank recently implemented two frameworks for outsourcing decision making and is interested in refining these frameworks.

The Bank currently uses two frameworks for outsourcing decision making: one to evaluate the project and one to evaluate a suitable vendor for the candidate project. These two frameworks are relatively new to the Bank and the business does not have experience with it. This thesis compares the Bank's two frameworks to academic literature's frameworks. Best practices can be incorporated into the context of the Bank's frameworks, thus the Bank's framework will be enhanced.

With the Bank's guidance, three published frameworks were chosen to be analyzed. A gap analysis was preformed comparing the Bank's frameworks to the published frameworks. Several criteria were identified that the Bank should add to their existing framework. An analysis of the frameworks using the Bank's historical outsourcing data was preformed.

The analysis determined that the Bank should modify or add several criteria into its framework. In the project evaluation framework, the Bank should include: industry or process knowledge and commitment of leader and economies of scale. The stability criteria in the Bank's project evaluation framework should be revised so that an unstable application is outsourced rather than a stable one. In the vendor evaluation framework, the Bank should include these criteria: infrastructure and user experience. Two of the Bank's criteria, in the vendor evaluation framework, measures and milestones and project plan should be grouped as one criterion.

Abstract

Decisions taken to outsource new projects are typically reached using frameworks which are aligned to the business's goals. A mature and proven outsourcing framework consistently identifies projects that have minimal risk and maxim benefits for outsourcing. A Canadian bank, the Bank, uses two outsourcing frameworks to provide an objective way to decide whether to outsource or "in-house" a project and, if outsourced, which vendor to choose. The purpose of this thesis is to analyze the Bank's two frameworks and to determine if best practices from industry and the literature can be incorporated into the Bank's frameworks. Numerous academic articles were reviewed. Three frameworks were selected for analysis. A gap analysis between the Bank's and the literatures' frameworks was preformed. Four of the Bank's ongoing and completed projects analyzed using the Bank's and selected frameworks. Several criteria from the literature were found to be important to the Bank and are included in the recommended framework.

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Glossary

Application Management Services (AMS): A type of engagement that allows vendors to maintains and supports an application or a suite of applications for a fixed price and time.

Black box: An application or service that takes input and provides output, no knowledge of how it operates is available.

Candidate framework: A framework the Bank has chosen from filtered frameworks to be analyzed.

Capacity pool: A type of engagement where a Business commits work to the vendors and the vendors provide a dedicated ‘bench’ of resources.

Capital Markets (CM): A group within the Bank.

Core competency: particular strength relative to other organizations in the industry which provide the fundamental basis for the provision of added value.

Corporate Service (CS): A group within the Bank.

Criteria: a rule or principle for evaluating or testing.

Direct relationship: A relationship between two similar criteria that have the same views of outsourcing.

Domain knowledge: Information associated with each particular group in the Bank.

Engagement: An initiative that has been outsourced.

Filtered framework: A framework that is has been filtered through to meet the Bank’s goals and objectives for outsourcing.

Framework: A structure that is used to solve a complex issue in a way that is objective. This are made of criteria what are assessed.

Gap analysis: A tool used to compare a business’ current methodology or performance to best practice methodology or potential performance.

Infrastructure: A structure that is needed for operation of a business.

Inverted relationship: A relationship between two similar criteria that have the opposing views of outsourcing.

Knowledge transfer: Information given in the form of training and documents to a third party.

Outsource: To hire a contractor, who is not managed by an employee from the business, to do work for the business

Regulatory: A project that is by law required to be completed.

Risk Management Group (RMG): A group within the Bank.

Senior Vice President (SVP): An employee in the Bank that is manages several departments.

Third Party Mutual Funds (TPMF): An initiative the Bank decided to outsource.

“Given the size of the market in Canada, and the operating scale and cost base of the banks here, it would be reasonable to believe that outsourcing operations is a serious consideration, and will become more compelling as the capabilities of providers continue to improve”- Silvia Brudar, head of financial institutions at CIBC [GTR07].

1. Introduction

1.1. Motivation

Outsourcing is an accepted way for a company to operate; reasons for outsourcings range from cost savings to adjusting for staff attrition. For the purposes of this thesis, outsourcing is defined as hiring contractors who are managed by their respective vendors. Like any company, financial institutions in Canada strive to provide their customers the best service at the lowest cost to the institution. Perhaps the most widely known banking outsourcing engagement is the CIBC's partnership with vendor EDS for human resource outsourcing [Nels04]. The field of Information technology (IT) is no stranger to outsourcing. In 2006, IT application outsourcing contracts was estimated to be %55.3 billion and is expected to grow to $81.1 billion by 2011 [Scar07].

Canadian Banks spend millions of dollars annually to satisfy business needs ranging from maintenance to regulatory projects. There has been an increasing interest in a Canadian bank, identified here as "the Bank", to outsource IT work to make the business more nimble in the market. Effective outsourcing would allow the Bank to position itself to focus on higher-valued business activities.

Company executives often jump on the "outsourcing bandwagon", believing outsourcing is the key to their company's success, without a proven process to decide which projects to outsource and to whom to outsource; thus, many companies enter into outsourcing agreements that fall short of meeting expectations. [Cohe06A] For this reason an outsourcing framework is used to determine whether a new project should be outsourced and the vendor best suited to perform the work.

Frameworks are structures that are used to guide the decision making process, in an objective manner, of complex issues. The significance of having an outsourcing framework is to provide direction for how a project should be developed. The Bank's outsourcing frameworks consist of criteria that assess whether an initiative should be outsourced. These criteria align with the Bank's outsourcing goals. The Bank utilizes two frameworks; one to determine whether a project is suitable for outsourcing and one to determine if the vendor is suitable for the project to be outsourced. This current practice was implemented last year, June 2008, through the introduction of the two frameworks. These frameworks have had little exposure in determining the projects or vendors for outsourcing.

1.2. Intent of Thesis

The purpose of this thesis is to analyze the Bank's two frameworks and to determine if best practices from industry and the literature can be incorporated into the Bank's frameworks. This will enhance the Bank's frameworks allowing the Bank to identify potential opportunities for outsourcing with reduced risks and enhanced success.

Gathering alternative frameworks from industry and academic literature provides best practices for outsourcing. The Bank's and literature's frameworks are used to rate historical and ongoing projects to establish which criteria are relevant to the Bank's outsourcing goals and targets. Criteria that are not used and irrelevant in the Bank's framework should be removed, and relevant criteria from the literature should be added to the Bank's framework.

Interviews with employees who have experience with outsourcing projects are conducted to gather data and learnings. Experiences are compared to what was predicted in the frameworks. Learnings or additional criteria found through interviews, which are not available in the frameworks, are also used to augment the Bank's framework.

1.3. Content of ~~thesis~~Thesis

The next chapter sets the stage for the thesis by providing the background of the Bank and its frameworks. The third section outlines the research methodology utilized to carry out this thesis. The fourth section looks at published frameworks and filters them. The fifth section selects several filtered frameworks and compares them to the Bank's frameworks. The sixth section analyzes the results of the interviews conducted with the Bank's personnel. The final section outlines the recommendations of this thesis.

2. Background

The Bank will continue to identify business opportunities and regulators will continue to impose additional policies and procedures that require the Bank to make investments in new development and regulatory projects. Next year there are proposals for about a $470 million investment in technology projects, a $25 million increase from last year [Lart09A]. Currently, a maximum of 30% of the investment is on new development and regulatory projects, but there is an expectation that there will be additional regulatory requirements in the future, resulting in an increase in the number of projects required to satisfy them [Lart09A]. Furthermore, there is pressure to "do more, or do the same, with less". Outsourcing may provide opportunities for cost savings, among other benefits.

2.1. Types of Engagements

Currently the Bank has four engagement models for outsourcing: staff augmentations, projects/ development, capacity pool, and application management services (AMS). Table 1 describes the types of outsourcing and how they can be used in order of decreasing control by the Bank. Staff augmentation is not necessarily an outsourcing contract by definition, as individual resources are trained and managed by the Bank's project managers.

Table 1: Types of Outsourcing

Types of Outsourcing	Managed by	Definitions
Staff Augmentation	Bank	Resources are contracted as needed
Projects / Development	Vendor	Resources are contracted as needed for projects/ development
Capacity Pool	Vendor	Business group commits work to the vendors and the vendors provide a dedicated 'bench' of resources
Application Management Services (AMS)	Vendor	Vendors maintains and supports an application or a suite of applications for a fixed price and time

A recent McKinsey report labeled the Bank as very mature in outsourcing because the Bank outsources approximately 60% of its outsourcing as application management services, compared with other banks that outsource 10-20% [Lart08]. This high rate of outsourcing can be accredited to governance practices and much due diligence in the Bank's outsourcing team [Lart08].

Within the Bank there are groups of differing outsourcing "maturity" that would take different outsourcing approaches. A less mature group might consider staff augmentation to be their only means of outsourcing, which requires managing their contract staff (onsite or offsite), thereby avoiding the need for and cost of governance of the outsourcing project. A mature group might consider an application management service (AMS) model, where they are managing outcomes because they already have suitable governance structures in place.

2.2. Bank's Business Groups ~~Departments~~

The Bank is organized into a number of divisions containing business groups. Table 2 describes the organization of groups within the Bank. There are four divisions in the enterprise and within each division are multiple business groups.

Table 2: Business Groups

Enterprise			
Enterprise System	**Private Client Group**	**Capital Markets/ Risk Management Group**	**Products and Commercial**
Information Management	Private Client Group	Capital Markets	Products
Corporate Services	Self Service	Risk Management Group	Sales and Services
	Foreign Banks		

The outsourcing maturity level of different business groups within the Bank varies. For example, Corporate Services is considered to be very mature. They frequently outsource development of new products and accept delivery of a "black box" with the required functionality. They understand that the challenge is to manage the outsourcing relationship and manage the outcomes. On the other hand, the Private Client Group relies on staff augmentation, believing that the only way to ensure delivery of the proper functionality is to directly supervise the development resource. Each group is ultimately responsible for its own projects, budgets, and staffing needs. The different maturity with respect to outsourcing adoption is one explanation for the differences in each group's practices.

The Bank has a framework including criteria with which it assesses the suitability of a project for outsourcing. Each outsourcing opportunity is assessed against these criteria. As a business group grows in maturity, their assessment of criteria for evaluating possible outsourcing projects and the outsourcing approach shifts.

The Bank has relationships with six vendors; Table 3 summarizes the Bank's vendor relationships. The Bank's significant outsourcing relationship is with the AMS Vendor, who has been contracted for AMS engagements and capacity pools engagements using 300 professionals. The AMS vendor is one of the largest outsourcing operations internationally.

Table 3: The Vendors and Their Roles within the Bank

Vendor	Business Groups	Type of outsourcing	Head count (approximately)
AMS Vendor	Enterprise	AMS, Capacity Pool	300
Specialized Vendor #1	Products	Staff Augmentation	20
Specialized Vendor #2	Corporate Services	Development/ AMS	10
Capacity Pool Vendor #1	Enterprise (focused on IM and PCG)	Capacity Pool	30
Specialized Vendor #3	Product	Development	10-20
Specialized Vendor #4	IM	Development	20

2.3. Bank's Current Frameworks

The Bank's current outsourcing practice includes two frameworks: the project evaluation framework and the vendor evaluation framework. The project evaluation framework is used to rate initiatives that the business may consider outsourcing. After a suitable project is selected for outsourcing, the vendor evaluation framework is used to determine whether a vendor is suitable to commit to and deliver the project.

Two frameworks are necessary for a successful outsourcing engagement. The projects that are outsourced are as important as the vendors that are completing the projects. Often vendors are chosen because the business can leverage experiences the vendor may have from other clients. The Bank has done its due diligence in developing two frameworks.

2.3.1. Bank's Project Evaluation Framework

The Bank's project evaluation framework, Table 4 is rated on a 1-5 scale, 5 being ideal for outsourcing. The criteria listed are used for every project, but the weighting of each criteria changes according to business groups. The discrepancies in weighting are a combination of maturity levels and the goals within each business group. Table 4 provides the definitions and questions to be asked of each criterion and describes the meaning of the ratings.

Table 4: Bank's Project Evaluation Framework

Evaluation Criteria	What does this mean?	Ranking
Impact / Risk of delivery failure	▪ What is the impact of failure? (Not about quality) How difficult do we think this will be to ensure success?	1 = significant risk 5 = low risk
Complexity of interaction with the business	▪ How important is it for their day-to-day work? How involved is the business in this application's operations?	1 = complex 5 = simple
Complexity of technology / Integration with other systems	▪ Level of integration with other systems? Unusual features? Does it require constant maintenance? Effort to ensure currency?	1 = complex 5 = simple
SLA Agreement with the Business	▪ What is our current SLA with the business and how well do we meet it? How important is it to the business?	1 = high responsiveness 5 = low
Ease of staff redeployment for high value work	▪ Is there something else that staff with this skill set can be doing? Are they open for change?	1 = difficult 5 = easy
Staff attrition levels / Specialized knowledge required	▪ What do we know about the current staff and the level of specialized knowledge required? Where are they in the 'retirement corridor'?	1 = deployable plan 5 = no action plan
Cost savings	▪ Does this take a lot FTE to manage- and what skill level? ▪ Does it require contractors?	1=small savings 5= large savings
Strategic value / Core competency	▪ Is this a core competency for the Bank/CTD/this department? ▪ Does it differentiate us from the competition?	1 = high 5 = low
Maturity of application technology	▪ Is it tried and tested - or are we early adopters?	1 = immature 5 = fully mature
Stability	▪ What does the history of this application reveal? Does the app tend to outages?	1 = unstable 5 = very mature
Growth vs. sunset	▪ What are the long term plans or prospects for this app?	1=strategic growth 5=sunset

2.3.2. Bank's Vendor Evaluation Framework

The Bank's vendor evaluation framework, Table 5, is composed of thirteen criteria the Bank believes should describe each vendor they select. No rating system is given to this framework as it is still a recent addition to the current best practices. An attractive vendor would be able to satisfy the requirements within each criterion. The criteria are weighted to form the basis of a weighted scoring mechanism that is used to evaluate the vendor. Table 5 lists the criteria and describes the requirements of each.

Table 5: Bank's Vendor Evaluation Framework

Evaluation Criteria	What does this mean?
Resource mix	• The right mix of onshore and offshore resources • The right mix of resources over time, implementation and post implementation
Skill-set & Knowledge	• Resources knowledgeable of IM applications, information and processes • The right skill mix pre and post implementation
Implementation plan	• A proposal that balances pace, risk and delivery • A roadmap that balances immediate opportunities with longer term goals • A proposal that adheres to the objectives of this effort • A proposal that encourages simplification of existing outsourcing contracts
Vendor investment	• Evidence the vendor is willing to invest the right time, effort and skill to this effort • Evidence the vendor is making an ongoing strategic investment in the effort' • Evidence the vendor is sharing the risk
Vendor risk	• The vendor can meet the necessary security and process requirements
Measures & Milestones	• Proposed measures for evaluating the success of the effort • Identified milestones to assess the effort
Management plan	• A clear proposal for managing the implementation and ongoing partnership • An efficient management structure that will encourage flexibility, pace and clarity • A clear proposal for blending vendor and the Bank's management
Cost reduction	• A cost improvement consistent with the increased scale and scope of the opportunity • Ongoing cost improvement
Quality transformation	• Ability to sustain and improve information management delivery processes • Ability to sustain and improve the quality of deliverables • A plan to continually deliver organization quality improvements
Flexibility, Agility & Pace	• A proposal that sustains and improves upon existing flexibility, agility and pace
Focus on outcomes	• The proposal emphasizes improved, on-time, right-the-first-time deliveries to our customers and business partners
Track record	• A vendor track record of achievement in outsourcing • Vendor experience with similar outsourcing implementations
Enterprise systems focus	• The proposal recognizes the desire for IM to extend GR partnership to the Corporate Services and Enterprise Systems level

3. Research Methodology

Outsourcing is a widely accepted practice across a variety of industries. Many firms, including the Bank, use frameworks based on their company's strategic goals to assess whether a project should be outsourced. This thesis identifies candidate frameworks in the literature that may provide criteria that are useful but missing from the Bank's framework. This section provides an outline of how this thesis will be conducted; Figure 1 illustrates the process.

3.1. Thesis Methodology

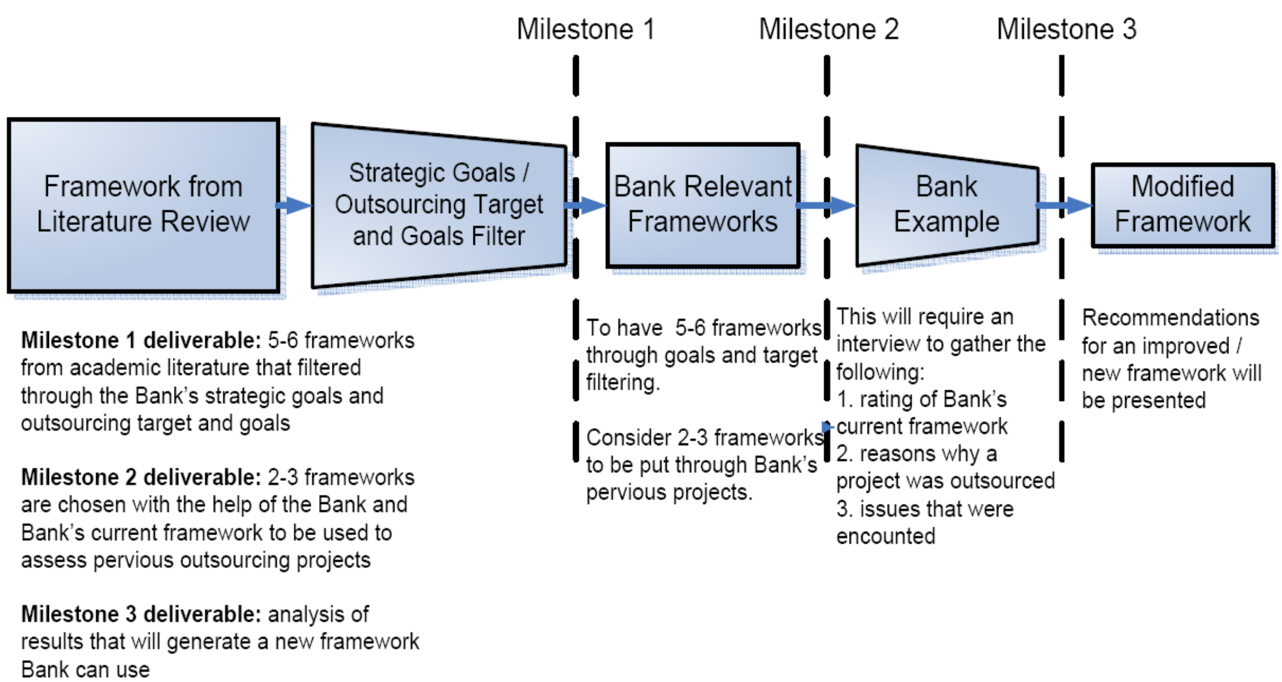


Figure 1: Thesis Plan

Figure 1 depicts the thesis plan to provide the deliverables of a recommended framework. This methodology requires each step to be completed in chronological order, as each stage is built upon previous stages.

The thesis project gathers frameworks through a literature review, filtering frameworks using the Bank's goals and targets, and running the Bank's pervious outsourcing engagements through the frameworks to produce a modified framework.

This thesis begins by reviewing academic and industry literature to identify different frameworks and best practices in use elsewhere. These will cover a spectrum of frameworks offered in literature, from lenient to more conservative. These frameworks are assessed or filtered with respect to the Bank's overall strategic and outsourcing goals, and targets. Some frameworks may be pruned to remove unsuitable criteria. Five or six frameworks or parts of pruned frameworks that best fit the Bank's goals are selected for presentation to the Bank. The Milestone 1 deliverables are five or six filtered frameworks.

With guidance from the Bank, two or three candidate frameworks are selected from the filtered frameworks according to what the Bank believes most accurately reflects viable frameworks within its business context. A comparison is preformed between the candidate frameworks and the Bank's frameworks to determine which criteria are unique to each framework. The Milestone 2 deliverables are two or three frameworks that will be compared to the framework currently used by the Bank.

Using the candidate frameworks as well as the Bank's current framework, a series of interviews are conducted to compare the candidate frameworks to the current one. The help of the Bank once again is required to select the appropriate personnel to interview; the interviewees should be decision makers who have outsourced previous Bank engagements. The thesis analyzes a spectrum of projects, from those labeled as "core competency" to those that are not and projects in between. An interview is used to gather: the ratings against the Bank's current frameworks, the reason why a project was outsourced and the issues that were encountered. An analysis is completed to determine: the criteria that could be removed from the Bank's frameworks, the criteria that can be added in deciding to outsource an initiative and the criteria that can be added to forecast the actual issues encountered. The Milestone 3 deliverables include an analysis of each project using the candidate frameworks and the Bank's framework and the information gathered while conducting the interviews.

There are two possible outcomes. The first is that the Bank's current framework best assesses the opportunities for outsourcing. The second is that the analysis identifies different/ new criteria that should be considered when making the outsourcing decision. The final step of the thesis is to present a modified framework that enhances the current framework with different or additional criteria, to the Bank, if the analysis merits so.

The methodology proposed requires guidance from the Bank to make decisions as to which strategic goals and targets to consider, which candidate frameworks to use in the assessment and which projects to analyze. If the analysis identifies different criteria from those currently used, the thesis will yield a modified framework the Bank can consider using to assess the suitability of outsourcing future development projects.

4. Filtered Frameworks

The first milestone of the thesis presents the selected frameworks that have been filtered using the Bank's goals and targets. The Bank's goals provide several criteria that are included in the filtered frameworks. A high-level overview of each framework is provided. Through the filtered frameworks, several frameworks are chosen as the candidate frameworks to be analyzed.

4.1. Bank's ~~goals~~Goals

The Bank provided several requirements that should to be included in the filtered frameworks: rates the competitive advantage of a project, identifies risks and a framework that can be adjustable.

4.1.1. Core Competency vs. Competitive Advantage

It is said that an enterprise should consider outsourcing those aspects of its business that are not core competencies or that do not provide the enterprise with a strategic and competitive advantage [Quin92]. Mature outsourcing practitioners believe that the final product may provide the advantage but that the underlying software code does not. Less mature practitioners believe that the manner in which they choose to implement a software product is a competitive advantage.

4.1.2. Vendors and Risk

The Bank takes significant preventative measures to ensure that its business runs as smoothly as possible. When considering a vendor, three precautionary assessments are made: one based on the country of the head office, one on the company itself and another on the site to which the project is outsourced.

The Porter five forces best describes the relationship between the Bank and the size of a partnered vendor [Port79]. There is a risk to the Bank if it partners with a large size vendor, like the Bank's AMS Vendor, which has other clients, like Bank of America, who may consume more services and be more important to the vendor. The Bank needs to realize that they have less leverage compared to other larger partners associated with the vendor. On the other hand, the Bank faces risks if it reduces the amount of work it contracts to smaller suppliers because this may make the supplier's business less viable.

The Bank may benefit from partnering with experienced suppliers. For example, the Bank's AMS Vendor introduced the Bank to outsourcing and guided the Bank to ensure both partners would succeed. The Bank took comfort from knowing that the AMS Vendor was as committed to success, and as concerned about failure, as they were. On the other hand, if a business chooses to work with a less experienced supplier the Bank will ensure the governance structures are in place to manage risk and work to mitigate the risk at some cost.

4.2. Literature review

Numerous frameworks from the academic and industry literature were reviewed and filtered to produce five filtered frameworks that align to the Bank's requirements. A broad selection of frameworks was gathered ranging from lenient to conservative frameworks. A high level explanation as well as the pros and cons of the each framework are provided as a preliminary to the next milestone in determining and analyzing the candidate frameworks.

4.2.1. Filtered Framework #1: Cohen and Young's Framework

Filtered Framework #1 is taken from Cohen and Young's article [Cohe06B]. This framework is lenient and few criteria are rated. The framework applies a fundamental approach to project evaluation for outsourcing by determining the differentiating value of the project and the competence of the internal team. The differentiating value criterion answers the "what" should be developed and the competence criterion answers the "who" should be delivering this. A lower rank in either of the two categories should result in a higher consideration that a project should be outsourced.

The Bank could use this framework as a quick way to determine whether a project should be kept in-house or outsourced. Having Cohen and Young's framework could save time for executives and senior management, as it is easy to implement.

The framework only takes into consideration two criteria and disregards other criteria the Bank may consider important; however, this framework provides a high-level assessment. After the assessment, the Bank would need to go through its current framework to have an in depth look as to determine if the project should still be outsourced.

4.2.2. Filtered Framework #2: Fink and Shoeieb's framework

Fink and Shoeib's framework, Framework #2 is done through a survey that breaks down the outsourcing process into five phases: intelligence phase, analysis and planning phase, strategy selection phase, action phase and evaluation phase [Fink03]. Filtered Framework #2 emphasizes the action phase which is part of a five phase outsourcing process. The action phase is further broken down into two actions: selection of the IT vendor and internally writing the IT contract. This framework determines which projects should be outsourced.

The framework permits a closer look at what other types of businesses regard as important to an outsourcing project and presents questions many organizations feel they need to clearly answer before engaging in an outsourcing contract. The Bank may want to ask these questions to ensure a successful outsourcing project.

Filtered Framework #2 presents a predetermined weighting for each criteria based on survey data, which may or may not align with each business group's goals. Fink and Shoeib provide little information pertaining to the other four phases of the outsourcing process.

4.2.3. Filtered Framework #3: Kliem's Framework

Filtered Framework #3 is taken from Kliem which presents five categories of risks associated with outsourcing projects: financial risk, technical risk, managerial risk, behavioural risk and legal risk [Klie04]. In order to mitigate these risks, Kliem, provides three categories of controls: preventative control, detective control and corrective control. Kliem determines which project and which vendor should be selected for outsourcing.

A matrix is created using project goals and associating specific risks and controls to formulate a preventive measure to mitigate risk.

Upon further review of the Bank's documentation, it was found that the Bank already has a comprehensive risk analysis matrix that overlaps with a significant portion of the risks presented in Kliem's framework.

4.2.4. Filtered Framework #4: Pati and Desai's Framework

The Pati and Desai framework [Pati05], Filtered Framework #4, breaks down the project evaluation into three equally weighted sections: type of IT service, the internal IT capabilities, and the strategic business value. Each section has a list of criteria that determine the section rating. This framework determines which projects should be outsourced.

Pati and Desai examines the current internal capabilities and the business structure of the organization with respect to the project needs. Understanding these criteria are critical to providing informed decisions. The Bank may use these criteria to examine its internal capabilities to see if projects do indeed need to be outsourced.

An issue with Pati and Desai's framework is the weighting: each section is weighted high, low or neutral; there is no intermediate weight.

4.2.5. Filtered Framework #5: Padmanabhan’s Framework

Padmanabhan’s framework gathers twelve criteria, from a review of the literature, which should be considered in the vendor evaluation [Padm07]. The framework, Filtered Framework #5, determines which vendor is most suitable for the engagement.

Padmanabhan’s framework is closely aligned with the Bank’s goals and strategies, as they are addressed in one or more of the twelve drivers. Like the Bank’s framework, Padmanabhan’s framework can be easily adjusted to meet the needs of each Bank’s department by assigning different weights for each criterion.

5. Candidate Framework

The purpose of this component of the thesis is to select several candidate frameworks from the filtered frameworks, section 4.2, and to perform a gap analysis between the candidate frameworks and the Bank's current frameworks. The gap analysis is conducted to determine which criteria are unique to each framework, which is further used in determining additional relevant criteria that can be added to the Bank's frameworks.

5.1. Candidate Framework Selection

With the help of the Bank, three frameworks were selected from the filtered criteria. The frameworks are:

- Cohen and Young's Framework
- Pati and Desai's Framework
- Padmanabhan's Framework

The Bank's project selection framework will be compared against Cohen and Young's and Pati and Desai's framework. The Bank's vendor selection framework will be compared against Padmanabhan's framework.

Cohen and Young's framework is chosen because it provides a quick assessment to determine which projects should be kept in-house and which should be considered for outsourcing. A gap analysis is preformed between Cohen and Young and the Bank's framework.

Pati and Desai's framework was chosen because it can be modified to adjust for different criteria weightings and the criteria align closely with the Bank's own criteria for outsourcing. The Bank has not considered the internal competence of the business and would like to determine if Pati and Desai's criteria may offer any advantages when considering a project for outsourcing. Pati and Desai's framework determines which initiatives should be outsourced or kept in house. A gap analysis is preformed between this framework and the Bank's current project selection framework.

Padmanabhan's framework was chosen by the Bank because the criteria can be weighted and it covers a broad spectrum of criteria the Bank did not consider when selecting a vendor. This framework determines which vendor is best suitable for the outsourcing project selected. A gap analysis is preformed between Padmanabhan's and the Bank's framework.

5.2. Candidate Framework Gap Analysis

A gap analysis identifies criteria unique to each framework. Criteria from a Bank's framework and a literature's framework are cross examined to identify directly related, inversely related or unique criteria. A direct relationship is a match of two criteria, from different frameworks, that have the same definitions of what is considered a strong outsourcing initiative. An inverted relationship is a match of two criteria that have opposing views using the same definitions. For example, framework A may say high stability is good for outsourcing and framework B may say low stability is good for outsourcing. Since they have opposing views of the same criteria, this is an inverted relationship.

For each of the published frameworks a section explains the reasoning behind the decision to classify each relationship between the Bank and framework criteria as directly related, inversely related or unrelated. Each relation heading indicates the literature's criteria followed by the Bank's criteria separated by a '/'.

A matrix is use to compare the Bank's frameworks and the published frameworks. If a direct relationship is found a '1' is given. If an inverted relationship is found a '-1' is given. A blank space signifies no relationship found between criterions. A greyed criterion indicates a criterion unique to its respective framework.

5.2.1. Cohen and Young's Framework

Cohen and Young's framework provides a very fundamental approach to outsourcing. The framework is presented in Figure 2. This framework judges all projects with respect to two criteria: competence and the projects value to differentiate. Table 6 defines each criterion in Cohen and Young's framework.

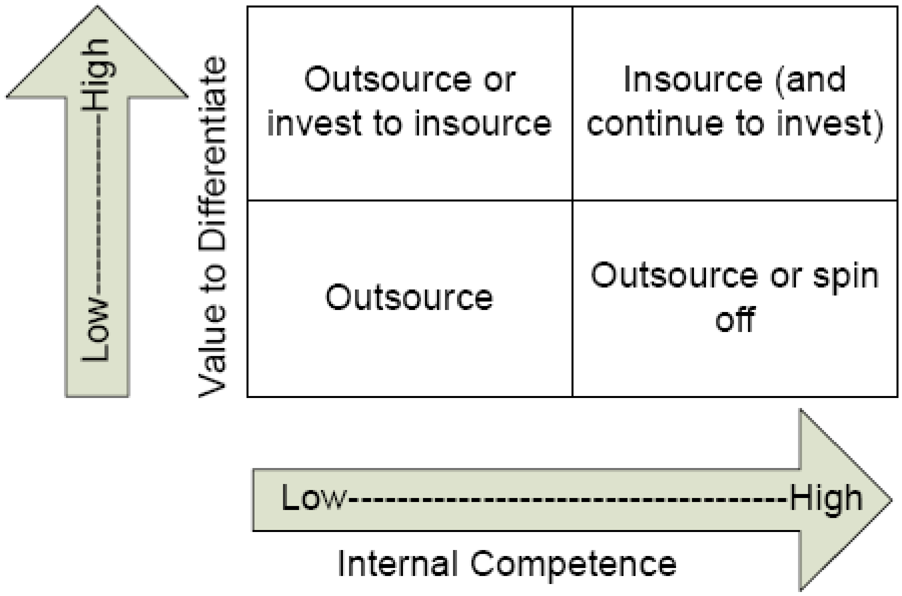


Figure 2: Cohen and Young's Project Selection Framework [Cohe06B]

Table 6: Cohen and Young's Project Evaluation

Evaluation Criteria	What does this mean?	Ranking
Competence	Does the organization have the capabilities internally to perform the work?	1 = Competent 5 = Not competent
Value to Differentiate	What level of differentiation does the organization receive from completing the project?	1 = High 5 = Low

5.2.1.1. Cohen and Young's Framework/ the Bank's Framework

Value to differentiate / Strategic value& Core competencies (Directly related)

These criteria take into consideration how well a project can differentiate the Bank to their competitors. The higher the level of differentiation, the more inclined the Bank should be to keep it in house.

<u>Unique to Cohen and Young's Framework</u>

IT Competency

A project that the internal team can develop effectively should be in-housed. If the Bank team has less competence it should consider outsourcing as an option.

5.2.1.2. Cohen and Young's Gap Analysis

Table 7: Cohen and Young's Gap Analysis

	Cohen and Young's Framework	
Bank's Project Evaluation Framework	Internal competence	Value to differentiate
Impact of failure		
Complexity of interaction with the business		
Complexity of technology		
SLA Agreement		
Redeploy staff for high value work		
Staff/ Attrition planning		
Cost savings		
Strategic value/ Core competency		1
Maturity of application technology		
Stability		
Growth vs. sunset		

From Table 7, it is seen that there is only one direct relationship between the Bank's framework and that of Cohen and Young. Both frameworks identify the value to differentiate as an important criterion. The unique criterion from Cohen and Young's framework signifies that internal competence of the Bank is not currently a consideration in the decision making of projects getting outsourced.

5.2.2. Pati and Desai’s Framework

The Pati and Desai framework is broken into three sections: IT service continuum, internal IT capabilities and strategic value [Pati06]. Figure 3 provides the criteria judged in Pati and Desai’s framework for each of the three sections. Each section is weighted equally to determine the correct course of action.

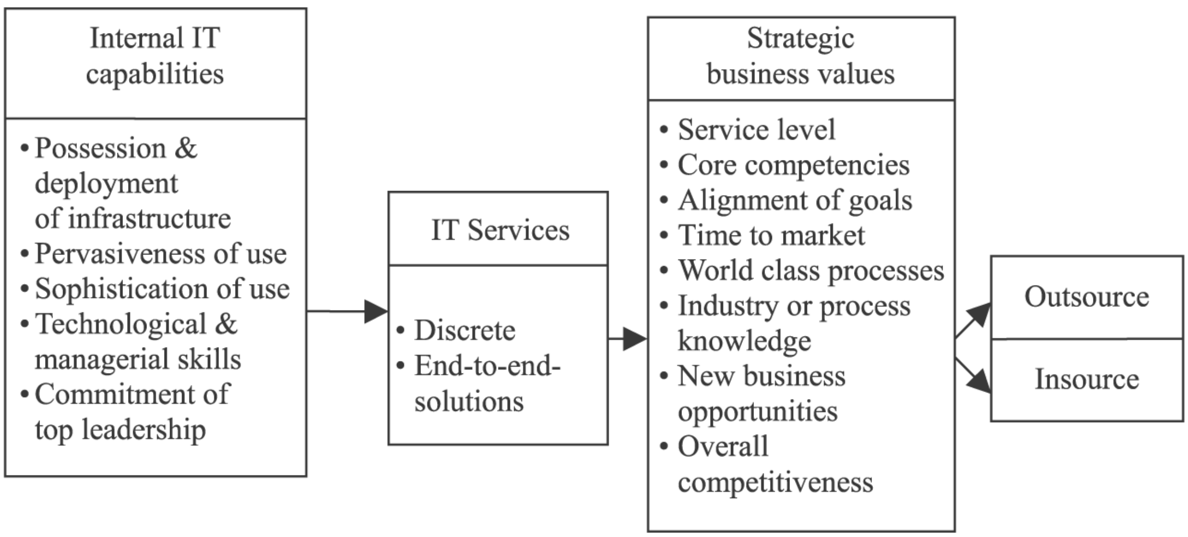


Figure 3: Pati and Desai's Framework [Pati06]

Pati and Desai’s evaluation criteria and definitions are stated in Table 8.

Table 8: Pati and Deasi's Criteria Definitions [Pati06]

Evaluation Criteria	**What does this mean?**	**Rating (High score = outsourcing)**
IT Services		
Discrete	Is the service a stand alone?	1- End to end 5- Discrete
End to end solution	Is the service integrated with other services?	
Internal IT Capabilities		
Possession and development of IT infrastructure	Is this a stable and effective service?	1- High stability 5- Low
Pervasiveness of IT use	Is this service used across the board? Are similar processes using different services?	1- Low pervasiveness 5- High
Sophistication of IT use	Is the business fully utilizing the service on a daily basis? Is the business using this application creatively?	1- Complex 5- Simple
Technical and managerial skill levels of IT personnel	Can these personnel be reused for other work that requires their skill? Technical? Managerial?	1- Diffcult 5- Easy
Commitment of top leadership	Are the leaders in the organization buying-in and championing the role to outsource the project?	1- Low commitment 5-High
Strategic business values		
Service levels	Does this project have the ability to provide better service?	1- Strengthen service level 5- Remains the same
Core competencies	Is this a core competency? Does it differentiate us from the competition?	1-Core 5- Non-core
Alignment of goals	Does the project align with the organization's goal?	1- High alignment 5- Low
Time to market	How quick does the internal department, compared to a vendor, deploy an application from start to finish?	1- Quicker 5- Slower
World class processes	How do similar services compare to the proposed? Is it world class?	1- World class 5- Not world class
Industry or process knowledge	Does your internal development team know the industry well to effective carry out this project?	1- Very well 5- Not well
New business opportunities	Are there possibly new business opportunities available to the organization for this project?	1- High opportunities 5- Low
Overall competitiveness	Looking at the bigger picture, can the project offer a competitive advantage among its competitor?	1- High competitive 5- Low

5.2.2.1. Pati and Desai's Framework / Bank's Framework

Sophistication of use / complexity of interaction with the business (Directly related)

Both criteria result in an undesirable outsourcing project. A sophisticated use of the service involves fully using the application for business needs. A complex interaction is defined as a dependence on the service and a heavy business involvement in the service's application.

Technological and managerial skills /redeploy staff for high value work (Directly related)

Both criteria are in favor to redeploying Bank staff for higher value work.

Discrete & End-to-end solution / Complexity of technology (Directly related)

Discrete and end-to-end solutions are indirectly related to each other. A discrete application is a simple application that is not integrated with other systems. A complex technology is an end-to-end solution which uses or supports many other applications. Discrete solutions are most favorable for outsourcing between the two criteria.

Service Level / Service level agreement (Directly related)

Both criteria agree that a project that contributes to higher service levels should be kept in house.

Core competencies / Strategic values & Core competencies (Directly related)

Both of these criteria look at the core competencies and how well they differentiate the Bank from its competitors.

New opportunities / Growth vs. Sunset (Directly related)

New opportunities and growth projects vs. sunset operations is directly related. Both criteria state that if project promotes new opportunities for the Bank to grow, these projects are kept in house.

Possession and deployment of infrastructure / Stability (Inversely related)

Pati and Desai suggest that if an internal IT team can provide a stable and effective service then the project should be kept in-house. The Bank's framework views a stable service as an outsourcing-worthy service.

<u>Unique to Pati and Desai's Framework</u>

Alignment of goals

Alignment of goals determines whether a project aligns with the Bank's goals. Outsourcing will be favored if it does not strongly align to the Bank's goals.

Pervasiveness of use

An application has pervasiveness of use if the same service is used to perform similar activities throughout the company. Standardizing the service as much as possible is highly recommended to save cost [Drey07].

World class service

A world class process/ service should be kept in house to maintain the knowledge surrounding the service.

Commitment of top leadership

Executive and senior management commitment to outsourcing are key for both project success [Kaka03][Dhar06] and the transformation of an organization into a competent outsourcing company [Cohen06A]. An ideal manager would be one who is a negotiator while creating a win-win situation for all stakeholders [Dewa08] [Mass03].

Time to market

Time to market lets the business compare the speed of development and deployment of its internal team to its vendor. Outsourcing would be favored if it can reduce the required time to market.

Industry or process knowledge

If the internal team of the business understands the industry well and knows how to make effective use of its resources to complete the project, the project should be in-housed.

Overall competitiveness

If the project can enhance the business' competitive advantage, the business should keep in house to develop the service further.

5.2.2.2. Pati and Desai's Gap Analysis

Table 9 and Table 10 provide the gap analysis. Several criteria are unique to Pati and Desai's framework. Many of the unique criteria are present under the section that evaluates strategic value of the project and the internal IT capabilities for a project. These differences between the Bank's and Pati and Desai's frameworks are further analyzed using historical data.

Table 9: Pati and Desai's Gap Analysis [Part 1]

	Pati and Desai's Framework						
	Internal IT capabilities for a project					Project type	
Bank's Project Evaluation Framework	Pervasiveness of use	Sophistication of use	Technological and managerial skills	Commitment of top leadership	Possession and deployment of infrastructure	Discrete	End-to-end solution
Impact of failure							
Complexity of interaction with the business		1					
Complexity of technology						1	-1
SLA agreement							
Redeploy staff for high value work			1				
Staff/ Attrition planning							
Cost savings							
Strategic value/ Core competency							
Maturity of application technology							
Stability					-1		
Growth vs. sunset							

Table 10: Pati and Desai's Gap Analysis [Part 2]

	Pati and Desai's Framework							
	Strategic Business Values for the project							
Bank's Project Evaluation Framework	Service level	Core competencies	Alignment of goals	Time to market	Industry or process knowledge	World class processes	New opportunities	Overall competitiveness
Impact of failure								
Complexity of interaction with the business								
Complexity of technology								
SLA agreement	1							
Redeploy staff for high value work								
Staff/ Attrition planning								
Cost savings								
Strategic value/ Core competency		1						
Maturity of application technology								
Stability								
Growth vs. sunset							1	

5.2.3. Padmanabhan’s Framework

Padmanabhan’s framework presents twelve drivers used to determine which vendor to outsource a contract to. Table 11 presents Padmanabhan’s evaluation criteria and definitions. An ideal vendor would align closely to the definitions of each criterion.

Table 11: Padmanabhan's Criteria Definitions [Padm07]

Evaluation Criteria	**What does this mean?** (Closely aligned vendor = ideal vendor for outsourcing project)
Cost	• All hidden cost like increased project management and software licenses has been analyzed • For equal quality of talent, there is cost savings significant in this model
Talent	• There are different expertise levels available • The skill sets required available • Project managers and team lead are proficient in a global delivery model
Infrastructure	• The infrastructure/network are scalable and standardized • These are available and fast enough to support daily business functions • There are testing environments
Time-to-market	• The vendor is flexible, and agile in delivering projects
Project management	• The approach methodology, resource planning and project estimate has been defined based on adequate past experience • Communication and status reports models have been predefined • A robust project management, planning and tracking methodology exist to manage people and deliverables
Language	• There are no language barriers between the vendor team and the business
Culture	• There are no significant business cultural differences between the vendor and the business • There are no significant ethnical difference between the vendor and the business
Information Security and Intellectual Property	• The vendor has an active information security body working on securing local area, wide area and internet networks • The vendor has a good reputation working in sensitive domains and references are available • Files are encrypted when sent out
Quality	• The vendor has globally recognized certification (i.e. six sigma, ISO) • The ratio to customer satisfaction to customer complaints is high. • There are lot of CMMI Level 5 projects or Six Sigma Black belts project executed
User Experience	• There is adequate research and analysis carried out for each project • The vendor understands the domain they are supporting
Proximity	• The location is free of natural hazard or political problems such as war or captivity • There is a quantifiable legal, monetary or governance advantage in outsourcing to the given location
Track Record	• The vendor have a seamless track record • The vendor is most qualified for the project being assessed • The past customers of the vendor are internationally reputed

5.2.3.1. Padmanabhan’s Framework/ the Bank’s Framework

Cost / Cost reduction (Directly related)

Both these criteria rate a higher cost reduction as favorable to outsourcing.

Talents / Skill set and knowledge (Directly related)

They both determine whether a vendor has the necessary skills and expertise to complete the selected project.

Time to market/ Flexibility, agility and pace (Directly related)

These criteria view the vendor’s time to react to the business’s demand and how flexible the vendor is to the changes in demand.

Project management/ Measures and Milestones & Management plan (Directly related)

Project management capabilities of the vendor defined by Padmanabhan, in a global delivery model, includes having measureable goals and a management plan, both of which are on the Bank’s framework.

Track record/ track record (Directly related)

Both of these criteria consider having a vendor with a good track record is critical for success in outsourcing.

Information security/ Vendor risk (Directly related)

Information security is a subcategory of the vendor risk criteria. Vendor risk not only looks at the information and intellectual property risk, but also the financial risk, company risk, and country risk of the vendor. Therefore they are in direct relation.

Proximity/ Vendor risk (Directly related)

Proximity is also a subcategory of vendor risk as both criteria look for a stable region for outsourcing. Vender risk covers a larger area apart from proximity. Hence a direct relation is made.

Unique to Padmanabhan's Framework

Quality/ Quality transformation

These two criteria are closely related although not directly related, as quality views the present function of the vendor and how well the vendor can perform the assigned task, whereas quality transformation looks at the future of the assigned task and asks if the vendor can improve on the quality in the long run.

User experience

A vendor that has experience or has done research in the domain or application they are developing/ supporting will improve the delivery of the service. According to Rottman and Lacity [Rott06], organizations should escalate the learning curve with an aggressive and integrated program of pilot projects to allow the service providers to get their staff accustomed to the culture and the functions of the organization.

Infrastructure

The infrastructure criterion determines if the vendor has the infrastructure to support additional workload. It is only through a scalable infrastructure and by increasing the volume of work, that vendors can pass cost savings to organizations [Cohen06A].It also looks how stable the vendors can get the applications to be in their environment.

Language

Having a language barrier between the vendor team and the business team will make business difficult.

Culture

Both the vendor team and the business team should be trained in cross-culture interaction. If there is a significant difference in culture, either business or ethnical there could be miscommunication by either party. Some companies have strategies to train their employees to deal with various cultures and how to manage outsourcing agreements [Dhar06].

5.2.3.2. Padmanabhan's Gap Analysis

Padmanabhan's gap analysis, Table 12, presents the gap analysis between Padmanabhan's framework and the Bank's vender evaluation criteria.

Table 12: Padmanabhan's Gap Analysis

	Padmanabhan's Framework											
Bank's Vendor Evaluation Framework	Cost	Talents	Infrastructure	Time to market	Project management	Language	Culture	Information security	Quality	User experience	Proximity	Track record
Resource Mix												
Skill-Set & knowledge		1										
Implementation plan												
Vendor investment												
Vendor risk								1			1	
Measures & Milestones					1							
Management plan					1							
Cost reduction	1											
Quality transformation												
Flexibility, agility & pace				1								
Focus on outcomes												
Track record												1
Enterprise systems focus												

Table 12, indicates that there are several criteria the Bank does not consider when evaluating a vendor, seen as the greyed criteria.

It is found that the Bank's vendor risk criterion encompasses Padmanabhan's information security and proximity criteria. Going forward the information security and proximity criteria will be grouped as vendor risk because they are already part of the Bank's framework.

It is also found that Padmanabhan's project management criterion encompasses the Bank's Measures & Milestones and Management plan criteria. Further analysis is done to determine if these two criteria should be grouped as one, under project management.

6. Analysis of Prior Engagements

This section analyzes four ongoing and completed outsourcing engagements. Issues are identified in each engagement and the analysis will determine whether these same issues can be identified using the literature's frameworks. The comparison between the Bank's and literature's frameworks, section 5.2, presents criteria that are unique to each framework. These unique criteria are the focus of this analysis.

Many of the Bank's engagements are either a capacity pool or AMS. From these engagements, two AMS and two capacity pool engagements were analyzed. All four engagements selected are outsourced to the AMS vendor.

A series of interviews were conducted to gather information regarding why the decision made to outsource a project and what issues arose during the engagement. An analysis is preformed on the issues gathered, to see if criteria identified as unique in the literature identify the same issues. Each engagement will be analyzed by Cohen and Young's framework, Pati and Desai's framework, and Padmanabhan's framework. Sample interview questions are summarized in Appendix A. The interviews sought clarification of the issues identified in the monthly reports provided by the vendor, Appendix B.

6.1. Prior Engagements

In 2007, each Senior Vice President (SVP) in the Bank was mandated by executive management to engage and fulfill a quota in outsourcing. Under the SVPs, each department selected several applications that could potentially be used as outsourcing candidates.

Table 13 provides a high level overview of each engagement showing which group proposed the project, the type of engagement, the reasons for outsourcing, the reasons for selecting the vendor and the issues encountered.

Following Table 13 is a more depth study of each engagement is presented. A high level description of the engagement is provided, along with reasons why the engagements were outsourced and issues that were encountered.

Table 13: High level Overview of Engagements

	Engagement			
	Capital Markets AMS	**Corporate Services AMS**	**Basel II**	**Third Party Mutual Funds**
Department	Capital Markets	Corporate Services	Corporate Services	Private Client Group
Engagement Type	AMS	AMS	New Development	New Development
Reasons for Outsourcing	-Mandated by executive leadership -Projects had economies of scale	-Mandated by executive leadership -Projects had economies of scale -Mostly done by contractors prior to outsourcing -High staff turnover rate	-Championed by director -Required vendor's experience to fulfill requirements -Eventual migration to CS AMS engagement -Used to fulfill the quota	-Mandated by executive leadership -Perceived cost savings -Unclear understanding of project requirements -Eventual migration to AMS engagement
Reasons for Outsourcing to the Vendor	-Only vendor available	-Only vendor available	-Deep relationship with vendor -Vendor has experience	-Vendor is supporting the group's AMS engagement
Issues Encountered	-Knowledge transfer -Incorrect understanding of requirement skills and solutions	-Knowledge transfer	-Knowledge transfer -Understanding requirements	-Knowledge transfer -Managing expectations -Change control

6.1.1. Engagement #1: Capital Markets AMS

Capital Markets (CM) outsourced a five-year agreement to maintain and support a suite of applications. The outsourced applications are part of a profit-loss calculator and data reconciliation process. These applications rely on either third-party built or off-the-shelf software. Initially, the CM AMS engagement was coupled with two Risk Management Group (RMG) applications because the two groups are under the same SVP. The two AMS were eventually separated into two engagements, CM AMS and RMG AMS. Only the CM AMS will be analyzed.

6.1.1.1. Reasons for outsourcing

The CM AMS engagement was outsourced to exploit the vendor's economies of scale and to fulfill the outsourcing quota mandated by the executives. These applications were not core to the business and would have the least impact if system problems were to occur. The applications were also very stable, hence were perceived to require less resources to maintain.

The vendor was selected because there was only one vendor partnered with the Bank at the time of the initial mandate.

6.1.1.2. Issues

The CM AMS engagement experienced knowledge transfer issues. Specialized knowledge transfer from CM to the vendor was required to maintain and support the applications. Although the vendor possesses the required technical knowledge, the domain knowledge to support the applications was lacking.

There were staffing challenges when the applications were supported by the vendor due to the misunderstanding in the required skills and solutions. The problem was caused because the applications were so stable, that insufficient domain experience was gained during the scheduled knowledge transfer period. When unexpected system challenges arose months after handover, the vendor did not have the experience to repair the applications.

The two issues, domain knowledge transfer and the misunderstanding of skills and solutions required, caused an 18-month delay from handover in the engagement.

6.1.2. Engagement #2: Corporate Services AMS

Corporate Services (CS) engagement is the first large AMS initiative taken by the Bank, this engagement is composed of many individual applications that are not core to the business. The main parts of this engagement are regulatory reports that are generated monthly for financial reporting.

6.1.2.1. Reasons for outsourcing

The CS AMS engagement was outsourced for several reasons. The project had the economies of scale to receive the cost saving benefits from the vendor. The SVP in charge of the department was determined to make the outsourcing work successfully. The applications were mostly supported by local contractors so there were perceived cost savings in outsourcing. Internally there was a quick turnover rate in supporting these applications and generating the reports because it was complex and tedious.

The vendor was chosen primarily because the business believed that the vendor would improve and transform the quality of the application.

6.1.2.2. Issues

There were knowledge transfer issues in this engagement, as the vendors did not have sufficient domain knowledge of the applications they were supporting. The vendor required more time to gain the expertise to support the application because of the inherent complexity of the domain. This caused a four-month delay to the engagement.

6.1.3. Engagement #3: Basel II

Basel II is a set of regulatory guidelines determined by the Basel Committee on Banking Supervision and enforced by governments to promote a common best practice of banking throughout the world. This type of project has been implemented in other banks around the world, and some banks have chosen to outsource this work, so vendors may have experience in fulfilling Basel II requirements. Offsite vendors are used to develop a database to retain information. The CS group was responsible for the Basel II development.

6.1.3.1. Reason for Outsourcing

This engagement was championed by the director. There was low internal knowledge and understanding of the regulatory requirements; the Bank relied on the experiences of the vendor. The vendor provided flexible staffing to form a development team for the Basel II project and same resources can later be used to fulfill an AMS engagement. This outsourcing engagement also was a way to fulfill the quota for outsourcing.

The vendor was selected because the Bank wanted to leverage the Basel II knowledge and experiences the vendor aggregated from other banks. There was also a deep partnership between the group and the vendor from previous outsourcing engagements. The same vendor also had local contractors working another section of the project.

6.1.3.2. Issues

There were migration issues dealing with knowledge transfer of the Bank's domain. Although the vendor had more experience in Basel II requirements than the Bank, the need to tailor the implementation to the Bank's environment required understanding of how the Bank operates.

There were also issues in understanding the regulations as they were subject to interpretation by each bank. This made gathering the requirements difficult, as knowledge is limited at both the Bank and the vendor.

6.1.4. Engagement #4: Third Party Mutual Funds

Third Part Mutual Funds (TPMF) is a new interface the Bank's customers can use to purchase mutual funds outside of the Bank's own mutual funds. This development is managed by the Private Client Group (PCG). This project was undertaken to ensure the business stays competitive.

6.1.4.1. Reason for Outsourcing

TPMF was outsourced due to the perceived cost savings and the need for flexible resources. This engagement was also used to fulfill the outsourcing quota.

The vendor was chosen because business group was already involved in an AMS engagement with the Bank's business group. The vendor had flexible staffing to form a development team and later to provide an AMS team. The outsourcing partner was perceived to have cost savings compared to hiring contractors, as was the typical practice.

6.1.4.2. Issues

During the development of TPMF, there was an issue with internal support to the vendors because only one subject matter expert was available internally. If the subject matter expert was not available, any problems the vendor encountered during the development time would put the project to a halt.

Managing the offshore team was an issue; the Bank managed the outsourced team as if it was an onsite contractor. This produced challenges in change management as both the Bank's team and vendor team had different ways of change request management and different ideas of what should be encompassed in a request.

There also were issues with managing expectations. The business expected the cost to be much lower. These resulted in schedule and budget challenges that lasted three to five months.

6.2. Analysis

Each framework is assessed using the data gathered from the interviews. Due to the context of each engagement, some criteria are not assessed. For example, from Pati and Desai's framework, the world class processes criterion was not a factor in the outsourcing decisions because it was not relevant to the engagements. The criteria unique to Cohen and Young's, Pati and Desai's and Padmanabhan's framework , when compared against the Bank's framework will provide the Bank with additional criteria with which to rate their potential projects or vendors.

6.2.1. Bank's Framework

The interviews rated each engagement using the Bank's current frameworks. The Bank's frameworks were only recently introduced; therefore, the engagements had not been assessed when the decisions to outsource were made. The bolded ratings indicate criteria that are important to consider for outsourcing a project or vendor. Criteria not assessed are marked with a dash '-'. An engagement with many 'High' ratings indicates a strong candidate for outsourcing and many 'Low' ratings indicate a weak candidate. Criteria that have not been used to assess any of the engagements would be candidates for removal from the Bank's framework.

The Bank used all the criteria in its framework as seen in Table 14; hence no criteria should be removed from the Bank's current project evaluation framework.

It should be noted that the CS AMS engagement rated low against the criterion measuring impact/ risk of delivery because the applications generate reports that are mandatory and regulated, so there would be an impact on the business if the engagement failed. This was an important factor because the contractors, prior to outsourcing the engagement, had low levels of competence in generating these reports. This special case was not captured by in the Bank's current framework.

Table 14: Bank's Project Evaluation Framework: Engagement Ratings

Evaluation Criteria	**Engagements**			
	Capital Markets AMS	Corporate Services AMS	Basel II	Third Party Mutual Funds
Impact / Risk of delivery failure	High	**Low**	Low	Low
Complexity of interaction with the business	High	High	High	-
Complexity of technology / Integration with other systems	High	Low	Low	-
SLA agreement with the business	-	High	-	-
Ease of staff redeployment for high value work	**High**	-	-	-
Staff attrition levels / Specialized knowledge required	-	**High**	-	High
Cost savings	-	-	High	**High**
Strategic value / Core competency	**High**	**High**	**High**	**High**
Maturity of application technology	High	Low	-	-
Stability	High	Low	-	-
Growth vs. sunset	**High**	**High**	-	-

Table 15 provides the ratings of the four engagements against the Bank's vendor evaluation framework.

Table 15: Bank's Vendor Evaluation Framework: Engagement Ratings

Evaluation Criteria	**Engagement**			
	Capital Markets AMS	Corporate Services AMS	Basel II	Third Party Mutual Funds
Resource Mix	-	-	High	-
Skill-Set & Knowledge	-	-	**High**	-
Implementation Plan	-	High	-	-
Vendor Investment	-	-	-	-
Vendor Risk	-	High	-	-
Measures & Milestones	-	-	-	-
Management Plan	-	-	High	High
Cost Reduction	-	-	**High**	**High**
Quality Transformation	-	**High**	-	-
Flexibility, Agility & Pace	-	High	-	-
Focus on Outcomes	-	High	-	-
Track Record	-	-	**High**	-
Enterprise Systems Focus	-	High	High	-

It should be noted that CM AMS engagement did not rate candidate vendors because there was only one vendor available at the time of the mandate.

Two criteria were not used in selecting the appropriate outsourcing partner for any of the engagements: vendor investment and measures & milestones. These criteria were not important in the four engagements analyzed and further analysis will determine their relevance to the Bank.

The vendor investment criterion identifies whether the vendor has taken the appropriate steps to ensure risks are shared and whether ongoing strategic investments are made to advance both parties' goals. It should be taken into consideration that outsourcing is relatively new to the Bank, so the Bank could not assess this criterion. With this fact taken into consideration, vendor investment should stay within the Bank's project evaluation framework.

The measures & milestones criterion identifies whether the vendor has measurements to evaluate the success of the effort. This was not used as a criterion for rating these engagements because there were no major milestones or measurements set in place prior to the engagements. This criterion should be removed or grouped to be part of the project management criteria as defined by Pati and Desai. The project management criterion accounts for both implementation plan and measures & milestones under a general definition.

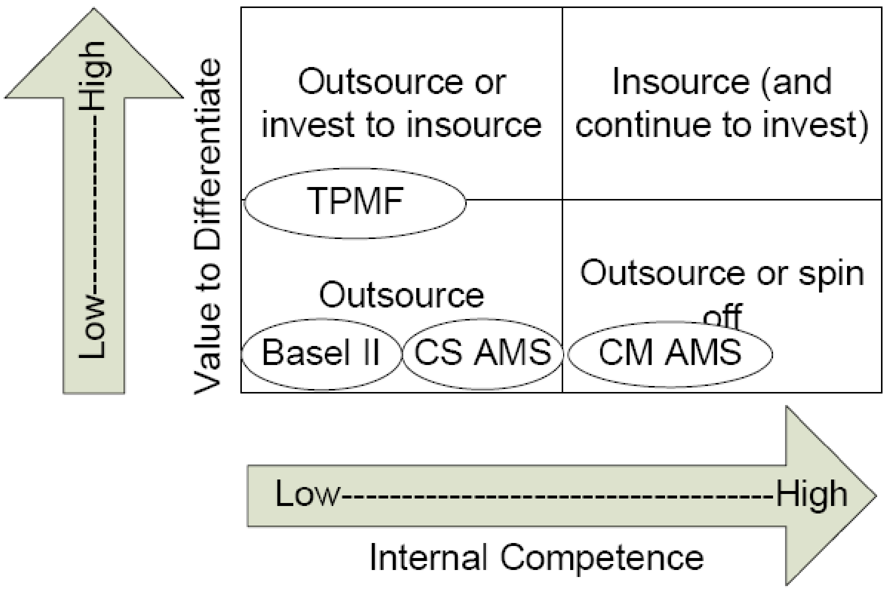
6.2.2. Cohen and Young's Framework

Cohen and Young's framework allows the user to quickly decide whether a project should be kept in-house or be considered for outsourcing. The framework considers two criteria for each engagement: value to differentiate and internal competence. Table 16 is a compilation of the analysis on the engagements using Cohen and Young's framework. Figure 4 provides a visual representation of which quadrant the engagement falls into.

Table 16: Cohen and Young: Engagement Rating

	Engagement			
	Capital Markets AMS	Corporate Services AMS	Basel II	Third Party Mutual Funds
Value to Differentiate	Low	Low	Low	Neutral
Internal Competence	Low	High	Low	Low

Figure 4: Engagement on Cohen and Young's framework



6.2.2.1. Value to Differentiate

Cohen and Young describes an application that has a high value to differentiate as an application that distinctly sets the business apart from its competitors. This criterion answers the question of "what" to outsource. A high level of differentiation indicates a weak candidate for outsourcing and should be in-housed. An application with a low level of differentiation should be outsourced.

The CM group selected applications that were not critical to the business and did not offer any differentiation among their competitors. The differentiating value criteria in the CM engagement scores low because the applications did not differentiate CM among competitors.

The applications involved with the CS AMS engagement were selected for the same reasons as the CM AMS engagement, therefore the value to differentiate scores low.

The regulatory project Basel II scores low on this criterion because all banks are to complete this project.

TPMF scores neutral as this service is offered in other financial institutions but the interface differs for each institution.

6.2.2.2. Internal Competence

Cohen and Young rates the internal competence of the business to determine whether they have the expertise, experience and knowledge to fulfill the initiative. This answers the question of “who” to fulfill the project. Cohen and Young states that if the internal team is highly competent, the engagement would score high making it a weaker candidate for outsourcing.

The CM group has competence and knowledge in supporting the application. The internal competence criterion rates this engagement as high because the internal team has proficiency in supporting the applications.

The CS AMS was previously contracted out and the internal team was not capable to support this application, thus the internal competence scores low.

The Basel II engagement ranked low on internal competency because this was recently mandated by the Basel committee and no one internally had the expertise to complete this initiative.

The business group involved with TPMF scored a low internal competence because this was a new product the Bank was introducing and did not have the resources to do the project.

6.2.2.3. Findings from Cohen and Young

Cohen and Young's framework is used to determine at a high-level the viability of the candidate engagements. The two criteria are fundamental questions behind each sourcing decision: "what" initiative to consider and "who" should fulfill the initiative.

From Figure 4, all four engagements analyzed are recommended for outsourcing. This concurs with the Bank's decision to outsource these projects. The CM AMS engagement's high internal competence, coupled with a low value of differentiation, suggests that this project can be outsourced. Both new projects and CS AMS have low internal competence and low value of differentiation making them suitable for outsourcing.

6.2.3. Pati and Desai's Framework

Pati and Desai's framework introduces several criteria the Bank can consider adding to its current project selection framework. Criteria unique to Pati and Desai's framework were used to rate each engagement to determine relevant criteria for the Bank's framework. A 'high' rating describes a stronger candidate for outsourcing. Table 17 provides the ratings of the four engagements against the criteria unique to Pati and Desai's framework.

Table 17: Engagement Rating Against Criteria Unique to Pati and Desai

	Engagements			
	Capital Markets AMS	Corporate Services AMS	Basel II	Third Party Mutual Funds
Internal IT Capabilities				
Commitment of Top Leadership	Neutral	High	High	Neutral
Pervasiveness of Use	-	-	-	-
Possession and development of infrastructure	Low	High	-	-
Strategic Business Values				
Alignment of Goals	-	-	-	-
Time to Market	-	-	-	-
Industry or Process Knowledge	Low	Neutral	Neutral	High
World Class Processes	-	-	-	-
Overall Competitiveness	-	-	-	-

The results in Table 17 indicate two unique criteria should be added to the Bank's current framework:

- commitment of top leadership
- industry or process knowledge

It also indicates one criterion that should have changed: possession and development of infrastructure.

These criteria are selected because they fall into one of two categories: they are used to drive outsourcing decisions or they can identify issues that occurred in the engagements.

6.2.3.1. Commitment of Top Leadership

The commitment of top leadership is not currently in the Bank's project selection framework but was a factor in deciding to outsource these projects. The commitment of top leadership includes the commitment, attitude and buy-in of the leaders involved in the outsourcing engagement. All engagements analyzed have commitment from executive leadership to make the outsourcing engagement succeed, as all SVPs were mandated to select outsourcing candidates. An engagement with a high rating recognizes that the leaders involved are fully supportive of the engagement being outsourced.

The CM group has efficient and effective software development and support teams and the SVP did not believe the engagement could have been better supported by outsourcing partners [Lart09B]. The CM AMS engagement was proposed by the SVP because of the mandate from the executives but did not have the buy-in of the SVP [Lart09B]. This makes the commitment of top leadership for this engagement neutral at best.

The CS leadership was committed to making the AMS outsourcing engagement a success; therefore, the CS AMS engagement rates high in the commitment from top leadership. The determination of the CS group’s SVP to make the engagement work trickled down to the department producing a positive attitude internally, which drove the engagement. There was buy-in and commitment from the executive level to director level.

The Basel II engagement was driven by the director responsible for the project because he wanted to leverage the knowledge and experiences of the vendor. Therefore, the Basel II engagement commitment of leadership criteria rates high.

The TPMF engagement was outsourced as a mandate from executive leadership. The commitment of top leadership criteria rates neutral against this engagement. Understanding how each department’s manager operates allows the Bank to determine their attitude and experiences with outsourcing. If a manager is accustomed to managing onsite contractors the manger might be inclined to manage outsourcing resources the same way. If the managers had exposure to capacity pools projects, they might be inclined to manage the team as an outsourcing team. Therefore, the engagement rated against the commitment of top leadership criteria is neutral, as the manager for this program had insufficient experience managing outsourcing vendors. However, outsourcing is supported by the executives.

The commitment of top leadership criterion is recommended to be added into the Bank's project evaluation framework. A committed leader to outsourcing was an important factor in deciding to outsource.

6.2.3.2. Industry or Process Knowledge

Assessing industry or process knowledge is unique to Pati and Desai's framework; this criterion identified issues the Bank experienced in the engagements. The industry or process knowledge criterion rates whether the internal team of the business has the necessary expertise and experience to develop or support the application. A high rating on this criterion indicates the business does not have the expertise and experience to fulfill this initiative; thus indicating a stronger candidate for outsourcing. A low rating indicates there is a substantial amount of knowledge available internally. If a business outsources an initiative with a low rating, more time will be required to transfer knowledge to achieve the same level of expertise available internally.

The CM applications are complex and specialized knowledge is required to support them. The rating against the industry or process knowledge criteria is low due to the specialized knowledge in the department. The need for a longer knowledge transfer period is identified using this criterion, because acquiring specialized knowledge takes time. This can be seen from the 18-month delay due to knowledge transfer.

The CS applications are supported by contractors and the internal team has limited knowledge of the applications. The internal team has domain knowledge which is required to support the application. The rating against the industry or process knowledge criteria is neutral. This identifies more time is needed for the vendor to understand how the department works. This lack of knowledge resulted in a four-month delay.

The Basel II is rated neutral against the industry or process knowledge criterion. The CS group in charge of the Basel II engagement has limited knowledge of the Basel II requirements. The CS group had domain knowledge in the operations of the Bank, which was needed to develop this application.

There was insufficient internal knowledge of the TPMF to develop this project because there was only one SME available; thus, a high rating is given.

It is recommended that the industry of process knowledge criterion be added to the Bank's project evaluation framework. This criterion will identify issues dealing with knowledge transfer time required for training before the project can be handed off to the vendor.

6.2.3.3. Possession and Development of Infrastructure / Stability

The analysis to determine criteria unique to Pati and Desai's framework, section 5.2.2, identifies a pair of criteria that is inversely correlated; the possession and development of infrastructure and stability. Pati and Desai states that a product that is unstable should be outsourced because the vendor should have the necessary skills and knowledge to stabilize and improve the application.

The stability of the applications in the CM engagement was high; conversely, the rating in Pati and Desai's would be low. The applications were too stable and the vendors could not gain enough experience through troubleshooting and enhancing the applications to understand how the applications work. As a result when problems occurred, the vendors did not have the knowledge or experience to support these applications.

The Pati and Desai would have rated the CS engagement as a strong outsourcing candidate with respects to possession and development of infrastructure because the internal team did not possess a stable application. This allowed the vendor to experience how the applications work in order to explore possible solutions to stabilize the applications. As a result this was a better candidate engagement for outsourcing than the CM AMS.

The Basel II and TPMF project were development projects; therefore the stabilities of the applications cannot be identified.

From these two engagements, it was found that the Bank would benefit if it were to outsource unstable applications rather than stable ones. Therefore, a recommendation is made to modify the stability criteria.

6.2.3.4. Criteria Not Considered from Pati and Desai

The pervasiveness of use criterion determines if the initiative will be widely used within the company. An application that is widely used is a strong candidate for outsourcing because there are economies of scale if more parts of the company decide to adopt the application. This criterion was not considered for any of the engagements.

The alignment of goals criterion establishes that if a project aligns with the company's goals it should be not outsourced because these projects are used to advance the business and should be kept in-house. This criterion is not applicable to the Bank's framework and should not be included into the Bank's framework.

The world class process criterion recommends the proposal be outsourced if it is not world class. This criterion was not applicable to any of the engagements because the criterion was not used the outsourcing decision making, nor did it identify any issues.

Time to market determines how quickly a vendor can develop and implement the project. This was not used in the two AMS engagements as they were support engagements which lasted five years each. The two new development projects were not assessed using this criterion because a rapid time to market was not a requirement; therefore, it is not recommended to be placed into the Bank's framework.

The new business opportunity criterion determines whether a project offers opportunities for business growth. Pati and Desai recommends that the initiative be outsourced if it does not provide new business opportunities. This was not used to assess the two AMS support engagements. Basel II is a regulation project so there was no business opportunity in this engagement. TPMF was available in other banks so there is no perceived business opportunity. Therefore the new business opportunity criterion was not applicable for these engagements and should not be included into to Bank's framework.

Overall competitiveness was not applicable for these engagements because none of the engagements analyzed were critical to the business. Hence, this criterion is not recommended for the Bank's framework, based on the engagements assessed..

6.2.3.5. Findings from Pati and Desai

Two criteria, from Pati and Desai's framework, were found be to relevant to the engagements analyzed: commitment from top leadership and industry or process knowledge. The commitment from top leadership criteria was a factor in the outsourcing decision made by the Bank but is not found in the Bank's current framework. Industry or process knowledge was used to predict the delays that occurred due to the domain knowledge needed to develop and support the engagements. The stability criterion from the Bank's framework was redefined to coincide with Pati and Desai's definition of possession and development of infrastructure. Other criteria unique to Pati and Desai's framework were not used to analyze the engagements because they were not relevant to the engagements assessed.

6.2.4. Padmanabhan Framework

Unique criteria in Padamanabhan's framework were used to rate the four engagements. A higher rating indicates a stronger vendor candidate to partner for the engagement selected. As noted earlier, the Bank used a single strategic partner for all four engagements.

Table 18: Engagement Rating Against Criteria Unique to Padmanabhan

	Engagement			
	Capital Markets AMS	Corporate Services AMS	Basel II	Third Party Mutual Funds
Infrastructure	High	High	High	High
Language	-	-	-	-
Culture	-	-	-	-
Quality	-	-	-	-
User Experience	Low	Low	Neutral	Neutral

From Table 18, two criteria were found to be relevant within the context of the four engagements. The two criteria are:

- infrastructure
- user experience

These criteria were selected because either they were factors considered in outsourcing to the vendors but were not present in the Bank's framework or they could have identified issues in the engagements.

6.2.4.1. Infrastructure

The infrastructure criterion in Padamanabhan's framework is not in the Bank's current vendor selection framework but was a factor when considering which vendor to select. This criterion determines whether the vendor has the infrastructure to support additional work so it would lower cost. A high rating indicates the vendor has the infrastructure to support more work if required. This is a stronger candidate for outsourcing if economies of scale are needed.

In the CM AMS engagement, the vendor chosen was able to support the many applications, thus a high rating is given in the infrastructure criteria.

The vendor for the CS AMS engagement rated high because they could support the number of applications the Bank desired to outsource.

Basel II will to be migrated to an AMS engagement once development is completed. One reason this vendor was chosen was because the vendor already has an AMS agreement with the Bank and could support more applications. The vendor scored high on this criterion.

TPMF follows the model of the Basel II engagement, as it has been developed and migrated to an AMS engagement. The vendor supports TPMF under an existing AMS agreement. The vendor rates high on the infrastructure criterion because the vendor can support more applications.

The infrastructure criterion is recommended to be added to the Bank's vendor evaluation framework because it is not found in the Bank's framework but was used in considering the chosen vendor.

6.2.4.2. User Experience

The user experience criterion is used to identify possible issues concerning the vendor selected. This criterion considers if the vendor selected has experience and knowledge to develop or support the applications. Most of the issues encountered were knowledge transfer issues, and from the interviews conducted, the vendors did not have experience working with the respective Bank departments. A vendor with little to no knowledge or experience with the department rates low against this criterion. This identifies possible issues regarding experience and indicates that more time should be scheduled for training.

The vendor involved with the CM group scored low on the user experience criteria because it was inexperienced in the Bank's CM domain. The low score indicates a longer knowledge transfer period is required. This issue was made evident by the 18-month delay due to inadequate knowledge transfer.

In the CS AMS engagement, the vendor rates low because the vendor was inexperienced with the CS domain. The lower rating identifies that more time is needed to train the vendors. This issue was made evident by the five-month delay associated with the knowledge transfer issues.

The vendor team dealing with Basel II rates neutral because they were not experienced with the Bank's domain but had familiarity with Basel II projects. This rating identifies that more time is needed to train the vendors on how the Bank operates but less time is needed to develop the product. Only a short delay has so far been experienced by this initiative.

TPMF's vendor rates neutral because there were insufficient Bank resources available for knowledge transfer, but the vendor has experience with the group through an AMS agreement.

It is recommended that user experience be included into the Bank's vendor evaluation framework.

6.2.4.3. Criteria Not Considered from Padmanabhan

The language criterion determines if the outsourcing team is able to communicate with the business. There were no issues regarding communication as the vendor in the engagements. Thus, this criterion was not applicable in the analysis of these engagements and is not recommended

The culture criterion determines whether the vendor and the business have significant ethnic differences. Engagements in departments with significant cultural differences with the potential vendor are not suitable for outsourcing, as miscommunication may arise due to the differences. This criterion was not applicable in these engagements because it did not identify any issues. This criterion is not recommended to be included into the Bank's framework.

The information security criteria falls under the larger vendor risk criteria which is already present in the Bank's vendor selection framework the same is true for the proximity criterion. These criteria were not used; hence is not recommended into the Bank's framework.

The quality criterion takes into consideration the training of the vendor in quality assurance. The Bank did not weight this criterion heavily as a consideration to outsource the engagements, hence this was not used to analyze.

6.2.4.4. Findings from Padmanabhan

Two criteria from Padamanabhan's framework should be added to the Bank's current vendor selection framework: the infrastructure and user experience criteria. The infrastructure criterion is one of the factors that drove the vendor selection but is not present in the Bank's current vendor selection framework. The user experience criterion identifies possible issues regarding knowledge transfer if a vendor is not familiar with the group for development or support. The other criteria unique to Padmanabhan's framework were not used in the analysis.

6.2.5. Additional Analysis

The interviews highlighted one criterion that was not identified by either the Bank's or literatures' project evaluation frameworks.

6.2.5.1. Economies of Scale

The economies of scale criterion determines whether the Bank has enough applications internally to outsource in order to have significant economies of scale. This criterion works particularly well with AMS deals such as CM AMS and CS AMS. The economies of scale criterion differs from the infrastructure criterion because the economies of scale criterion looks at the project's size and workload, whereas the infrastructure criterion looks at whether the vendor has the resources to complete the project.

The CM group had enough applications available to outsource to the vendor. The economies of scale criterion was one of the main reasons to outsource the CM AMS initiative but this criterion was not present in the Bank's current framework.

The CS AMS followed the model of CM AMS because CS had enough applications to outsource to the vendors that allowed it reduce cost per unit work by increasing workload.

Basel II is a new development project so this criterion was not a deciding factor in outsourcing. It should be noted that Basel II support will eventually be added to the existing AMS agreement.

Since TPMF was a new development project economies of scale was not a consideration when deciding to outsource this project. As a side note, this project was added to an existing AMS engagement after it was developed.

6.2.6. Summary of Findings

From the Bank's project selection framework, it was concluded that no criteria should be removed. From the Bank's vendor selection framework, it was found that one criterion should be removed as it provided no additional value to the. It was found that Cohen and Young provides a quick and high level recommendation to decide what to keep in-house and what to outsource. From Pati and Desai, it was found that commitment from leadership and industry and process knowledge are important considerations in determining if a project should be outsourced. From Padmanabhan, the vendor's infrastructure and user experience should also be considered when deciding to whom to outsource to.

7. Recommendations and Conclusions

7.1. Conclusions

It was found that there was a relatively large gap between frameworks. Four ongoing and completed engagements were used to analyze the frameworks. It was found that the criteria in the Bank's project evaluation framework are all relevant to the Bank. In the Bank's vendor evaluation framework, measures and milestones criteria did not need to be independent and could be included with the project management criteria. The analysis of Cohen and Young's framework yields a framework that could quickly be used to determine, on a high level, a decision to outsource or internally develop an initiative. Pati and Desai's framework presented two criteria the Banks should include into their project evaluation frameworks: commitment of top leadership, and industry or process knowledge. From Pati and Desai, it was found that the Bank should reconsider its stability criteria so that an unstable application should be outsourced and a stable one kept in house. Padmanabhan's framework determines that there are two criteria that are relevant to the Bank's vendor evaluation framework: infrastructure and user experience. Through the interviews it was found that economies of scale should be added to the Bank's project evaluation framework.

Several criteria were presented to the Bank to strengthen their current framework. The frameworks will identify possible risks so the business groups are made aware before any commitment is made.

7.2. Recommended Framework

The Bank's project evaluation framework should be augmented with the addition of three criteria: industry or process knowledge, commitment of leadership, and economies of scale. There is one criterion that is modified to represent what was found during analysis: stability. Table 19 presents the recommended project evaluation framework that the Bank should use.

The industry or process knowledge criterion forecasts a longer training period if an internal team with high competence in the application were to train vendors to support or develop the project. This criterion forecasted that there would be delays in analyzed engagements. Therefore, this criterion is added to the recommended framework.

The commitment of leadership criterion identifies if the leaders in the Bank are truly committed to making the engagement successful. This criterion is one of the most important factors in deciding to outsource the engagements analyzed; hence, added to the recommended project framework.

The economies of scale is another factor identified through analysis as necessary for outsourcing AMS deals; hence is added to the recommended framework.

The definition of stability is redefined in the recommend framework so that a less stable product is outsourced, to reflect the findings of the analysis. In the CM AMS engagement, stable applications did not allow the vendors to gain experience in fixing the application. In the CS AMS engagement, unstable applications allowed the vendors to gain experience in supporting the applications.

Table 19: Recommended Project Evaluation Framework

Evaluation Criteria	What does this mean?	Ranking
Impact / Risk of delivery failure	▪ What is the impact of failure? (Not about quality) How difficult do we think this will be to ensure success?	1 = significant risk 5 = low risk
Complexity of interaction with the business	▪ How important is it for their day-to-day work? How involved is the business in this application's operations?	1 = complex 5 = simple
Complexity of technology / Integration with other systems	▪ Level of integration with other systems? Unusual features? Does it require constant maintenance? Effort to ensure currency?	1 = complex 5 = simple
SLA agreement with the business	▪ What is our current SLA with the business and how well do we meet it? How important is it to the business?	1 = high responsiveness 5 = low
Ease of staff redeployment for high value work	▪ Is there something else that staff with this skill set can be doing? Are they open for change?	1 = difficult 5 = easy
Staff attrition levels / Specialized knowledge required	▪ What do we know about the current staff and the level of specialized knowledge required? Where are they in the 'retirement corridor'?	1 = deployable plan 5 = no action plan
Cost savings	▪ Does this take a lot FTE to manage- and what skill level? ▪ Does it require contractors?	1=small savings 5= large savings
Strategic value / Core competency	▪ Is this a core competency for the Bank/CTD/this department? ▪ Does it differentiate us from the competition?	1 = high 5 = low
Maturity of application technology	▪ Is it tried and tested - or are we early adopters?	1 = immature 5 = fully mature
Growth vs. sunset	▪ What are the long term plans or prospects for this app?	1=strategic growth 5=sunset
Industry or process knowledge	• Does your internal development team know the industry well to effective carry out this project?	1- Very well 5- Not well
Commitment of leadership	• Are the leaders in the organization buying-in and championing the role to outsource the project?	1- Low commitment 5-High
Stability	▪ What does the history of this application reveal? Does the app tend to outages?	1 = very mature 5 = unstable
Economies of scale	▪ Does the initiative have enough applications or weight to exploit economies of scale?	1 = light weight 5 = heavy weight

Two criteria are added from Padmanabhan’s framework: infrastructure and user experience. Two of the Bank’s criteria, measures and milestones and project plan, was grouped as one criterion: project management. The changes are presented in recommended vendor evaluation framework, Table 20.

The infrastructure criterion was a factor in the Bank’s decision to outsource to a vendor that has the economies of scale to allow for cost savings. This criterion was not present in the Bank’s framework; hence, the infrastructure criterion was added to the recommend vendor framework.

The user experience criterion examines the vendor’s experience with the Bank. There were delays due to the vendor’s inexperience with the Bank’s domain knowledge. The criterion forecasted that if there is a lower rating on the user experience criterion, more time is required to train the vendors on the operations of the Bank. Hence, this criterion was added to the recommend vendor framework.

The measures and milestones criterion and project plan criterion were grouped as one: project management. It was found that the measures and milestones criterion was not used in rating any of the engagements so it is recommended to be removed. This criterion tied very closely with project plan; hence, it is grouped as one criterion.

Table 20: Recommended Vendor Evaluation Framework

Evaluation Criteria	What does this mean?
Resource mix	• The right mix of onshore and offshore resources • The right mix of resources over time, implementation and post implementation
Skill-set & Knowledge	• Resources knowledgeable of IM applications, information and processes • The right skill mix pre and post implementation
Vendor investment	• Evidence the vendor is willing to invest the right time, effort and skill to this effort • Evidence the vendor is making an ongoing strategic investment in the effort' • Evidence the vendor is sharing the risk
Vendor risk	• The vendor can meet the necessary security and process requirements
Management plan	• A clear proposal for managing the implementation and ongoing partnership • An efficient management structure that will encourage flexibility, pace and clarity • A clear proposal for blending vendor and the Bank management
Cost reduction	• A cost improvement consistent with the increased scale and scope of the opportunity • Ongoing cost improvement
Quality transformation	• Ability to sustain and improve IM delivery processes • Ability to sustain and improve the quality of deliverables • A plan to continually deliver organization quality improvements
Flexibility, Agility & Pace	• A proposal that sustains and improves upon existing flexibility, agility and pace
Focus on outcomes	• The proposal emphasizes improved, on-time, right-the-first-time deliveries to our customers and business partners
Track record	• A vendor track record of achievement in GR • Vendor experience with similar GR implementations
Enterprise systems focus	• The proposal recognizes the desire for IM to extend GR partnership to the Corporate Services and Enterprise Systems level
Infrastructure	• The infrastructure/network are scalable and standardized • These are available and fast enough to support daily business functions • There are testing environments
Project management	• The approach methodology, resource planning and project estimate has been defined based on adequate past experience • Communication and status reports models have been predefined • A robust project management, planning and tracking methodology exist to manage people and deliverables
User experience	• There is adequate research and analysis carried out for each project • The vendor understands the domain they are supporting

It is recommended that the Bank should adopt a three-step approach to assess which projects to outsource and to whom to outsource to:

1. Preliminary project assessment using Cohen and Young's framework

2. Project evaluation using the recommended project evaluation framework

3. Vendor evaluation using the recommended vendor evaluation framework

The first step uses Cohen and Young's framework, Figure 2 and Table 6, and rates the initiative against it. This will allow the Bank to quickly determine if an initiative should be kept in house or outsourced.

The second step assesses the initiative using the Bank's modified project evaluation framework, Table 19. Each criterion is assigned a weight in accordance to the departments' goals to obtain a weighted score. A low score indicates a weak outsourcing candidate and a high score strong candidate.

The last step determines which vendor is most appropriate for the outsourcing engagement using the recommended vendor evaluation framework, Table 20. The framework is also weighted, to represent important requirements for each project's outsourcing vendor. Each criterion provides a definition of a strong outsourcing partner. A strong vendor would present less risk during the partnership.

7.3. Future Work

Outsourcing has the potential to bring benefits to the Bank but it has to be undertaken correctly. The frameworks offer guidance for the first steps: to determine which projects are appropriate for outsourcing and to identify suitable vendors.

Managing the vendor is the next step after determining which project to outsource and who to partner with. The Bank should consider developing a governance model to manage their outsourcing activities. Without proper governance, expectations will not be met and the benefits of outsourcing will not be secured. Some companies have developed their outsourcing to a point where governance becomes one of their core competencies [Dhar06].

The Bank should continue to refine its frameworks. Consistently using the frameworks and assessing the issues in each engagement will provide the Bank feedback for its outsourcing assessments. This experience will provide additional criteria to the frameworks as well as refining the current framework.

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Appendix A: Sample Interview

Project Evaluation:

What was outsourced?

- Which department was it under?
    - Was this the first time the department outsourced an engagement?
- Was it core to the business?
    - What kind of project was it?

Why was this outsourced?

- Was this mandated from executives?
- Was there commitment / buy in from executive leadership? SVP? Directors? Managers?

What issues arose?

- How long did the issues last?
- Was there delay to the project? How long?

Vendor Evaluation:

Why was it outsourced to the vendor?

Did they have experience with the department they were working for?

- Did they have experience with the developing the type of applications?
- Do they have expertise? Experience? Knowledge?

Did any problem arise due to vendor?

- Could a more suitable vendor be selected? How?

What additional criteria should be added? (Vendor or project selection)

Rate the engagement according to the criteria used in determining the outsourcing viability. Rank according to high, neutral or low, high being a strong criterion for outsourcing.

	Engagement
Bank's Project Evaluation Criteria	
Impact / Risk of Delivery Failure	
Complexity of Interaction with the Business	
Complexity of Technology / Integration with other Systems	
SLA Agreement with the Business	
Ease of Staff Redeployment for high value work	
Staff Attrition Levels / Specialized Knowledge required	
Strategic Value / Core Competency	
Maturity of Application technology	
Stability	

	Engagement
Bank's Vendor Evaluation Criteria	
Resource Mix	
Skill-Set & Knowledge	
Implementation Plan	
Vendor Investment	
Vendor Risk	
Measures & Milestones	
Management Plan	
Cost Reduction	
Quality Transformation	
Flexibility, Agility & Pace	
Focus on Outcomes	
Track Record	
Enterprise Systems Focus	

Appendix B: Engagement Issues

Using the monthly decks the AMS vendor provided complications of issues are made between the months of August 2007 to December 2008. Projects may have begun before August 2007 but monthly decks were not available before that time. The statue of each project is either ‘Green’, ‘Yellow’ or ‘Red’ which means on track, delays or critical condition respectively. The reasons to the right of each status are taken from the deck.

CM AMS		
Date	Status	Reason
Aug-07	Yellow	Migration cutover slipping for some applications
Sep-07	Yellow	Migration cutover slipping for some applications
Oct-07		
Nov-07		
Dec-07	Yellow	Migration cutting over running later than planned
Jan-08		
Feb-08	Yellow	Migration cutting over running later than planned (CM and RMG AMS separated)
Mar-08	Yellow	Migration running late
Apr-08	Yellow	Migration running late
May-08		
Jun-08	Yellow	descoping
Jul-08	Yellow	proposal redone to remove onshore roles
Aug-08	Yellow	
Sep-08		
Oct-08	Yellow	Combatilbity issues with Bank's infrastructure
Nov-08		
Dec-08	Yellow	infrastructure dependency / domain knowledge and turnover issue and skill level issue

CS AMS		
Date	Status	Reason
Aug-07	Green	On track
Sep-07	Green	On track
Oct-07		
Nov-07		
Dec-07	Green	On track
Jan-08		
Feb-08	Green	completed ahead of schedule
Mar-08	Green	-
Apr-08	Green	On track with SLA milestones
May-08		
Jun-08	Green	to hold CS / IM governance movie forward
Jul-08	Yellow	delays in work assignment
Aug-08	Yellow	Not given
Sep-08		
Oct-08	Yellow	delay (migration issue)
Nov-08		
Dec-08	Yellow	schedule slipping due to new work items

Basel II		
Date	Status	Reason
Aug-07	Yellow	Not given
Sep-07	Yellow	Not given
Oct-07		
Nov-07		
Dec-07	Yellow	Not given
Jan-08		
Feb-08	Yellow	Resources need to be more dynamic
Mar-08	Yellow	Schedule slipping (additional resource needed)
Apr-08	Yellow	migration slipping (even with resources integrated into project)
May-08		
Jun-08	Yellow	
Jul-08	Yellow	Contract scope revisited
Aug-08	Yellow	Unclear understanding of contract
Sep-08		
Oct-08	Yellow	Not given
Nov-08		
Dec-08	Green	On track

TPMF		
Date	Status	Reason
Aug-07	Green	on track
Sep-07	Green	on track
Oct-07		
Nov-07		
Dec-07	Green	on track
Jan-08		
Feb-08	Yellow	budget and schedule challenges
Mar-08	Yellow	budget and schedule challenges
Apr-08	Yellow	budget and schedule challenges
May-08		
Jun-08	Green	going well
Jul-08	Green	going well
Aug-08	Green	going well
Sep-08		
Oct-08	Green	Contract extended to Nov to support deployment
Nov-08		
Dec-08	-	project completed