PROJECT MANAGER PERFORMANCE AND THE DECISION TO BACKSOURCE THE PROJECT MANAGEMENT OFFICE

by

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Abstract

This paper reviews a management decision of an Information Technology Outsource (ITO) provider to backshore the management oversight of its Project Management Office (PMO) after only one year of offshore operations. Governance is a term used in project management to refer to management oversight. The review is a quantitative analysis of existing project manager performance surveys taken over a two year period. As a closing phase for all projects, customers and internal team members are requested to complete a survey detailing the project managers performance throughout the project. Project team setting for all projects is a virtual environment where project manager and subject matter experts work remotely from each other and the customer. The survey's reviewed covered the 12 month period the governance function was managed offshore and the 12 months that immediately followed the backshoring. The ITO provider management team reversed itself based on client feedback at an annual symposium and persistent performance complaints from clients over the previous two quarters. A number of methods are used to compare and contrast data for the two periods, including two-way ANOVA, chi-square, and *t* test. Research question 1 was noted as the primary question and was concerned with comparing project manager performance for the period governance was offshore and the immediate 12-month period following the repatriation of the governance function. The findings indicate that there were significant differences between the two periods for both customers and internal survey respondents. However, internal team member results were much more noteworthy. Several other research questions provided additional insight into the performance concerns. These questions were related to the experience and location of the surveyed project manager.

Dedication

This work is dedicated to my precious wife, Cecilia. Without her unwavering love and support throughout this process, it is unlikely I could have finished the coursework, let alone the research for my dissertation. She has always been there to strengthen, encourage, and provide insight, helping me to overcome stumbling blocks and doubts about my ability to complete this incredible task. During this nearly 5-year journey, I underwent three major surgeries for which she nursed me back to health. I know her prayers were answered and that they were my source of inspiration in addressing problems both physical and intellectual. I could not have dreamed of a better soul mate than what the Lord offered me in Cecilia. I am a very blessed man and thank God daily for Cecilia, the love of my life.

Acknowledgments

First and foremost, I acknowledge God and my Lord Jesus the Christ for calling me out of the darkness and into His marvelous light. Without Him in my life, I would not, could not, have completed this work. I am profoundly grateful that He first loved me enough to provide a wife 30 years ago that would lead me to Him. I continue to believe that He has a destiny for me.

Secondly, I must acknowledge the influence that my brother James Lively and my sister Margaret Lively-Guiliani had in my life. While they were both much older than me (22 and 14 years, respectively), I looked up to them and always found encouragement from them both. James, who has now passed on, was a no-nonsense streetwise tough guy who worked hard all his life. He provided a great example of drive and dedication that has always motivated me. While at times he was a little tough on me, I knew without a doubt that he wanted the best for me. My sister Margaret has never failed me. She has at times been brutally honest in correcting me, has been supportive of all my efforts, and has been a source of help in times of trouble. But most of all, she has been a friend that I could easily confide in and expect a loving and compassionate response from. I am grateful beyond words and know that neither will truly know the depths of my love for them.

My sister Margaret recently lost her husband of 49 years. My brother-in-law Gary Guiliani was a retired Police Officer who served his home town of the Town of Niagara, NY for over 39 years. During this time he turned around many young men including myself by simply being a mentor and a friend. He believed there were no bad kids, just bad behavior and he had the ability to look past the immediate problem and offer

encouragement towards a better life. To a very large degree, my life would have been much different had Gary not taken the time to confront me (on more than a few occasions) on my bad behavior as a teenager and young adult and show me that I could rise above my circumstances. I loved this man and he will be greatly missed by many. But his legacy is how we who were touched by him live our lives. His was a life well lived. Lord help us to remember Gary's example of how to honor You and bless others.

Finally, I would like to acknowledge my mentor Dr. Joseph Levesque for his patience and support for me throughout the last several years. I first met Dr. Joe during my second colloquia and believed I had found a kindred spirit, especially in our belief in not taking oneself so seriously. I am forever grateful for his kindness toward me in understanding the challenges I faced in enduring three major surgeries while pursuing my PhD.

Dr. Joe's compassion is only slightly overshadowed by his mentoring and leadership skills. His insight and direction on addressing issues related to my research questions were nothing short of extraordinary. The advice he provided helped me to better understand the differences between the two survey years and the two groups of project managers. As a result, I improved my skills as a researcher and my understanding of humility in service to others. Dr. Joe fully and completely demonstrated the essence of what it means to be a mentor and a professional. I have grown immensely through my experience with him.

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CHAPTER 1. INTRODUCTION

Introduction to the Problem

The 21st century has witnessed numerous firms, especially IT firms, outsourcing their business operations in a bid to capitalize on high-quality, low-cost IT labor markets overseas. Such moves, though intended to cut costs and increase companies' operational capabilities, have had disappointing results for some companies, especially in terms of customer satisfaction (Palvia, King, Xia, & Palvia, 2010). Some firms have begun backsourcing their operations, a trend that will likely grow, especially in view of growing dynamic IT capabilities such as virtualization and cloud computing, which have made IT services and projects easier and less costly (Benaroch, Dai, & Kauffman, 2010).

In this study, project manager (PM) performance surveys were used to analyze a management decision of an information technology outsourcing (ITO) provider to backsource the project management office (PMO) from Mexico, to the United States. The surveys were conducted over a 2-year period from 12 months prior to the initial decision to return the PMO to the United States office and the 12 months that immediately followed that decision. The analysis compared the two 12-month periods to determine if there was a significant statistical difference in the performance ratings. A strong or positive statistical difference favoring the second 12-month period would have suggested support for the management decision to backsource the PMO to the United States. Conversely, a weak or no significant difference in the ratings would have suggested a

lack of support for the decision. Additional contributing factors could be whether the PM holds the credentials of a project management professional (PMP) and in which country the PM resides.

As a closing process for a project, clients of the ITO provider and other lead contributors on the project team receive an e-mail from the PMO governance board at the completion of a project requesting their participation in surveying the PM's performance. The PMO governance board is responsible for providing project management processes, direction in defining scope, and executive support for PMs during the course of an active project. Therefore, for purposes of this study, the PM's performance was a direct reflection of the governance provided by the PMO.

The problem under consideration in this study was whether the survey results supported the management decision to move the PMO onshore. That decision was based solely on clients' complaints regarding the PMO leadership provided by the Mexico management team. The purpose of this study was to determine if a statistically significant difference exists between the two survey periods that would either support or refute the management decision noted above.

The topic of this investigation was of interest to me as a program director working for an ITO provider in the PMO as it directly affected a number of my clients and the PMs who reported to me during the two periods. The decision to onshore the PMO affected my job as it changed the reporting structure, chain of command, and client escalation path for my work area.

Prior to being offshored to Mexico, the PMO had been located in the United States at the ITO provider's headquarters. Management made its decision to offshore the

PMO in late 2008 (effective January 2009) based on the lower labor rates for professional IT project workers in Mexico. The reason for the decision to bring the PMO back onshore at the end of 2010 was feedback from clients who were reporting poor results from the PMs and poor oversight of projects by the governance team in Mexico. The decision was reached after an annual customer forum hosted by the ITO provider, where a number of clients openly expressed concern over project delivery after the decision to move governance offshore. The customers' concerns had been part of an ongoing conversation for at least two quarters before the decision. The open discussion in a customer forum setting provided motivation for senior management to make the decision to return governance to the United States headquarters.

This study is important to scholars and practitioners alike as it provides insight into the issue of project governance, performance, backsourcing, and client perception. Performance does not always represent perception and vice versa; however, as this study showed, management must address customers' perceptions, even if those perceptions are false. The decision to move the PMO onshore specifically addressed the concerns voiced by the customers without additional analysis. This speaks to the strength of the customers' arguments and management's desire to resolve the issue.

This study contributes to the ongoing discussion within the project management field regarding project team governance and customer perceptions versus project results. The study did not generate any conclusions regarding PMO governance and its relationship to performance results during the time the PMO resided in Mexico. However, PMO governance as a performance issue would be a worthwhile research topic and will be discussed further in the chapter 5 under recommendations. Although this

study provided a review of PMO governance, the research question and analysis focused on PM performance in leading virtual teams under the direction of the PMO. From that perspective, this study held that performance issues were a direct reflection of the leadership provided by the PMO management team.

Background of the Study

The organization examined in this paper is an ITO provider that offers a full range of services. It hosts client applications, provides technical support, and houses client-owned equipment at one of its six large data centers. Virtual project teams perform the implementation and maintenance for the services provided. For the purposes of this study, I did not distinguish between virtual teams and project teams. According to Cascio (2000), a virtual team is defined as "one that conducts its work almost entirely through electronic technology" (p. 22). Advances in technology and the low cost of communication devices have greatly increased the use of virtual project teams across many industries. Lurey and Raisinghani (2001) found that virtual teams are a relatively recent phenomenon linked to the increase of mergers and acquisitions during the late 1980s.

There are a number of concerns regarding the use of virtual teams, mostly related to performance issues. These performance issues are the result of external concerns held by team members. Cascio (2000) pointed out that chief among these concerns are relationship and trust issues: "Lack of trust can undermine every other precaution taken to ensure successful virtual work arrangements" (p. 83). Kasper-Fuehrer and Ashkanasy (2001) found that the "nonverbal cues are central to communications of trust" (p. 237). There are two common problem areas related to virtual teams that are noted in the

literature review as leading to a break down in trust: lack of relationships and communication issues. Each of these issues is explored in more detail in the literature review section. Cultural differences compound these problems, especially in the interactions between Americans and non-Americans (Knoll & Jarvenpaa, 1995). Such issues are even more relevant when cultural differences between clients and project management leadership are taken into consideration. A lack of focus and drive by the PMO governance team was in fact one of the concerns voiced during the annual client conference mentioned earlier.

The ITO providers' use of governance boards starts with the initiation of a new project. The governance board team members are identified from key internal stakeholders typically at the executive management, client executives, and PMO management team. The PMO management team could consist of 3-5 managers depending on the scope of the project. Clients normally have only 1 or 2 representatives on the governance board. Other internal stakeholders are also dependent on the project scope but normally only consist of 1 or 2 executive level managers.

In many large organizations such as the ITO provider referenced in this study, the establishment of a PMO provides centralized oversight for both process methodology and governance of project scope. The Project Management Institute (PMI) (2008) defined a PMO as "an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain" (p. 11). As further noted by PMI, a PMO has a range of responsibilities including support and direct management of projects. One such coordination process within a PMO is the establishment of a governance board on which executive-level stakeholders serve to

provide guidance and direction to the project teams. In its very basic form, according to the PMI, the governance of projects provides oversight including scope definition, funding approval, and executive authority extended to the PM to engage in the activities necessary for completing the project.

PMI (2008) also noted that governance is a control process designed to ensure the success of a project. Organizations that provide project-related services to external stakeholders (clients) also encourage client representation on the governance board. For such organizations, the responsibility of the governance board is to ensure the project team is meeting the expectations of the client. From this perspective, effective communication with the client representative is critical to ensuring success on project deliverables.

A governance board serves as the day-to-day communication link to the client. Pryke and Pearson (2006) suggested that the nature of governance or the amount of oversight vary depending on what is happening with the project. For example, there may be a need to request additional funding if a scope change is discovered or was missed in the initial assessment. Additionally, they found that "the extent and maturity of alliances between clients and project actors will have an effect on the mix and extent of governance systems operating on the project" (p. 536). The maturity of the relationship between the client and the governance board is highly affected by the client's relationship to or perception of how the project actors are performing in regards to project deliverables. Because governance of a project extends to providing guidance and direction to the PM and team members, it is essential that the guidance provided to the project manager and team is timely, effective, and in sync with the client's expectations

and the agreed-upon deliverables. Each of the parameters for guidance directly links to communication problems. Clients will notice areas where there is a lack of maturity in their relationship with the governance board and thus will lose confidence in the board and the ITO provider.

Ineffective communication among virtual team members is a leading contributor to poor performance and missed deadlines (Furst, Blackburn, & Rosen, 1999). Additionally, researchers commonly report lack of relationships between team members and trust factors as the major contributing factors to communication issues. Further, lack of relationships and trust issues lead to miscommunication with the PM and ultimately the governance board. Furst et al. (1999) report that most research in this area has been descriptive. Although such research is helpful in determining and characterizing the problem, it does not provide a road map to recovery or improvement in the area of communications or client perspectives.

The governance of project teams is a collaborative effort between the executive sponsor, the client representatives, and the various department heads or stakeholders involved in the development and execution of project (Pryke & Pearson, 2006). The governance team provides project oversight to include project authorization and scope definition, funding approval, and executive authority extended to the PM to engage in the activities necessary for completing the project. According to Weaver (2005), project governance also includes training, risk assessment, monitoring of progress, and control systems, which serve as indicators for deviations from the planned milestones. For the purposes of this paper and the research conducted for this study, it was assumed that project governance, while a collaborative activity, is the responsibility of the PMO.

Statement of the Problem

The ITO organization referenced in this study made the strategic decision to offshore the governance of its PMO to Mexico in January 2009. The major contributor to that decision was the cost savings associated with the lower labor rates for IT project professionals in Mexico compared to the rates for the same professionals in the United States. Twelve months later, the ITO senior management reversed the decision by bringing the PMO management function back onshore. They reached this decision after receiving verbal complaints from clients regarding the ineffectiveness of the PMO under the watch of the offshore governance board.

During the 12 months after the initial decision to offshore the PMO, the ITO provider faced significant resistance from clients, who demanded more involvement from stateside management. Clients openly expressed a lack of confidence in the leadership team establish in Mexico noting that a sense of urgency was missing. This contributed to the clients' perception that the Mexico management team was not engaged to ensure delivery on projects as planned and scoped. The dissatisfaction expressed by clients eventually led to the decision in December 2009 to return the governance of the PMO to the United States effective January 2010. The ITO provider did not perform any analysis on existing data to either confirm or refute the clients' claims related to performance issues. However, data in the form of performance surveys on a per-project basis were available for the period that the PMO remained in Mexico. The performance surveys were issued by the PMO at the completion of a project and were specifically concerned with the performance of the PM. No questions were ever asked on the surveys regarding the governance function.

The research presented here included an examination of the performance survey results for PMs for the 12 months that the PMO was in Mexico and the 12 months after the return of the PMO to the United States office. The goal was to determine if there was statistically significant evidence to support the management decision to return the governance of the PMO to the United States. Limited research was available in the area of assessing performance differences between onshore and offshore PMOs. The goal of this study was to fill a gap in the research or at least start a relevant conversation to add to the body of knowledge. Specifically, the gap in understanding the impact on customers and project delivery when governance is provided offshore is a conversation that needs further review.

Purpose of the Study

The purpose of this study was to determine if there was PM performance issues that contributed to customer perceptions regarding governance from the offshore PMO in Mexico. Additionally, this study involved an examination of the survey results for the 12 months that immediately followed the return of PMO governance to the United States to determine if PM performance improved. This study is important to scholars and practitioners in that it identifies a gap in knowledge regarding the offshoring of PMOs and governance. Additionally, there was little in the literature regarding offshore performance of PMOs as measured by PM performance evaluations. Further, this research is relevant given the heightened sensitivity to offshoring jobs in the current economic environment and a trend toward backsourcing by many corporations (Benaroch et al., 2010).

Rationale

Virtual teams are an effective approach in meeting geographic challenges in business and have improved efficiency and productivity (Furst et al., 1999). PMO governance is also a well-established business practice that provides standardized oversight, methodologies, and processes for project management. Effective communication is the driver behind PMO standards. Singh, Keil, and Kasi (2009) listed ineffective communication, poor PMO leadership, and lack of support from senior management as some of the top 10 problems for implementing a PMO. With the high rate of offshoring from the United States to lower-cost labor markets in the 21st century, the recent shift toward backshoring critical project activities to the United States is of high interest. This is especially true with regard to project performance issues as one of the critical objectives of a project-oriented organization.

The current study adds to the discussion on backsourcing with a review of a recent management decision related to backsourcing PMO governance of virtual teams. Further, this study builds on the work of Singh et al. (2009) as it relates to PMO leadership and the recommendations for further study in the area of performance provided by Palvia et al. (2010).

Research Questions

The objective of this study was to validate a management decision regarding the responsibilities for governance of virtual project teams. In the case of the ITO provider investigated in this study, low labor costs in Mexico led to a decision to offshore PMO leadership responsibility to that country. Twelve months later the ITO provider reversed that decision and returned the PMO onshore. The reversal came after a number of clients

openly expressed concerns about the offshore PMO in a customer forum hosted by the ITO provider.

Research Question 1: Is there a significant difference between the overall performance results for all PMs between the two 12-month periods? The focus for this question was the two 12-month periods. No distinction was made regarding the PMs. Although the results were not conclusive, they may indicate issues related to the overall management of the PMO in the area of governance or performance. Specifically, the finding of an overall improvement in performance after the PMO governance function was backshored to the United States would necessitate further investigation.

Research Question 2: Is there a significant difference between the performance of United States based PMs and of PMs residing in Mexico? This question sought to understand if a performance difference existed between the two groups of PMs during the two periods of study. This may help in understanding whether client perceptions of low performance were justified as a reflection of the individual PMs based on geographical location. The finding of a significant difference could contribute to an overall increase or decrease in performance results.

Research Question 3: Is there a significant difference in performance between the United States and Mexico-based PMs for the two 12-month periods as reported in the surveys? This question sought to determine if performance increased or decreased for both PM groups for the two 12-month periods.

Research Question 4: Is there a significant difference in performance between PMP-certified and non-PMP-certified PMs? This question sought to determine if there

was a difference in performance based on whether PMs received PMP certification or not.

Significance of the Study

This study was timely given the economic and employment conditions in the United States and across the globe, especially in view of the fact that many United States companies' offshored core company activities after the turn of the 21st century. Due to this new, rising trend, companies are beginning to backsource their previously outsourced IT services to an ITO provider. Thus, understanding whether project performance is an issue is critical. Benaroch et al. (2010) argued that this trend was made possible by advances in technology. Chief among those advances are virtualization and cloud computing, which alone have significantly lowered IT costs associated with equipment. This research addressed these issues as they relate to performance and provides critical information to business practitioners and project management scholars.

Definition of Terms

Backshoring

Backshoring is the return of previously offshored work to the home country.

Change Control Process

The *change control process* for the ITO provider starts with the PM submitting a form titled Change Control Request (CCR) to the client for approval. The form identifies a problem that typically requires a scope change. Once the client approves, the governance board reviews the form and provides final approval and implementation consent.

Cloud Computing

Cloud computing is a technology that enables access to various services over the Internet at low costs (Aljabre, 2012). It is a "technology model in which any and all resources—application software, processing power, data storage, backup facilities, development tools . . . are delivered as a set of services via the Internet" (Haag & Cumming, 2010, p. 205).

In-flight Projects

Active projects at any given time during a calendar year are considered *in-flight projects*. If they are not completed during one calendar year, they carry over to the following year.

Offshoring

Offshoring refers to contracting work to third-party vendors outside the country due to the lower costs. It may involve moving an entire department or operation of a company to a foreign country with more favorable labor costs than in the home country (Jensen & Pedersen, 2012).

Project Governance

Project governance is the framework through which a group arrives at decisions. These decisions result from the processes and success factors previously determined by the group. In essence, project governance "involves a set of relationships between a project's management, its sponsor, its owner, and other stakeholders" (Turner, 2006, p. 93).

Project Management Office

A *Project Management Office (PMO)* is a formal, centralized office assigned with the responsibility of coordinating the management of projects, improving project management performance, and reducing runaway projects (Martin, Pearson, & Furumo, K. 2007).

PMP credentials

The *Project Management Professional (PMP)* is a certification issued by the Project Management Institute (PMI). Requirements for include 4500 documented hours of project management experience, 40 professional development units (pdu) in the field of project management, and a passing grade on the 4 hour 200 question exam.

Virtual Project Team

A *virtual project team* is one that "conducts its work almost entirely through electronic technology" (Cascio, 2000, p. 22) and its "members are not resident in the same physical location and may be dispersed across different time zones" (Curlee, 2008, p. 84)

Virtualization

In basic terms, *virtualization* in the IT world is the creation of a virtual representation of something—for instance, a server, operating system, or network. In this study, virtualization was defined as abstraction of data from a wide array of sources such that they can be accessed with no regard for their heterogonous structure or physical storage (Bologa & Bologa, ,2011). . In addition, rather than rely on localized physical hardware operating systems, virtualization relies mainly on shared virtual storage that

enhances load-balancing solutions, data safety, and faster computing operations over the network or fiber channel (Kotsovinos, 2011, p. 62).

Assumptions and Limitations

Assumptions

The current study used survey results from internal team members and clients of the ITO provider under investigation over a 2-year period. The surveys are part of a closing phase and are issued to all project team members by the PMO at the completion of a project. The first assumption was that the client-provided survey results reflected only the performance of the PM for the single project surveyed. A second assumption was that the PM operated under the direct authority of the PMO leadership. Third, as a function of the PMO-established methodology, it was assumed that the PMO governance board provided regular oversight for the PM and feedback on progress to the client throughout the duration of the project.

A fourth assumption was that changes in scope progressed through the change control process and gained approval from the client. The fifth, and final assumption, was that survey responses came from internal resources (coworkers), end-user clients (referred to as "the client"), or both. The focus of this study was on gaining an understanding of PM performance and determining if it could account for the clients' overall perspective. Therefore, most of the material presented in this study focused on the client and how measurements either supported or refuted their perceptions. An evaluation and discussion of the survey responses as they relate to both types of respondents are provided in Chapter 4 of this study.

Limitations

This study was limited to one ITO provider and a single management decision by that provider. The study addressed the ITO provider's decision to return its PMO governance to the United States and whether the performance of the PMs as documented in the client surveys supported that decision. In addition, the performance surveys, conducted on a per-project basis, were based mainly on client evaluations. The fact that the clients perceived the offshored PMO as inadequate could have influenced the survey results.

Although there are many factors that contribute to a client's perception of performance, this study was limited in focus to operational (PMO) performance and client satisfaction (PM performance) from the client's perspective. However, a wider perspective or conceptual model would have provided a more comprehensive view of overall performance, especially given clients' preconceptions.

An analysis of every survey question would have resulted in a much larger project and therefore was beyond the scope of this study. Although the survey questions could provide insight into a number of areas, the study focused on clients' overall satisfaction. However, a limited discussion on PM location and experience is offered in the final two chapters that may offer some insight into the governance style of leadership..

Theoretical/ Conceptual Framework

The literature review covers six main topics: virtual teams, offshoring, ITOs, PMO/project performance, PMOs, and PMO governance. Within each of the six topics were three areas of concern (performance, description, and trends), which drove the literature review as it related to the research questions. The search for peer-reviewed

sources for each of these topics and areas of concern was guided by the main research question, which was mainly concerned with the performance of PMs leading virtual teams under the direction of the ITO provider's PMO. A secondary research question related to differences in performance between the U.S. and Mexico-based PMs is also discussed in the findings section to offer some clarity regarding cultural differences and client expectations.

The concept map (see Figure 1) provides a visual representation of the literature review and its relationship to the research questions. It should be noted that the sources referenced in the concept map do not include all references used in this study. Additional resources drove the analysis and findings section of this study.

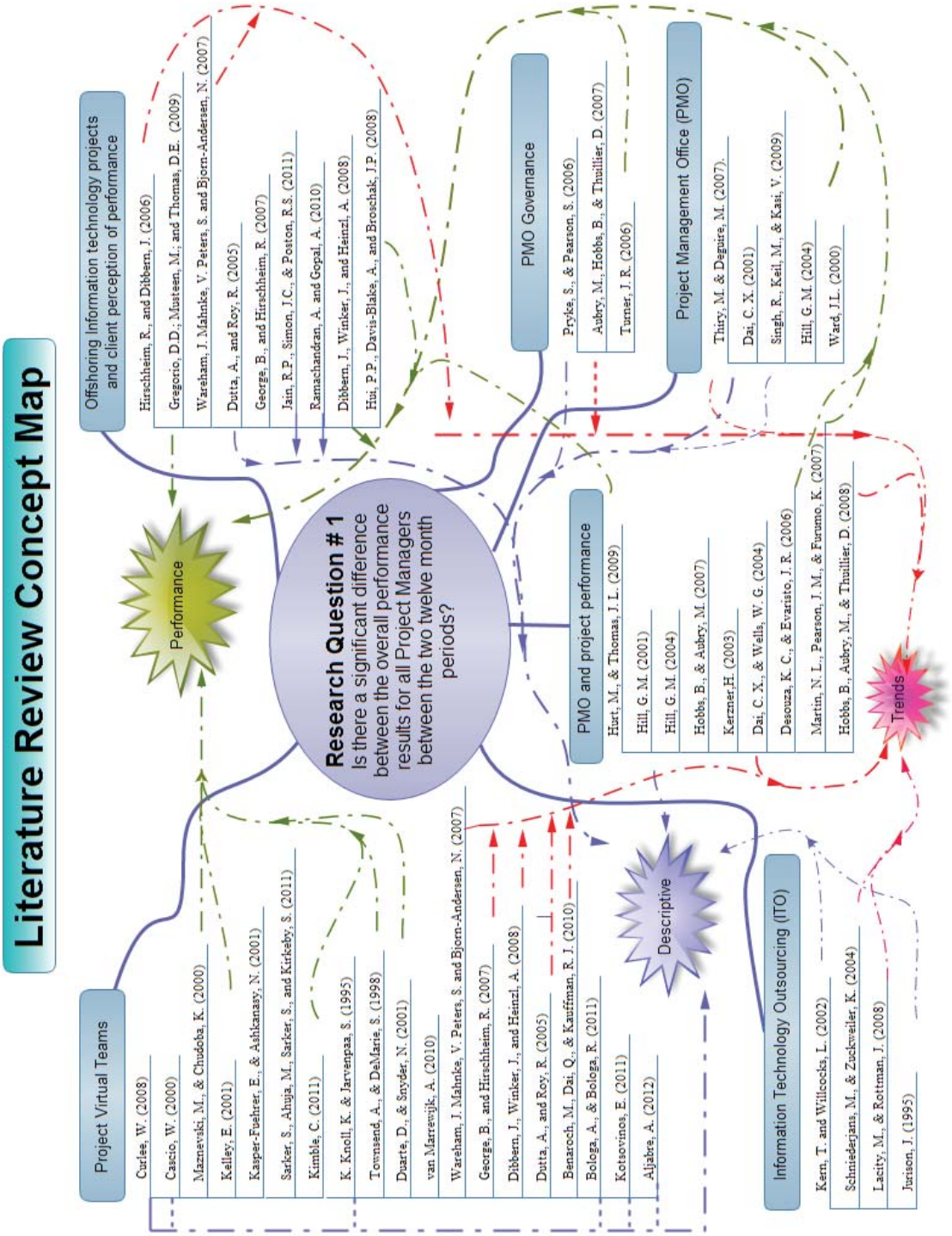

Figure 1. Concept map.

Organization of the Remainder of the Study

The rest of this research study is divided into four chapters. Chapter 2 provides a review of the research on PMO offshoring, project governance, and the performance of both the PMO and virtual teams. This chapter identifies a gap in the research that this study sought to fill. Chapter 3 presents the method employed in the research study. It describes the research design, sample, measurement tools, and methods of data collection used in the study. Furthermore, Chapter 3 describes the data analysis and the validity and reliability of the data analysis tools used. Finally, it identifies the ethical considerations for carrying out the research study.

Chapter 4 presents the results of the research study based on the analysis of the data described in Chapter 3. It provides a detailed discussion comparing the findings of the two survey periods in 2009 and 2010, and an in-depth look at PM performance based on location and PMP certification. Chapter 5 discusses the results of the research study and the implications of the results for research and business practitioners in the future. It also provides recommendations with regard to offshoring and backsourcing of PMO operations and compares the performance implications of such decisions with client perceptions of project performance.

CHAPTER 2. LITERATURE REVIEW

This study is unique in that it looked at survey data collected by an ITO provider in an effort to understand if the PM performance perception of the ITO provider's clients could be substantiated. The survey data collected for the period during which the ITO PMO resided in Mexico were available at the time the ITO provider made the decision to backsource the office; however they were not taken into consideration prior to making the decision. Backsourcing is a relatively recent phenomenon about which there is little information available in the literature. Most clients stated that the reason for their dissatisfaction was related to PM and PMO performance issues. Thus, the literature review focused mainly on those areas.

Further, to provide a context for the overall discussion, a number of related areas were included in this literature review including IT outsourcing, PMOs and governance, virtual teams, and offshoring. The final issue reviewed in the literature was the trend of backsourcing. Wherever possible in this review, specific ideas or concepts discovered in the literature were compared or contrasted as they related to the problem at hand.

Information Technology Outsourcing

Outsourcing of IT functions occurs when an organization deems it necessary and advantageous to have another company provide the maintenance and support for their information systems (Kern & Willcocks, 2002). This could include anything from providing simple remote application support to hosting servers and providing technical

support, maintenance, upgrades, and future planning for increased growth (Jurison, 1995). Jurison (1995) argued that client organizations were putting a significant amount of trust and faith in the ITO with respect to administrating and providing protection for their applications and data. Today's business environment is highly dependent on availability of and timely access to data. Therefore, clients expect that their business will not suffer from moving their IT processes to an ITO provider.

According to Schniederjans and Zuckweiler (2004), IT outsourcing can be "differentiated in terms of domestic (i.e. to a firm within the country of the outsourcing firm) and international outsourcing (i.e. to a firm outside the country for the outsourcing firm)" (p. 974). The authors argued that domestic outsourcing is not a new concept; its history traces back to at least 1937. Further, Schniederjans and Zuckweiler found that international outsourcing has been growing in popularity primarily due to the economic advantages of lower wages in some foreign countries. They also found that some countries, such as India, have made outsourcing a priority in their economic policy and have created agencies to help foreign companies establish a presence in their country. Schniederjans and Zuckweiler concluded "outsourcing has moved from a tactical decision . . . to a strategic decision . . . for many firms" (p. 975). In this sense, strategic decisions relate to the cost savings associated with receiving leveraged services and support.

Lacity and Hirschheim (1993) argued that ITO is a pay-as-you-go service; whereby, clients are only charged for what they use or for fulfillment of contractual agreements. Lacity and Hirschheim found that executives were beginning to view IT as a utility they could leverage to provide a competitive advantage through economies of

scale. Schniederjans and Zuckweiler (2004) reaffirmed this argument, noting that outsourcing allows a "firm to focus on what they do better than other outside firms" (p. 975). This suggests that specialists who operate in that field are the best providers of IT services. Further, the attractiveness of ITO is that it allows a firm to focus on its core strengths

Project Management Offices

PMI is a standards organization for the management of projects. In existence since 1969, PMI (2008) defines a PMO as "an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain" (p. 443). Recently, PMOs have taken a broader view in their organizational role to include balancing the needs of all other program or portfolio initiatives within the organization. According to Thiry and Deguire (2007), the broader organizational approach of PMO programs and portfolio management is an enterprise-wide initiative that takes into consideration resource allocation to "achieve corporate objectives and maximize value for the stakeholders." (p. 650). Thiry and Deguire stated that this approach prioritizes the use of technical resources to satisfy stakeholder requirements and achieve optimum results as set by predetermined parameters. These parameters typically include hard deadlines, regulatory compliance, and financial incentives, both positive and negative. This enterprise perspective requires high-level communication, coordination, and cooperation between senior management and department heads. In the world of project management, this level of interdepartmental cooperation is referred to as project or program governance.

According to Dai (2001), the concept of a PMO has been around since the 1930s but saw a significant increase in corporate use during the 1990s due to IT concerns related to hard deadlines as the year 2000 (Y2K) approached. Singh et al. (2009) found that the role of the PMO was to establish "IT project management discipline within an organization" (p. 410). They further noted that the PMO is a senior management control process that allows for formal and centralized decision making using standardized management processes. These processes form the basis for governance of IT projects.

Ward (2000) defined a PMO as an entity that provides structure, organization, techniques, and tools for the successful management and oversight of projects. The role of a PMO can vary and is highly dependent on an organization's maturity and level of competence (Hill, 2004). The responsibilities of a PMO range from consultation on process and process control to full program-level oversight and funding approval.

PMOs and Project Performance

PMOs play a critical role in governing PMs' performance and ensuring continuous project success. The PMO is charged with ensuring project management competency, from governance (providing administrative support and coaching of PMs) to serving as a full-blown project delivery center (Hurt & Thomas, 2009). A number of scholars have sought to describe the basic workings of a PMO (Hill, 2001, 2004). The most comprehensive was Hobbs and Aubry's (2007) work, who developed a comprehensive list of 27 functions that were central to the PMO. The most important function was ensuring management competency in order to guarantee the success of various projects (Kerzner, 2003).

Hurt and Thomas (2009) argued that the key importance of a PMO was continually building value for the organization through sustainable and high-performing projects. Various studies have sought to understand the impact of the PMO on project performance. Dai and Wells (2004) conducted an empirical study of 320 project managers and assessed project performance against the functions of the PMO. They noted that higher project standards set by a PMO positively correlated to project performance. They also noted that organizations that had PMOs recorded better project performance than those without.

Desouza and Evaristo (2006) supported these views, noting that a high-performing PMO reflects better-performing projects within an organization. However, Martin, Pearson, and Furumo (2007) disagreed with this view in their survey study of 129 information systems PMs drawn from the PMI. They contended that organizations with no PMO were just as likely to have high-performing projects as the ones with a PMO. This was because both were equally likely to use the standard management practices set by PMI. This conclusion may be due to bias in the use of the PMI sample population. However, the researchers showed that an effective PMO greatly correlated to meeting project budgets. This implied that the PMO significantly influenced project performance with regard to meeting budgets.

Research also supported the view that PMOs strongly enhance project performance and success; however no research has yet compared project performance for onshore versus offshore PMOs. Hobbs, Aubry, and Thuillier (2008) noted that in order for PMOs to ensure sustainable project success and performance and carry out their governance functions effectively, it was important that the PMO continually evolve,

change, and transform to effectively fit the overall strategic objectives of the organization. Such changes explain the developments that took place inside the ITO provider since 2010. The ITO provider's focus on cost cutting in 2009 during the economic downturn played a key role in offshoring its PMO to Mexico, which has a low-cost labor market with skilled personnel. However, client concerns about the quality and performance of various projects influenced the organization's decision to backshore the PMO to the United States. This shows that a key focus of the ITO provider was to please the clients, which in turn influenced the PMO by restricting and shifting it back to the United States in order to build customer confidence in the quality of the projects delivered by the PMO.

PMO Governance

Project governance is a broad concept that means different things to different organizations depending on their size and commitment to project management as a process tool for accomplishing work (Pryke & Pearson, 2006). Pryke and Pearson (2006) concluded that governance is the framework for the decisions a group arrives at as a result of processes and defined success factors previously determined by the group. Governance of the workgroups that perform the work outsourced to the ITO is important to the client as it ensures the protection of their equipment, services, and best interests. Aubry et al. (2007) found governance to be a strategic role for the PMO as it provides boundaries and control over finance, scope, and resources. In discussing the nature of project governance, Turner (2006) noted that project governance "involves a set of relationships between a project's management, its sponsor, its owner, and other stakeholders" (p. 93). According to Turner, these relationships form or solidify while

serving on the governance board, where each stakeholder negotiates for resources, funding, and timeline considerations.

According to Palvia et al. (2010), the governance process, based on PMI standards for performance purposes, follows a three-part model of inputs, process, and outputs. Palvia et al. stated that the three aspects of an IT project include management capability as the input, process quality as the process, and project performance as the output. These aspects make up the three-level theoretical model of capability quality performance that is essential to examining project performance and outcomes. However, this study limited its discussion to operational performance (PMO), and satisfaction (PM performance) as outputs under the performance level of the conceptual model.

Martin et al. (2007) found three key project outcome variables that are measured to assess project performance: quality, duration, and cost. Other factors, such as stakeholder satisfaction with the project team and the value that the projects add to the business, also play an important role in determining overall project performance (Kirsch, 2000). For offshored work, more factors are taken into consideration with regard to project outcomes and performance (Palvia et al., 2010). Palvia continues that a process model relates various variables leading to the project outcome; thereby, providing a deeper understanding of the underlying phenomena.

While project governance is well covered, offshore project governance is a topic that is lacking in the literature. The ITO provider's workload during the 2 year period surveyed were approximately 95% U.S., 4% UK, and 1% Mexico. There is very little if anything in the literature where the vast majority of the work being performed by a firm onshore was governed by leadership that was offshore.

Project Virtual Teams

Project management has increasingly evolved to incorporate flexible working environments such as the use of virtual teams on projects. Curlee (2008) defined virtual project teams as teams where "50% of the team members are not resident in the same physical location and may be dispersed across different time zones" (p. 84). According to Cascio (2000), a virtual team is defined as "one that conducts its work almost entirely through electronic technology." (p. 22). Advances in technology and the lower cost of communication devices have greatly increased the use of virtual project teams across many industries in recent years. Such teams often depend on technology to communicate and are often responsible for making some project decisions; in addition the members rarely meet (Kelley, 2001; Maznevski & Chudoba, 2000). One of the key challenges that a PMO faces is optimizing the value of virtual teams in a way that results in better project success and performance.

There are a number of concerns with the use of virtual teams, mostly related to performance issues. These performance issues are the result of external concerns held by team members. Cascio (2000) pointed out that chief among the concerns were relationship and trust issues: "Lack of trust can undermine every other precaution taken to ensure successful virtual work arrangements" (p. 83). According to Kasper-Fuehrer and Ashkanasy (2001), "nonverbal cues are central to communications of trust" (p. 237). There were two common problem areas related to virtual teams that lead to a break down in trust as noted in the literature: lack of relationships and communication issues. The significance of trust and communication within virtual teams has been significantly noted and addressed in the project management literature.

Sarker, Ahuja, Sarker, and Kirkeby (2011) concluded that trust is important in building relationships among different project stakeholders, and communication is significant in effective working relationships. These two factors are critical in determining the performance of any project. However, due to the varying characteristics of virtual teams (where interaction takes place over computer-mediated platforms and team members rarely meet), developing trust and relationships among key stakeholders and team members can prove to be a challenge (Kimble, 2011). Such problems are further exacerbated when considering cultural differences (Knoll & Javernpaa, 1995), especially between U.S. clients and non-U.S. project management teams or leaders.

Such challenges can be overcome in a number of ways. Townsend and DeMarie (1998) and Duarte and Snyder (2001) suggested that through training and learning, virtual teams could successfully communicate in a way that enhances team effectiveness. Kimble (2011) on the other hand noted that key solutions to the trust, relationship, identity, and communication issues that plague virtual teams can be handled through improvements in technology and training virtual team members. However, training, learning, and other improvements still do not completely resolve the problem.

Van Marrewijk (2010) argued that though cultural differences can be constructed, harnessed, and used as a strategic source for an organization, they are still a major challenge that intensifies project management problems with regard to project control and client contact. This implies that for offshored virtual project teams, cultural differences exacerbate the various project management issues that may be faced during project execution (Dutta & Roy, 2005; George & Hirschheim, 2007; van Marrewijk, 2010;

Wareham, Mahnke, Peters, & Bjorn-Andersen, 2007). This is despite various solution strategies that may be adopted in order to increase the virtual team's effectiveness.

Offshoring IT Projects and Client Perceptions of Performance

In the 21st century, organizations have increasingly been attracted to offshore outsourcing due to the availability of highly skilled and talented workers at reduced labor costs, the increased business opportunities (Hirschheim & Dibbern, 2006), and the opportunity to increase their global competitiveness (Gregorio, Musteen, & Thomas, 2009). However, such organizations have often found themselves faced with challenges that are unique to outsourcing operations offshore. Wareham et al. (2007) stipulated that the anticipated cost savings expected by organizations do not often achieve the desired effect due to the hidden costs of unforeseen challenges such as capability differences. Other challenges include inadequate understanding of IT experts in the foreign countries (Dutta & Roy, 2005), cultural and communication differences (George & Hirschheim, 2007), and project management issues (Wareham et al., 2007).

Jain, Simon, and Poston (2011) showed that client managers in offshored and outsourced IT projects play an important role in reporting project problems to ensure optimal IT project management. They noted that remaining silent on offshore project-related issues is a recipe for project failure or suboptimal performance. This provides a rationale for the ITO provider in this study to use client views and perceptions in understanding project management performance and making the decision to backshore the PMO to the United States.

An important task for the PMO is the assessment of IT project performance. This is especially true for IT firms. The complexity and intangible nature of various IT

services make this PMO role and associated tasks difficult and complicated (Ramachandran & Gopal, 2010). In a study using a sample of 85 outsourced IT development projects, Ramachandran and Gopal (2010) noted that while diagnostic inputs are often used in measuring the performance of projects from a client's perspective, PMs use non-diagnostic input information to form judgments of the risk anticipations and outcomes of various projects undertaken. In essence, the use of PMs' perceptions of project performance along with client perceptions and assessments is essential in providing an actual picture of the performance of the various projects undertaken. Although surveys are used to assess PMs' performance in leading a project, the PMs for the ITO provider in this study followed the *lessons learned* process to document the team's impressions of the overall performance of the project.

As part of the project closing process, the lessons learned sessions were scheduled within 1 week of the completion of the final deliverable for the project. The PM called together the key players involved in the recently completed project and walked through each phase of the project, asking questions. The questions were geared toward learning what they did right and what went wrong. The goal was to capture both facts and impressions with an eye toward improvement. Formal documentation of the sessions was a requirement with coded results entered into a database for future reference by other PMs. The coded references included categorizing issues under such areas as communications, project scope, team member participation, and leadership, to name a few. Results from these sessions were available to all PMs and could be used to identify potential risks for newly initiated projects.

Dibbern, Winker, and Heinzl (2008), in their analysis of the perceived costs of offshored IT projects, noted that the extra costs incurred by clients in such projects were mainly post contractual costs that included knowledge transfer; requirements design; and specifications, coordination, and control. The researchers noted that clients perceived that the IT project costs that required client-specific knowledge about IT systems or business processes involving the IT systems were considerably higher since the effort of managing knowledge asymmetries between vendors and clients was also high. This could provide an explanation for the negative client perception concerning the performance of the PMO located in Monterrey. Although research shows that customer perceptions of the performance of offshored projects tends to be lower (Dibber et al., 2008; Hui, Davis-Blake, & Broschak, 2008; Jain et al., 2011), no actual study has been carried out to measure such client perceptions against the actual performance of the PMO and the various projects outsourced.

This research study sought to add knowledge related to PMO performance by analyzing differences between the survey results for the period that the function resided in Mexico and the period after the PMO had been backsourced to the United States. Additionally, an analysis and review of performance for PMP-certified versus non-PMP-certified PMs might provide insight into the perceived performance concerns expressed by clients. Offshoring the project management of IT projects is well established and has been significantly noted and addressed in the project management literature. However, additional research on PMO performance is needed specifically in the area of client perception.

New Trend: Backsourcing

A new trend is on the rise whereby companies are beginning to backsource their previously outsourced IT services to offshore locations. This reflects the communication and relationship problems that influence virtual teams, especially ones that have been offshored. Dibbern et al. (2008) argued that there are extra costs incurred by clients in the use of offshoring. Benaroch et al. (2010) stated that this new trend toward backsourcing and onshoring is made possible by recent advances in technology, chief among them virtualization and cloud computing.

Virtualization has changed the IT services sector in the sense that it is the solution to a wide array of challenging factors. Notably, virtualization enhances resource utilization, increases data center optimization, and reduces carbon emission (Bologa & Bologa, 2011). It also enables cost reduction without compromising service quality and enables completion of heavier workloads on fewer servers, allowing the same data center space to last longer (Kotsovinos, 2011).

Cloud computing is also making it increasingly cheaper and more convenient for organizations to access a wide array of services at lower costs via the Internet (Aljabre, 2012). These two advances have reduced the amount of work needed in IT services and hence have reduced both labor expenditures and overall operational costs, making it favorable for organizations that had previously outsourced to backsource any number of IT services or functions. Backsourcing is a relatively new phenomenon and has not been significantly addressed in the project management literature. Research on the ties to PM and PMO performance would be a good topic for further research.

Summary

The purpose of this literature review was to explain a number of concepts related to the research questions and provide an assessment of what the literature has to say about the phenomenon of offshore PMO performance, especially as it relates to the governance function of a PMO. A significant body of work exists in the areas of outsourcing, PMOs, PMO performance, and virtual teams. However, there are a number of gaps in the area of offshore PMO governance. Specifically, there are gaps in governance performance, PM performance in offshored PMOs, and performance differences between PMP- and non-PMP-certified PMs in an offshore PMO.

Additionally, little research has been performed in the area of comparing offshore and onshore PMO performance. The literature provides conflicting views on the future of outsourcing. Whereas some say that outsourcing is here to stay, others believe that it is on the decline. According to Benaroch et al. (2010), the decline in outsourcing is largely due to recent advances in technology such as virtualization and cloud computing. These advances offer significant cost savings and reduce the office space needed to support IT services. Consequently, fewer human resources are needed to support this newer technology. The cost of equipment and the number of resources required to support in-house IT functions have been the main drivers behind the offshoring phenomenon.

The future of offshoring is yet to be determined as Iacovou and Nakatsu (2008) found that "offshore-outsourced projects are especially prone to failure" (p. 90). Client perceptions related to a lack of management commitment seem to be a key factor in determining the future of offshoring IT projects. This mind-set was the central concern for clients of the ITO provider considered in this study. Iacovou and Nakatsu identified

the top 25 risks associated with offshored/outsourced projects. The number one risk was a lack of management commitment. These findings seem to support the client perceptions of the ITO provider for the period that the PMO was managed out of the Mexico office.

The second- and third-place risk factors according to Iacovou and Nakatsu (2008) were issues related to communication. Confirming those findings, George and Hirschheim (2007) found cultural and communication differences in offshored countries contributed significantly to the management problems associated with offshored projects. As such, a number of the questions on the surveys for the current study dealt with the issue of communication. Of specific interest for the current study were the differences between the United States and Mexican PMs as those differences may support the findings in the literature in terms of communication and cultural concerns.

Offshore PMO performance is the central issue for the current study. The performance of PMs under the leadership of the offshore PMO is an additional subject for which there is a gap in the literature; therefore, it requires additional study. Overall, there is little research regarding offshore PMO performance. Although this study was not conclusive because it was a case study of only one ITO provider, it is a starting place for filling those gaps.

CHAPTER 3. METHODOLOGY

The purpose of this research was to determine if PM survey results from an ITO provider's clients supported the management decision to return governance of a PMO to an onshore management team. The surveys, conducted over a 2-year period, were administered as part of the closing phase for all projects. The primary purpose of the surveys was to provide feedback regarding the client's impressions of project performance and delivery to the PMO governance board and the PM who led the project. Additionally, the aggregate survey rates were included in the PMs' annual review cycle to assess potential raises and promotional readiness.

Research Design

For the study, I used existing survey data from customers and employees/team members to assess process and overall satisfaction with the project outcomes. The focus was on the measures of overall satisfaction of each of these two groups of respondents. The research design was a quantitative analysis of the surveys that contrasted overall satisfaction of external clients and team members across countries, time periods, and levels of training of the PMs who managed the projects. Copies of the surveys are included in Appendixes D and E.

Creswell (2003) concluded that research design often determines the technique used for the analysis phase. Babbie (2001) found that "analysis is the process of putting questions to-and getting answers from-your data" (p. 396). Design for quantitative

research, according to Creswell, is typically experimental or survey based. The researcher poses a hypothesis and then seeks to disprove the null hypothesis (Creswell, 2003). The null hypothesis states, "…that there is no significant relationship between or among variables" (p. 73).

Research Question 1

Research Question 1 asked, Is there a significant difference in the overall performance results for all PMs between the two 12-month periods? For this question, the focus was on the two periods with no distinction regarding the PMs. The data analysis involved a year-to-year comparison of performance and included the survey results for all PMs. Through this comparison, I sought to understand if performance increased or decreased after the PMO was backshored to the United States. It could be argued that a significant difference favoring the second 12-month period would be an indication that the ITO provider's senior management responded correctly to the situation.

The following hypotheses were used in conjunction with Research Question 1:

H1o: There is no significant difference in the overall performance results for all PMs between the two 12-month periods.

H1a: There is a significant difference in the overall performance results for all PMs between the two 12-month periods.

Research Question 2

Research Question 2 asked, Is there a significant difference between the performance of United States based PMs and of PMs residing in Mexico? Through this question, I sought to understand if there was a performance difference between the two groups of PMs during the two time periods of the study. A significant difference could

have contributed to an overall increase or decrease in the performance results. The complete analysis for this question included whether or not the PM held PMP credentials. For the purposes of this study, I assumed that PMP certification represented experience and advance training. Any significant differences found in this analysis could add to the contextual framework for this study of backsourcing.

The following hypotheses were used in conjunction with Research Question 2:

H2o: There is no significant difference between the performance of United States based PMs and of PMs residing in Mexico.

H2a: There is a significant difference between the performance of United States based PMs and of PMs residing in Mexico.

Research Question 3

Research Question 3 asked, Is there a significant difference in performance between United States and Mexico-based PMs for the two 12-month periods as reported in the surveys? Through this question, I sought to determine if performance increased or decreased for either PM group between the two 12-month periods.

The following hypotheses were used in conjunction with Research Question 3:

$H3_o$: There is no significant difference in performance between United States and Mexico-based PMs for the two 12-month periods as reported in the surveys.

H3a: There is a significant difference in performance between United States and Mexico-based PMs for the two 12-month periods as reported in the surveys.

Research Question 4

Research Question 4 asked, Is there a significant difference in performance between PMP-certified and non-PMP-certified PMs? Through this question, I sought to

determine if there was a performance difference between PMs who have received their PMP certification and those who have not.

The following hypotheses were used in conjunction with Research Question 4:

$H4_o$: There is no significant difference in performance between PMP-certified and non-PMP-certified PMs.

H4a: There is a significant difference in performance between PMP-certified and non-PMP-certified PMs.

Permissions

In early April of 2011, a request for permission to use the survey results for the preceding 2 years was submitted to the senior vice president of the ITO-PMO. Over the course of the next couple of months, a number of emails were exchanged to explain what would be looked at and how it would benefit the ITO Provider in knowing the outcome. At the request of the senior vice president, several meetings were held with the group director for PMO administration. We agreed on details that could be shared.

The primary concern for the director of PMO administrations was the privacy of the individual PMs. To gain permission from each PM involved would have been a very long process. However, information pertaining to their identities was not relevant in answering the research questions. Therefore, an agreement was reached with the director to have a project analyst summarize the data and remove the names of the PMs. Appendix A provides a copy of the e-mail from the group director granting permission to use the survey data for purposes of the current study.

Sample

The target populations were the hypothetical population of all potential customers of the ITO provider and all potential project managers at the ITO provider. The sampling frame for drawing inferences about the hypothetical populations comprised the completed surveys during the 2-year period. A census of these surveys was created, and there were no exclusion criteria for the surveys. Therefore, the issue of sample selection bias could only emerge with respect to whether the sampling frame represented a random sample of possible customers in the same or different years.

The ITO provider's choice to move its PMO functions out of Mexico and back to the United States after 2009 is informative with respect to the likely outcomes of the statistical tests for Research Questions 1 through 3 but does not raise any sample selection concerns. In fact, if the ITO provider had some reason to believe that a particularly difficult or unfavorable selection of clients led to poorer PM performance in Mexico, then presumably the ITO provider would have been less likely to move the PMO function back to the United States. Although the purpose of the relocation of the PMO function was to improve overall satisfaction—and therefore an improvement might be anticipated in the data—there is no reason to suspect that such a difference would be due to sample selection bias rather than any real difference in performance across the PMs of the two countries.

This study included 216 completed projects for the period between January 2009 and December 2010. PMs residing in Mexico led 130 projects, and PMs residing in the United States led 87 projects. Of the 216 total projects, 146 were completed in 2009 and 70 projects were completed in 2010. In 2009 PMs residing in Mexico led 86 of the 146

total projects, and PMs residing in the United States led the remaining 60 projects. In 2010 PMs residing in Mexico led 44 of the 70 projects, and PMs residing in the United States led the remaining 27 projects. This ratio was as expected due to the lower charge-back to clients for PMs who reside in Mexico.

The total number of completed projects for 2010 represented approximately one-third of the total number of projects the ITO provider completed in 2009. Much of this may be attributed to the slowdown in the economy since 2007. Additionally, while the number of completed projects for 2010 was less than the number completed in 2009, the total number of in-flight projects for 2010 was only 12 less than the total at the close of 2009. Similarly, not all projects completed in 2010 started in that year. The average project duration during the two time periods was 15 months.

Setting

The PMs surveyed for this study worked remotely and were geographically dispersed across the United States and Mexico. They had full knowledge and understanding that the surveys they participated in were a reflection of the work they had performed on their recently completed projects. The survey process is initiated by the PM at the completion of a project. The PM fills out a form identifying the client executive, other client team members, and key internal team members that participated on the project and forwards that information to the PMO. The PMO issues the surveys based on whom the PM identified on the form.

The PMO has complete ownership of the surveys from the time they receive the initial form identifying team members to be surveyed from the PM. The final product from the PMO on the surveys is a performance review with the PM

The surveys were used prior to the offshoring of the PMO and while the PMO was offshore. The surveys continue to be in use as of the finalizing of this study. The surveys provided an opportunity for the client to assess the PMs' performance on an individual project and were used to evaluate overall performance on an annual basis for purposes of merit increases. As a result, the surveys become part of the PMs official record.

Instrumentation and Measures

This study used survey results based on an existing instrument in use since 2002. The instrument has been subjected to the rigors of multiple reviews and revisions based on input from clients, PMO leaders, and PMs. One such review process is the annual project management boot camp hosted by the senior vice president of the ITO's PMO. During this weeklong training and development course had at the corporate headquarters, all the tools and instruments used in the administration of the PMO and projects in general are carefully reviewed for clarity. Additionally, team exercises include using and analyzing all of the tools including the end-of-project survey.

Table 1 provides a list of questions used in the performance surveys and the rating system used. The PM identified for the PMO project analyst the names of the individual team members who should receive a survey and advised whether the team member was an internal coworker or client, which determined what type of survey the project analyst sent out. The surveys for the internal coworkers in addition to the same questions asked of clients included a few specific questions related to internal disciplines. These questions helped the PMO determine technical knowledge awareness of the PM.

Table 1. Client Survey Questions

Number	Question
1	The project was implemented on time.
2	The project met or exceeded all stated objectives.
3	The project met or exceeded expectations.
4	During the delivery of the project, there was minimal disruption to personnel and processing environments.
5	Project issues were clearly documented, communicated, and resolved in a timely manner.
6	Project tasks were clearly defined, documented, communicated, and executed as planned.
7	Status review meetings were effective and informative.
8	Please rate your overall level of satisfaction with the performance of the project manager.

Note. Responses were rated on the following Likert scale: 0 = *not applicable*, 1 = *disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, and 5 = *strongly agree*.

The customer satisfaction survey and internal satisfaction survey are attached as Appendixes D and E, respectively. For the present analysis, the dependent variable for each of the surveys was overall satisfaction. On the customer satisfaction survey, Item 8 read, "Please rate your overall satisfaction with the performance of the project manager." On the internal satisfaction survey, Item 10 read, "I was satisfied with the overall performance of the project manager." For each survey, respondents responded using a five-point Likert scale: 0 = *not applicable*, 1 = *disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, and 5 = *strongly agree*.

Additional variables on the survey used as independent variables in either chi-square tests or two-factor ANOVA analyses were (a) the date of the project, (b) the country of the PM, and (c) a binary variable indicating whether the PM had undergone a training program. Each of these variables was a categorical variable (i.e., had a nominal

level of measurement) and was used to group data on the dependent variable (overall satisfaction) for comparison between the groups.

Data Collection

The data are a census of surveys for projects completed during the years under study. Performance surveys were completed at the end of a project as part of the project-closing phase. The PM filled out a form identifying all key members of the project team (see Appendix C). The members typically included the executive sponsor, the ITO executive, and technical leads from all disciplines involved in the project. The completed form was forwarded to the PMO for one of the project analysts to use in setting up the survey process. The process included entering the data provided from the returned form in a tracking database. This study was based on existing data from PM performance surveys that covered the 24 months between 2009 and 2010. At the instruction of the group director for the ITO's PMO, a project analyst removed the PMs' names and other identifying factors from the file to maintain anonymity and provided a copy of the file to me as the researcher for this study.

Data Analysis

For Research Questions 1 and 2, independent samples *t* tests would ordinarily be used to determine any differences across time periods or countries. However, in the sample used in this study, the distribution of survey responses was highly negatively skewed relative to a normal distribution. For that reason, a chi-square test for equality of distributions was performed. The null hypothesis for each of these tests was that the distribution of responses across the Likert scale was the same regardless of the location of

the PM. These chi-square tests also separately addressed what might be perceived as confounding factors (location of PM and time period).

Research Question 3 directly addressed the possible confounding factor of date of project completion on a PM's location. If the distribution of responses was normal, then the appropriate analysis would be a two-factor ANOVA, with date of project completion and PM location as the factors. Given that the responses to the customer and internal satisfaction questions were not normally distributed, the nonparametric analysis analogous to a two-factor ANOVA in this case was Freidman's test. Specifically, Friedman's test compares the ranks of the responses to the overall satisfaction questions and does not require a normal distribution. The null hypothesis tested was that the distribution of ranks of responses was the same across time all time periods and location combinations, and the alternative hypothesis was that at least one set of these ranks differed from the others. One method of obtaining Friedman's test is to rank the responses to questions and then apply a two-way ANOVA to the ranked data (Bickel & Doksum, 1977). This method was used because the ranked data are necessarily less skewed than the raw data that generate the ranks.

For Research Question 4, a chi-square test was used to compare the distributions of responses across PMs who are certified and those who have not received certification. The null hypothesis was that the distribution of responses to the two overall satisfaction items was the same for certified PMs as for noncertified PMs. All of the statistical tests and descriptive statistics were computed using SPSS 17.0.

Validity and Reliability

The survey responses that were contrasted used Likert-scale responses to items related to clients' and team members' overall satisfaction. The surveys were administered at project completion so that recall bias was not an issue. There was no reason to think that these measures of satisfaction were either invalid or unreliable.

Ethical Considerations

Neither the survey respondents nor the PMs they were evaluating were directly identified in the survey. The expectation of privacy of employee evaluations and recommendations fosters honesty and more useful evaluative instruments and results. The same expectation of privacy is maintained here. Additionally, this study benefitted the ITO provider's PMO as the purpose of the study was to understand performance from a customer perspective. This was made possible through a comparative analysis of the survey questions and a discussion of how clients perceived the work performed from the various groups involved.

CHAPTER 4. RESULTS

Chapter 4 presents the analysis of the survey results as they relate to the research questions and the hypotheses. The research methodologies identified in chapter 3 were used for analysis of the data. Chapter 4 is divided into four sections discussing the sample, research methodology, the data and analysis of results, and the summary. As a director in the PMO of the ITO provider, I was directly affected by the decisions by senior management regarding offshoring the PMO. The impact of the decision on my daily activities included, but was not limited to, reeducating clients on governance procedures, rating PMs, and addressing performance issues for projects and PMs.

Most clients regularly expressed their lack of confidence in the PMO leadership team that was established in Mexico. The major concerns seemed to always be about an inability of the PMO management team to focus the project managers on completing tasks on time or getting them to identify problems in a timely manner. The timeliness the customers were looking for were related to immediately escalating when a problem was first identified. From the client's perspective, it was unclear if it was a lack of leadership at the governance level or individual experience of the PMs. All they knew was that their projects were not completing on time or as originally scoped.

A contributing factor to the client's frustration was that there was no mechanism in place that would allow them to rate the PMO governance team as it related to individual project performance. The assigned PM was the most visible representative of

the ITO with nearly daily contact with the client. The end result was that clients used the end of project surveys to voice all the dissatisfaction. Therefore, it is important to keep in mind that while the analysis is on the PM performance surveys, the client saw no difference between the PMs or the governance team. This will be discussed more in chapter 5 and recommendations for both improvement and further research.

Description of the Sample

The sample contains 216 projects over the years 2009 and 2010, 146 of which were completed in 2009 and 70 of which were completed in 2010. Project managers in Mexico managed over 60% (130) of the projects, with the balance managed by PMs in the United States. The goal of the ITO provider was to offer PMs to clients at a lower rate, which explains the higher percentage of projects managed by PMs in Mexico versus by PMs in the United States. Of the 216 projects, 92 were managed by PMs who had obtained the PMP certification, and 124 were managed by PMs who had not obtained certification.

Figure 2 shows a clustered bar chart of certification by location, which indicates that about 35% of the projects were led by PMP-certified PMs from Mexico; whereas, about 45% were led by PMP-certified PMs from the United States. In most cases, the clients were not made aware of the PMs Credentials unless they specifically requested a certified PM. Consequently, clients were charged a higher rate for a certified project manager.

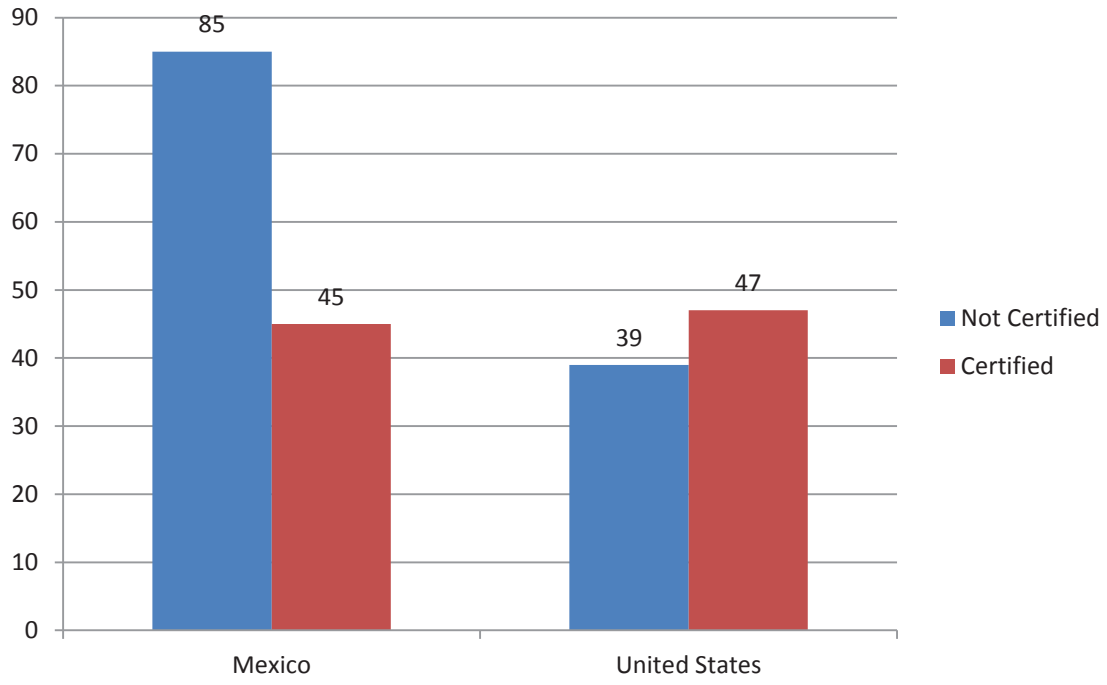

Figure 2. Frequency counts of project manager certification by country.

Research Methodology Applied to the Data Analysis

Research questions 1 and 2 were the primary focus of this study and relayed heavily on *t* tests and chi square for analysis. However, as there were 2 sets of survey respondents (internal and client), it was necessary to apply a number of data analysis tools. Therefore, skewness statistics, kurtosis statistics, central limit theorem, *t* tests, chi square, two-factor ANOVA, and regression coefficients are also used in this study to provide a broader perspective on the research questions.

Presentation of the Data and Results of the Analysis

The skewness statistics indicated that both of the distributions were severely negatively skewed (i.e., had long left tails) relative to a normal distribution, which was not surprising given that the mode was at the highest rating—5. The positive value of

kurtosis indicated that the mode and the extreme tails had too many observations relative to a normal distribution. Taken together, the skewness and kurtosis statistics suggested that the sample distribution would be poorly characterized as a normal distribution. However, the sample sizes were quite large so a central limit theorem could be used to reliably generate the result that the sampling distribution of the mean was a normal distribution, which is all that is required for hypothesis testing.

Table 2 displays summary statistics for the two overall satisfaction rating questions for the entire sample. Both sets of stakeholders gave the ITO provider high overall ratings. Both the median and mean ratings were between 4 and 5 for each group. The modal rating was 5, and 75% of the ratings were above 4.

Table 2. Summary Statistics for Customer Overall Rating and Internal Overall Rating for Full Sample

Statistic	Customer overall rating	Internal overall rating
Sample size	163	199
Mean	4.35	4.45
Median	4.67	4.67
Mode	5.00	5.00
Standard deviation	0.84	0.68
Skewness	–1.49	–1.57
Standard error of skewness	0.19	0.172
Kurtosis	1.72	2.34
Standard error of kurtosis	0.38	0.34
Minimum	1.50	2.00
Maximum	5.00	5.50
First quartile	4.00	4.00
Third quartile	5.00	5.00

To investigate Research Question 1, an independent samples *t* test was performed. The results are summarized in Table 3. For 2009, there were 110 customer responses to the overall question and 139 internal responses to the overall question. For 2010, the same sample sizes were 53 customer responses and 60 internal responses, respectively. Table 3 shows the mean difference as the average of the 2010 scores minus the average of the 2009 scores; thus the average of the 2010 scores was higher for both groups. However, as indicated by the significance levels of the *t* statistics, if the population means were the same, then a difference of 0.154 between the ratings given by customers for the 2 years would occur in nearly 28 out of 100 samples whereas a difference of 0.280 in the internal ratings would occur in about 1 out of 100 samples. Therefore, there was very strong evidence that the internal respondents perceived a difference in overall performance in the 2 years. However, there was not strong evidence that customers perceived a difference between the 2 years.

Table 3

Independent Samples *t* Test of Null Hypothesis for Overall Ratings of Customer and Internal Satisfaction

	Mean difference	*t* statistic	Significance level
Customer overall rating	0.154	1.09	0.277
Internal overall rating	0.280	2.63	0.009

Table 4 shows the findings of an independent samples *t* test for Research Question 2. For 2009, there were 66 customer ratings of projects managed by PMs from Mexico and 44 for projects managed by PMs in the United States. The internal

respondents rated 83 projects managed by PMs in Mexico and 56 managed by PMs in the United States. In each row of Table 4, the mean difference is the average of overall

Table 4

Independent Samples *t* Test of Null Hypothesis for Overall Ratings for PMs in Mexico and PMs in the United States During 2009

	Mean difference	*t* statistic	Significance level
Customer overall rating	0.444	3.06	0.003
Internal overall rating	0.459	4.57	0.000

ratings for projects managed by PMs in the United States minus the average of projects managed by PMs in Mexico. Thus, the average overall ratings are higher for the United States for both internal respondents and customers. Moreover, the significance levels associated with the *t* statistics provide overwhelming evidence that the difference in scores between the PMs in the two countries is not the result of chance. Further, Levene's test for the equality of variances had significance levels of 0.004 and 0.000 for customers and internal respondents, respectively. Therefore, the null hypothesis of equal variances was rejected in favor of unequal variances, and the *t* tests in Table 4 are computed for populations with unequal variances.

Table 5 reports results for a two-factor ANOVA for the dependent variable overall satisfaction of internal respondents in which the two factors were the year the project was completed and the country of the PM. A full factorial model that allows for interaction effects between the two treatments (year and location) was estimated. The interaction effect was significant at the 0.111 level, which suggested weak evidence of an interaction effect between the year and country of the PM. The main effects of year and

location of PM are significant at the 0.010 and 0.003 levels, respectively. Therefore, if the null hypothesis is not rejected, then there are significant differences between the years and location of the PMs. Thus, the model that best fits the mean is an additive model with separate values for location and year.

Table 5

Two-Factor ANOVA for Overall Satisfaction of Internal Respondents With Year and Location of PM as Treatments

Source	Sum of squares	*df*	Mean square	*F*	Significance
Corrected model	20.76	3	6.92	8.50	0.000
Intercept	6,897.14	1	6.897.14	8,467.88	0.000
Date	5.52	1	5.52	6.77	0.010
PM location	7.59	1	7.59	9.32	0.003
Year*Location	2.09	1	2.09	2.56	0.111
Error	158.83	195	0.815		
Total	8,184.23	199			
Corrected total	179.59	198			

Figure 3 provides some insight into the results shown in Table 5. The lines that connect the means across the 2 years are shown in green for the project managed by the PMs in the United States and blue for the projects managed by the PMs in Mexico. Internal respondents' means increased for both types of PMs in 2010. However, the nearly significant interaction effect resulted from a much greater increase in the means of Mexican project managers relative to their United States counterparts. The mean for project managers in Mexico increased from 4.18 to 4.59 from 2009 to 2010 whereas the mean for projects managed in the United State increased as well but only from 4.64 to

4.74. This could suggest that the Mexico based PMs performed better when the governance leadership was backsourced in 2010 and managed by U.S. based leadership.

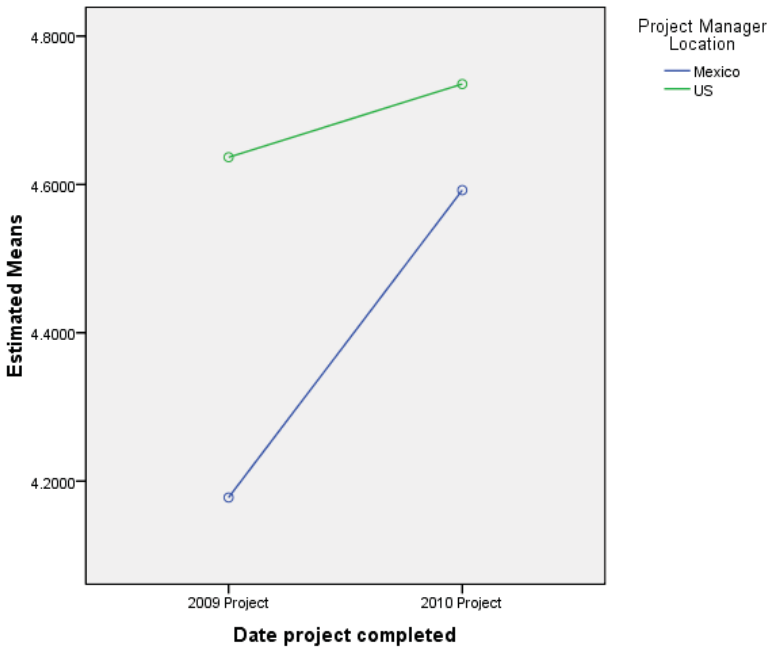

Figure 3. Estimated mean overall rating by internal respondents for projects in 2009 and 2010 managed in Mexico and the United States.

Table 6 shows a two-factor ANOVA with the overall satisfaction of customers as the dependent variable for the factors of year and project manager location. The interaction between year and location of the PM was not significantly different than zero; therefore an additive model for the mean was appropriate. In contrast to the internal respondents, there was a significant difference between the means of the location of the PMs but not between the years the project was completed.

Figure 4 highlights the difference between the customers' overall ratings for projects managed by PMs from Mexico versus projects managed by PMs from the

United States. In contrast to Figure 3, each line in Figure 4 is for a single year, and each line connects the means of overall satisfaction ratings by customers for projects managed within the United States and Mexico. For 2009, the gap between the means of the overall rating was nearly half a point—0.45 (the U.S. mean for 2009 was 4.57 and the Mexico mean for 2009 was 4.12). In 2010, the gap narrowed but was still a quarter of a rating point—0.25 (the U.S. mean for 2010 was 4.61 and the Mexico mean for 2010 was 4.36). Here again, this could be contributed to the change in PMO leadership.

Table 6. Two-Factor ANOVA for Overall Satisfaction of Customers with Year and Location of PM as Treatments

Source	Sum of squares	*df*	Mean square	*F*	Significance
Corrected model	24.38	3	8.12	3.22	0.024
Intercept	12,715.24	1	12,715.24	5,034.50	0.000
Year	3.18	1	3.18	1.26	0.263
PM location	19.64	1	19.64	7.78	0.006
Year*PM location	1.55	1	1.54	0.613	0.435
Error	401.57	159	2.52		
Total	13,141.19	163			
Corrected total	425.95	162			

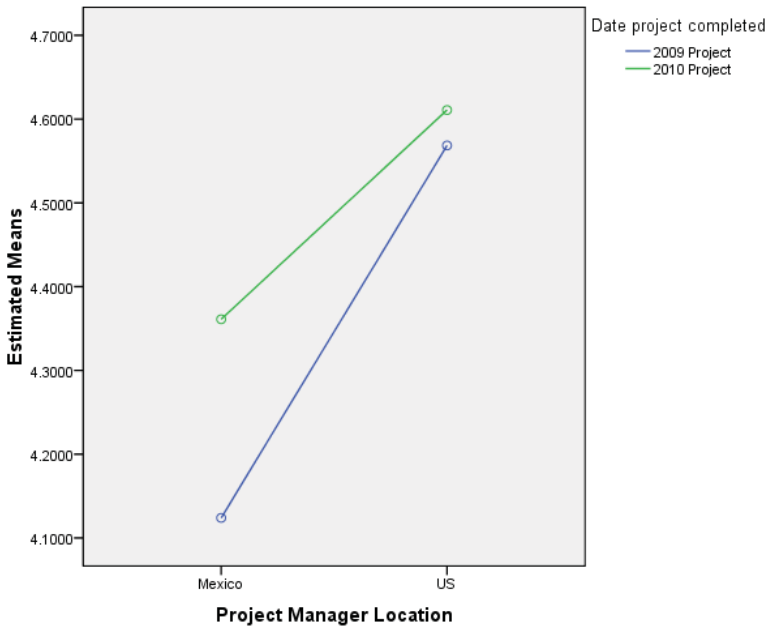

Figure 4. Estimated mean overall rating by customer respondents for projects in 2009 and 2010 managed in Mexico and the United States.

Table 7 presents the results of the independent samples *t* tests of the null hypothesis that the means of overall satisfaction for clients and internal respondents did not differ between certified and noncertified PMs. There were 81 projects led by certified PMs and 118 led by noncertified PMs in the sample. In each row, the mean difference was the mean of certified PMs minus the mean of noncertified PMs. As Table 7 indicates, certified PMs received slightly higher overall satisfaction ratings from both customers and internal respondents, but these were not statistically significant differences for either group of respondents.

Table 7. Independent Samples *t* Test for Null Hypothesis That Mean Overall Satisfaction Is the Same for Certified and Noncertified PMs

	Mean difference	*t* statistic	Significance level
Customer overall satisfaction	0.067	1.418	0.158
Internal overall satisfaction	0.143	0.504	0.615

Table 8 provides descriptive statistics for the overall satisfaction ratings by country and PM certification. Within each country, mean ratings for certified and noncertified PMs were remarkably similar. For example, from internal respondents, the mean overall satisfaction for Mexican PMs was the same (4.31) regardless of whether they were certified. However, although certification within a country did not seem to matter, there were quite large, statistically significant differences in customer satisfaction across the two countries with respect to certification.

Table 8. Means and Standard Deviations of Overall Satisfaction by Country and PM Certification

Country	Sample size	PM certified?	Mean	*SD*
Mexico, internal rating	81	No	4.31	0.783
Mexico, internal rating	41	Yes	4.31	0.786
Mexico, customer rating	64	No	4.24	0.830
Mexico, customer rating	35	Yes	4.13	1.124
United States, internal rating	37	No	4.56	0.571
United States, internal rating	40	Yes	4.75	0.345
United States, customer rating	29	No	4.51	0.747
United States, customer rating	35	Yes	4.64	0.452

One possible source of dissatisfaction with overall performance was dissatisfaction with the PMs' handling of process details. For both internal respondents and customers, the sixth question addressed process issues including whether project tasks were clearly defined, documented, communicated, and executed as planned. To determine the relationship between respondents' answers to this question and their overall ratings, the overall evaluation for both internal respondents and customers was regressed on this question.

For the regression of internal respondents' overall rating of the PMs' handling of process details, the sample size was 199 and the R^2 was 0.58, indicating that 58% of the variation in the overall rating could be explained by variation in the PMs' handling of process details. Moreover, the *F* test for the regression indicated the model was significant at less than the 0.000 level. Regression coefficients for internal respondents are summarized in Table 9.

Table 9. Regression Coefficients for Regression of Overall Rating of Project Tasks by Internal Respondents

	Coefficient estimate	Standard error	*t*	Significance
Intercept	0.804	0.223	3.610	0.000
Project tasks were clearly defined, documented, communicated, and executed as planned	0.835	0.051	16.531	0.000

For the process details question, each 1-point increase in the response to the question leads to a 0.835 increase in overall rating so the increases in process details are nearly one-for-one with increases in the overall rating of internal respondents. The coefficient estimate was also significant at less than the 0.000 level.

For the regression of customers' overall rating of the PMs' handling of process details, the sample size was 163 and the R^2 was 0.53, implying that 53% of the variation in the overall rating could be explained by variation in the PMs' handling of process details. Once again, the *F* test for the regression indicated that the model was significant at less than the 0.000 level. Coefficient estimates are provided in Table 10.

Table 10. Regression Coefficients for Regression of Overall Rating of Project Tasks by Customers

	Coefficient estimate	Standard error	*t*	Significance
Intercept	1.580	0.211	7.501	0.000
Project tasks were clearly defined, documented, communicated, and executed as planned	0.687	0.051	13.474	0.000

For each 1-point increase in the respondents' assessment of the PMs' handling of process details, the overall rating increased by an average of about two-thirds of a point (0.687). This increase was also significant at less than the 0.000 level.

Table 11 provides results for an independent samples *t* test of whether the process handling details differed by the location of the PM. The mean differences in the table were the average of the United States PMs' ratings minus the average rating of the PMs from Mexico, which were both positive and identical to three decimal places. However, because of the larger variance in the performance of the PMs in the eyes of customers, the differences favoring the United States based PMs were significant at the 0.004 level for internal respondents but only at the 0.101 level for customers.

Table 11. Independent Samples *t* Test for Differences in Overall Rating on Project Tasks by Location of Project Manager

	Sample size	Mean difference	Standard error	*t*	Significance
Internal respondents	199	0.244	0.084	2.891	0.004
Customers	165	0.244	0.147	1.649	0.101

Table 12 provides results for the independent samples *t* test for whether certified and noncertified PMs obtained ratings for process details. The mean differences were the average rating for certified PMs minus the average rating for noncertified PMs, which were positive for both internal respondents and customers and identical to three decimal places. The smaller standard error for internal respondents led to a significance level of 0.063 for internal respondents whereas the significance level of the difference for customers was only 0.258. Thus, the sample provides somewhat strong evidence that internal respondents rated PMs differently on their handling of process details but only weak evidence that customers perceived a difference in the handling of process details.

Table 12. Independent Samples *t* Test for Differences in Overall Rating on Project Tasks by PM Certification

	Sample size	Mean difference	Standard error	*t*	Significance
Internal respondents	199	0.166	0.088	1.867	0.063
Customers	165	0.166	0.146	1.136	0.258

Summary

This chapter presented the statistical analyses and findings related to 2 years of data on a management decision of an ITO provider. The problem under investigation was whether the outcomes supported the management decision to return the PMO onshore. The goal of this chapter was to determine if a statistically significant difference existed between the two survey periods to either support or refute the management decision. The survey periods were between 2009 and 2010, and the sample comprised 216 projects. The survey was undertaken in two phases with the majority of it being completed in 2009, when 146 projects were accomplished. The rest (70) were undertaken during the second

survey period, in 2010. The findings showed that PMs in Mexico managed over 60% of the projects (130), with the balance managed by PMs in the United States. According to the survey findings, the project managers based in Mexico led a higher percentage of the projects than the United States based managers. This was in line with the main objective of the ITO provider to provide project management resources at a reduced cost over those found in the United States.

However, 92% (124) of the projects led by Mexican based PMs used PMs who were not PMP certified. Conversely, 60% of the projects led by United States based PMs used PMs who were PMP certified. Therefore, most projects in Mexico were completed by uncertified PMs while a significantly larger percentage of projects in the United States were accomplished by certified PMs. The results also showed that most projects in the United States were done credibly because there were fewer client concerns than in Mexico, which reported lower survey scores.

Research Methodologies Used

The research methodologies applied to the data analysis process included skewness statistics, kurtosis statistics, the central limit theorem, *t* tests, two-factor ANOVAs, and regression coefficients (Heerkens, 2009). Each research methodology had its function. For example, the statistics showed that both of the distributions were severely negatively skewed (i.e., had long left tails) relative to a normal distribution, which was not surprising given that the mode was at the highest rating—5.

The positive value of kurtosis, on the other hand, showed that the mode and the extreme tails had too many observations relative to a normal distribution (P. Hobbs, 2009). These research methodologies played a key role in defining the results of the

survey. However, for hypothesis testing, the skewness, and kurtosis statistics could not be used together because when taken together, the two proposed that the sample distribution would be poorly characterized as a normal distribution (Lock, 2009). In order to come up with reliable results that could integrate the large sample sizes, the surveyors had to use a central limit theorem to help show that the sampling allocation of the mean was a normal allocation, which was needed for testing of the hypothesis.

Implications of Table 3

Table 3 shows the results for an independent samples *t* test of ratings by year. There were positive differences over the years that were statistically significant for internal respondents only. The ITO provider was responding to this phenomenon in its decision to backsource the PMO governance. The results showed that both sets of stakeholders gave the ITO's PMs high overall ratings. Both the median and mean ratings were between 4 and 5 for each group. The modal rating was a 5, and 75 percent of the ratings were above 4. The positive statistical differences favored the second 12 months (i.e., 2010).

The results showed support for the decision to backsource the PMO governance to The United States. Whitchurch (2013) offers that project team members wish to provide excellent performance to customers but are often unable due to poor project management governance or oversight. Table 3 supports this position in terms of how the internal respondents rated the PM. Customers, on the other hand, feel they need to see credible performance and get quality products. Therefore, the customers also support the decision of the management to backsource the PMO Governance to the United States.

Project governance involves providing guidance and direction to the PM and team members (Hobbs, 2009). It is crucial that the guidance provided to the PM and team is timely, effective, and in sync with the clients' expectations and the agreed-upon deliverables. Each of the parameters for guidance directly link to communication problems. Lack of maturity in governance leads to poor communication between the PM governance board and the team members (Lock, 2009). This situation can make the client lose confidence in the governance board and the ITO provider.

The fact that the customer respondents supported the decision to backsource means that they already noted the differences that exist between the governance and team members of the projects. It is difficult to salvage such a project and make it perform better if no action is taken. Therefore, the decision of management to backsource the PMO to the United States was credible and necessary to restore confidence in the ITO provider.

Implications of Table 4

Table 4 shows the results of a cross-country comparison in 2009 based on an independent samples *t* test. The results suggest a significant difference in overall ratings from both customers and internal respondents. This finding supports the results shown in Table 3. The internal respondents provided higher ratings because they were the performers and knew the exact source of any problem. They understand the causes of poor performance on the projects better than the customers and are ready to hold the PM to a higher standard.

Accordingly, they strongly supported the decision of management to return the PMO governance to the United States, as the Mexico office was responsible for poor

performance. The internal respondents included team members on the projects being investigated through the survey. These were coworkers of the PM employed by the ITO provider. Their work was to ensure the project was completed on time and within scope. As subject matter experts, they understand what must be done and have great ideas about how to improve performance that can bring contentment to both customers and the organization (PMI, 2009).

The survey results showed that the Mexico governance team did not cooperate well with the internal respondents because there was poor communication and relationship issues between the two groups. Once there is a lack of credible relationship between the management and the team on the ground, the performance in the organization deteriorates (Lock, 2009). In order for a project to be successful, there must be quality communication, which only exists when there is proper closeness and association among all stakeholders. The customers learned about the differences within the organization when the outcome was subpar. The function of the organization is to offer quality products and/or services to customers. When it does not deliver on its expectations, customers tend to begin to evaluate where the problem lies. The findings in this research highlight that the customers were unsatisfied with the governance and supported the decision of management to return the PMO onshore.

Implications of Tables 5 and 6

Tables 5 and 6 represent results of location and year based on two-factor ANOVAs. The results showed weak evidence for an interaction effect. Instead the evidence showed that PMs from Mexico improved vastly in the second year compared to PMs from the United States and that there were statistically significant effects for both

year and country. These are competitive responses in both cases. This could also suggest that better leadership from United States based management resulting from the backsourcing of PMO governance contributed to the improvement in survey results for Mexico-based PMs.

The ITO provider moved governance out of Mexico because of its low satisfaction ratings by customers. The PMs in Mexico began making improvements because of stronger leadership from United States based management and the potential business losses for nonperformance. According to the figures, for 2009, the gap between the means of the overall ratings was nearly half a point (0.45). The United States mean in 2009 was 4.57 whereas the Mexico mean in 2009 was 4.12. In 2010, the gap narrowed but was still a quarter of a rating point (0.25). The United States mean in 2010 was 4.61 whereas the Mexico mean in 2010 was 4.36.

The ITO provider was unsatisfied with the progress of projects undertaken by PM's based in Mexico. The PMs in Mexico responded by working harder to improve their management skills in order to salvage the situation and ensure the ITO provider did not lose out on opportunities in the market. The customers were unsatisfied with the business because it was not performing to their expectations. The fact that the Mexico PMO was not performing to customer satisfaction showed that there were noteworthy internal problems that led to poor governance. The main problem that leads to poor governance and low satisfaction ratings was poor communication between the governance team, PMs, and team members. Communication has always been a key factor in ensuring progress in organizations.

When management fails to integrate rational communication, projects fail to work as expected. Heerkens (2009) noted, "Good communication between the management and team members brings about trustworthy and realistic relationships among the stakeholders" (p. 113). The fact that the team members felt let down by the management showed that there was not a good relationship between the PMs and team members. Sometimes it is difficult for external stakeholders to understand what is going on within a business organization even if there are some apparent differences among team members (Deeprose, 2008).

When a customer detects poor performance, the blame is focused on the PMO. This is validated and seems clear given the high overall PM performance ratings. Team members cannot give their best when they are not supported by strong PMO leadership. Some might propose ideas to improve processes especially in their respective departments, but they may be ignored or marginalized by the PMO. Therefore, despite the fact that the Mexico PMs were trying to make improvements, they could not salvage the situation, especially if the PMO leadership did not give team members time to voice their ideas and maintain proper communication (Cooke, Tate, & Cooke, 2011).

Implications of Tables 7 and 8

Tables 7 and 8 indicate the results for overall satisfaction related to whether the PMs were certified or not. According to the results, there were no significant differences in level of satisfaction to show if a PM was certified or not. Table 7 demonstrates the results of the independent samples *t* tests of the null hypothesis that the means of overall satisfaction for clients and internal respondents did not differ across certified and noncertified PMs. Table 8 provides descriptive statistics for overall satisfaction ratings by

country and whether the PMs were certified. However, descriptive statistics indicated that while this result was true for each country, a comparison of certified and noncertified PMs across countries showed that respondents had much higher levels of satisfaction in the United States than in Mexico.

If certification works, then it should be a sufficient, but not necessary, condition for acceptable and good PM performance. One can receive good or poor performance from a noncertified PM but should not receive poor performance from a certified PM. A certified PM is an expert individual who specializes in offering professional PM governance (Deeprose, 2008). These experts have project management experience and can transform a poor project into a credible one. Noncertified PMs may have experience but lack professionalism to salvage a sinking project. This was the case with most of the projects in Mexico, where the ITO provider's clients were complaining that they were not satisfied with how the projects were being managed. The surveys did not differentiate between PM or PMO governance board performance in terms of satisfaction, and there was nothing on the surveys that specifically distinguished the two groups. Therefore, it could not be assumed that the dissatisfaction was wholly directed toward the PMs. Again, this position is validated by the high overall ratings the PMs received.

Initially, I thought that the projects had failed to satisfy the customers because of the fact that the PMs were uncertified. Collins (2011) stated, "When organizations employ uncertified personnel, it becomes somehow difficult to attain a strong competitive advantage" (p. 93). However, in this case, some of the uncertified PMs proved to perform extremely well and satisfied the customers due to credible performance. Moreover, some of the certified PMs were unable to satisfy the customers and internal respondents, which

meant they were unable to deliver. These findings supported my observation that these results were contradictory. This was the case in both the United States and Mexico. However, the United States demonstrated higher levels of performance than Mexico.

If PM effort/ability is normally distributed (low in the left tail and high in the right tail), then certification should cut off the left tail (Peterson & Søndergaard, 2008). The project might end up with a good PM who is not certified, but if certification works, the project cannot end up with a poor PM who is certified. Therefore, the means of the two groups should be different. The case in the United States is interesting because both certified and uncertified PMs were performing to the expected standards. According to the results, there was no massive difference between the projects handled by the two types of PMs. Again, a contributing factor was the PMO leadership overseeing the governance, which begs the question, is it the PM or the leadership that the clients were unsatisfied with?

Of course, certification is still worthwhile because of the anticipation of better performance, if not the reality of better performance (Elearn Limited, 2010). This is because certification is a marketing strategy. When shareholders look for PMs to manage their projects, they advertise the vacancy and several PMs apply. In pursuit of new business, the ITO provider provides perspective new clients organizational profile information on the number of PMP certified PMs, their level of educations, and years of experience as a PM. The shareholders always go for the best and most qualified with expertise and experience. It is difficult for uncertified PMs to apply to such vacancies because they do not have proof of their professionalism (Deeprose, 2008). Apart from experience and word of mouth, uncertified PMs do not have the papers or certificates to

prove their expertise. Therefore, it may be sensible for management and shareholders to use certified PMs because they know how to tackle tricky situations and can easily rescue a submerging project.

Conclusion

Chapter 4 presents the results of the 2-year survey review to determine if the management decision to return the PMO onshore was in fact the right decision. The findings clearly indicate that the management made the right decision to return the PMO onshore. The internal respondents clearly recognized this by showing support for the PMs. The internal respondents were the subject matter experts who were responsible for ensuring the projects succeeded. Clients also clearly supported the management decision to backsource the governance function, as they were ultimately the ones impacted by the poor performance of the Mexico leadership. It should be noted that, it was not that the PMs were unable to perform to the standards expected by the customers; rather they failed to deliver because their voices were not heard or acted on by the PMO leadership based in Mexico.

The PMO leadership in Mexico was perceived as being timid, laidback, lacking a sense of urgency in pushing for project deliverables. To some extent, this is a cultural issue as well. It is extremely difficult for a project to be successful if good communication does not exist between leadership and the rest of the project team. This is especially true when it comes to leadership and the PM as it creates a situation where the PM may be reluctant to act if she believes that she will not have the support of leadership.

Another key aspect described in chapter 4 is the fact that the projects were managed by both certified and noncertified PMs. There was not a significant difference in

the client's opinion between the performance of certified and noncertified PMs. Internal respondents however, did perceive a difference in performance between certified and noncertified PMs. This is significant as the internal respondents are the ones required to execute on the direction of the PMs. The performance of PMs in the United States was better than that of PMs in Mexico by nearly .5 a point. Additionally, there were nearly twice as many certified PMs in the United States verses Mexico. This could be expected as the professional practice of project management has been established in the United States for over 45 years through the efforts of the PMI.

Nevertheless, it seems better for stakeholders and management to employ certified PMs because of their perceived professionalism. It is also significant for PMs to note that organizations perform well when there is a good association between management and workers. Good associations are mostly brought about by credible communication among stakeholders.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

Chapter 5 presents a detailed discussion of the results of this study, the implications of those results, and recommendations for future study. The subject of this study was an ITO organization that had made a management decision regarding the governance of its PMO. Specifically, governance (or management oversight), which had been offshored to Mexico the previous year, was brought back onshore with oversight provided by a United States based management team. The decision was based solely on input from clients who were very vocal about their dissatisfaction with performance since the governance function was offshored a year earlier. No analysis or other investigation of performance issues was considered even though surveys of PM performance were available for projects completed during the time governance had been offshored to Mexico.

In this study, I set out to determine if the performance survey results of the PMs working in the PMO during the time governance was located in Mexico could support the leadership decision to return governance to the United States management team. First, I examined key questions from the surveys to see if there were any issues that were immediately apparent in the area of performance. Additionally, the study compared performance between the United States and Mexico-based PMs and overall performance

between the 1-year period that governance was provided in Mexico and the 1-year period that governance was returned to a United States based management team.

Discussion

The ultimate aim of this study was to employ performance surveys for PMs to assess a management decision of an ITO provider to backsource the PMO from Mexico to the United States. The surveys were conducted for a period of 24 months with the first 12 months coming prior to the preliminary decision to return the PMO onshore and the last 12 months of the survey following that decision. The function of the analysis was to compare the two periods and to find out if there was a noteworthy statistical dissimilarity in the performance ratings. The study presented a possibility of two outcomes: A strong (or positive) statistical distinction favoring the second 12-month period would suggest support for the management decision to backsource the PMO onshore. A feeble, or no momentous, distinction in the ratings would not support the decision.

Survey participants included the clients of the ITO provider and internal SME stakeholders. The participants were committed to taking part in assessment of the PMs' performance. The function of the PMO governance board was to offer project management processes, direction in defining scope, and executive support for PMs throughout the duration of a project. The problem that I sought to respond to was, Can the survey outcomes support the management's verdict to return the PMO to the United States? The study also aimed at determining if a statistically momentous variation existed between the two survey phases that would either prop up or disprove the management decision.

It was in late 2008 (effective January 2009) when the management decided to offshore the PMO to Mexican IT project workers because of their low labor rates. However, the ITO provider conducted a yearly customer meeting in which a significant number of clients openly articulated their worries that the project teams were not meeting their demands. They noted that their dissatisfaction began a couple of months after the decision was made to move governance offshore. The customers' concerns were the primary motivation behind the management decision to return the PMO to the United States.

Significance of the Study

This study is as relevant to scholars and practitioners as it is to me because it issues insight into the perception of project governance, performance, backsourcing, and client discernment. It provides a broader understanding of the concept of project management beyond a focus on performance. Another key factor in this study was the customer's voice, which is highly relevant to project management. The management decision to onshore the PMO purposely addressed customer concerns without making any assessment of those concerns.

Customers were the reason why management first decided to establish the ITO organization in Mexico. Customers' concerns must be taken into consideration because without them an ITO organization will cease to operate. The ITO's projects are aimed at making a profit, which can only happen if quality products and services are offered to customers. This study is relevant to the fragmentary discussion within the project management field on the subject of project team governance and customer discernment versus project results.

The study is also significant to other business projects because it shows the significance of customers' voices (Seguino, 2009). It enlightens the stakeholders of different projects and is important for conducting surveys to determine the perceptions of customers concerning organizational products and services. The study is also important to scholars and practitioners as it identifies a gap in knowledge regarding the offshoring of PMOs and governance.

Basis of the Study

The ITO in this study offers a full collection of services for the IT outsourcing industries such as hosting client applications, offering technical support, and accommodating client-owned paraphernalia at one of six large data centers. The main function of the virtual project teams is to undertake service implementation and maintenance. Virtual project teams are the key performers in the ITO organization as they are responsible for serving customers and keeping them satisfied.

Advances in technology and the use of low-cost communication devices have significantly augmented the employment of virtual project teams across many industries (Schniederjans & Zuckweiler, 2004). The team members who serve customers face performance issues related to relationships and trust. According to the surveys, the PM's did not have a good relationship with the PMO established in Mexico, which led to a lack of trust between the two. Lack of trust can easily destabilize other measures taken to ensure the success of virtual work activities. Furthermore, nonverbal prompts are essential to building trust. The Mexico based PMs lacked credible verbal and nonverbal communication with the virtual teams, which was exacerbated by cultural differences.

PMOs are always responsible for offering consolidated supervision for both procedural methodology and governance of project scope. This is true not only of ITO organizations but also other organizations dealing with different products and services. The PMO directs management of projects (Palvia et al., 2010) and requires the development of a governance board on which executive-level stakeholders provide leadership and administration to project teams. The governance function provides project oversight to ensure that capacity definition, funding endorsement, and decision-making authority extends to the PM to engage in the activities essential for carrying out the project (Maznevski & Chudoba, 2000). A governance board is responsible for creating bonds with clients through everyday communication. The association between the client and the governance board is highly influenced by the relationship portrayed by the client or the perception of how the project executors are performing with respect to project deliverables.

Essentially, the leadership offered to the PM and team must be judicious, efficient, and concurrent with the expectations of the client and the settled on deliverables. The communication feature in any organization establishes the outcome of the associations. If the governance of the organization illustrates appropriate communication among participants, it becomes easy to meet the expectations of the client. On the contrary, unproductive communication among virtual team members and leadership is the main cause of poor performance and lack of punctual completion of projects (Furst et al., 1999). Additionally, poor associations between team members and leadership within the organization are regularly reported in different studies as the chief

contributing features to communication problems. Deficiencies in relationships and trust lead to miscommunication with the PM, as well as the entire governance board.

The ITO organization mentioned in this study decided to offshore the governance of its PMO to Mexico in January 2009. Cost savings linked to lessened labor rates were the primary contributor to the decision concerning using the IT project experts in Mexico instead of paying the much higher rates for the same professionals in the United States. Barely a year after settling on that decision, the ITO senior executive reversed the decision by bringing the PMO management back onshore. Management settled on this decision after listening to verbal complaints from clients concerning the ineffectiveness of the PMO under the offshore governance board. Dissatisfaction as expressed by clients eventually led to the decision in December 2009 to bring the governance of the PMO back to the United States effective January 2010.

This study focused on establishing if there were performance problems connected to the PMs that added to customer perceptions of the offshore PMO in Mexico. This study also examined the outcomes of the survey for the 12 months (second phase) that followed the return of the PMO to the United States to determine if PM performance was enhanced. PMO control is a well-established business unit that offers standardized supervision, methodologies, and processes for project management. However, efficient communication is the operator behind the standards issued by a PMO. Among the primary difficulties that hold back implementation of PMOs include unproductive communication, poor PMO leadership, and deficiency of support from senior management.

The purpose of this study was to respond to questions such as, is there a significant difference between the overall performance results for all PMs between the two 12-month periods? Is there a significant difference between the performance of the United States based PMs and of PMs residing in Mexico? is there a significant difference in performance between the United States and Mexico-based PMs for the two 12-month periods as reported in the surveys? and is there a significant difference in performance between PMP-certified and non-PMP-certified PMs?

This survey had a number of suppositions and constraints. There were many suppositions that could be made in this study, but the main ones included client-provided survey results based only on the performance of the PM for the single project surveyed. The PM worked under the direct power of the PMO headship (Levina & Ross, 2003). Moreover, as a function of the PMO-established methodology, the assumption was that the PMO governance board provided regular oversight for the PM and feedback on progress to the client throughout the duration of the project.

Lee (2002) stated, "Changes in capacity had to advance through the transformational control process and gain endorsement from the client" (p. 183). The final assumption was that survey retorts came from either internal resources, customers, or both (Kim, Cheon, & Aiken, 2005). The survey responses determined whether the assumptions were right or wrong. However, the assumptions also posed limitations to the whole survey process. To begin with, the study was restricted to the ITO provider and a solitary administration verdict by that provider. Also, the surveys did not offer a methodology to distinguish between PM performance and PMO oversight.

Additionally, the implementation surveys on a per-project starting point were centered primarily on client evaluations. Lee (2002) added, "Taking into account that the clients already distinguish the offshore project administration as derisory, it could possibly have predisposed the survey outcomes" (p. 213).

Understanding Information Technology Outsourcing

ITO refers to allowing another company to undertake the maintenance and support of their information systems (Kern & Willcocks, 2002). ITO can involve anything from uncomplicated remote application installs to server hosting, technical support, continuance, upgrades, and future planning for augmented expansion (Jurison, 1995). Client-based organizations are putting a noteworthy quantity of trust and faith in the ITO as it relates to managing and offering fortification over its applications and data. The current business environment exceedingly relies on accessibility and timely access to data.

This implies that clients expect that their business will not experience losses when moving their IT processes to an ITO provider. ITO can be distinguished in terms of domestic (to a company within the same country of the outsourcing company) and international (to a firm outside the country of the outsourcing company) (Kim et al., 2005). Note that global outsourcing is mounting in popularity first and foremost because of the economic advantages of lower wages in certain foreign countries. This has caused outsourcing to move from a premeditated decision to a strategic decision for many companies due to the cost savings linked to receiving leveraged services.

PMI has outlined organizational standards that help in the administration of projects. These standards have been established since 1969. PMI described a PMO as an

organizational unit or entity tasked with a variety of responsibilities associated with the federal and coordinated administration of projects under its sphere (Iacovou & Nakatsu, 2008). The wider responsibility of a PMO is oversight for assigning resources on a per-project basis to attain corporate objectives and make the most of balancing the needs of stakeholders. Kern and Willcocks (2002) noted that one of the main concerns of a PMO was the "concept of prioritizing the use of technical resources to gratify stakeholder requirements and achieve most favorable overall results as set by prearranged parameters" (p. 200).

These parameters characteristically consist of hard date limitations, regulatory conformity, or financial inducements both positive and negative (Kasper-Fuehrer & Ashkanasy, 2001). This enterprise point of view requires sophisticated communication, harmonization, and cooperation between senior administration and department heads. As Deeprose (2008) noted, "In the world of project management, this level of inter-departmental cooperation is referred to as project or program governance" (p. 179).

Understanding PMO and Project Performance

PMOs offer configuration, organization, techniques, and equipment for the supervision and oversight of projects. PMO tasks can vary and greatly depend on the maturity and proficiency of an organization. PMOs are often tasked with ensuring project administrators have a high aptitude by offering services ranging from governance, administrative support, and coaching of PMs to being a full-blown project delivery center (Kern & Willcocks, 2002). PMOs have numerous responsibilities, the most noteworthy of which is ensuring proficiency management of various projects to ensure success. Lack of this kind of competency means the office is not up to the task assigned. Superior project

standards established by the PMO are positively linked to project performance. Furthermore, organizations that have PMOs record higher project performance than those without. A high-performing PMO mirrors advanced performing projects within an organization.

Understanding PMO Governance

Different organizations display different kinds of project governance because the latter means different things to diverse organizations depending on their characteristics and dedication to project administration as a process device for accomplishing work. Governance facilitates group decision-making based on processes and achievement factors as determined by the group (Kim et al., 2005). Governance should not be taken for granted; its leadership of workgroups that undertake outsourced work for an ITO is imperative to clients. Governance ensures the fortification of PM tools and services and serves their best interest. Project governance encompasses a set of associations between a project's administration, its sponsor, its owner, and other stakeholders. In other words, project governance is ensures project triumphs.

According to Lacity and Rottman (2008), "Poor governance leads to poor project performance while effective administration leads to quality performance." (p. 67). The ascendancy process, centered on PMI standards for the sake of performance, follows a three-part model that includes inputs, process, and outputs. These associations form or coagulate on the governance board as each stakeholder competes for resources, funding, and timeline considerations.

Additionally, IT projects follow a three-part model that includes management capability as the input, process quality as the process, and performance of the projects as

the output. The three add up to the three-level capability quality performance theoretical facsimile, which is indispensable in examining project performance and outcomes. According to Martin et al. (2007), "Quality, duration, and cost are the three primary consequential variables from a project which when measured help find out the performance of the project" (p. 301). These factors play a key role in determining additional factors such as stakeholder contentment and teamwork, which are equally momentous in assessing project performance.

Project Virtual Teams

Virtual project teams are teams on which at least 50 percent of members are not occupants of the same physical setting and may be disseminated across different time zones. The function of this team, as noted earlier, is to conduct its performance entirely through electronic technology. Leenders, van Engelen and Kratzer (2003) mentioned "the use of virtual teams has been greatly augmented by progress in technology and lessened costs of communication equipments" (p. 156). Virtual teams are the reason why a project is run from the initial step to conclusion.

One of the primary challenges that the PMO of an organization faces is optimizing the worth of virtual teams in a manner that leads to superior project accomplishment and performance. Moreover, the use of virtual teams also raises some concerns associated with performance issues. These issues occur because of exterior concerns held by team members (Levina & Ross, 2003). The main issues, as noted by the authors are relationship and trust. Lack of trust can destabilize every other safety measure taken to ensure successful virtual work engagements. A lack of relationship and trust in the organization leads to poor communication, which consequently causes damage to the

performance of the project. Trust is imperative in building positive relationships among distinct project stakeholders, and communication is noteworthy in ensuring efficient working relationships. Cultural distinctions augment such kinds of challenges especially when a project is governed by a foreigner who does not understand the cultural practices and aspects of the new environment. This is evident between United States clients and non-United States PM teams or leaders.

Training and learning enable virtual teams to successfully communicate in a way that enhances teamwork and effectiveness. Improvements in technology and training of virtual team members also ensure there is successful development of relationships and appropriate communication in an organization.

Offshoring IT Projects

For more than a decade, organizations have steadily moved toward offshore outsourcing because of the accessibility of exceptionally skillful and brilliant workers at low-price labor costs, in addition to augmented business opportunities as a way of increasing their global competitiveness (Lacity & Rottman, 2008). Nevertheless, the expected cost savings anticipated by organizations are not often realized because of the hidden costs of challenges like capability disparities, inadequate comprehension of IT professionals in foreign countries, and cultural and communication differences.

Lacity and Rottman (2008) stated, "The use of PM's perception on project performance along with client perceptions and evaluations is crucial in offering the actual depiction on the performance of the various projects undertaken" (p. 164). In most cases, clients perceived that the cost of IT projects that require client-specific acquaintance with IT systems or business processes was significantly higher since the effort of managing

knowledge asymmetries between vendors and clients was also high (Lacity & Rottman, 2008). This could present an explanation for the negative client perception concerning the performance of the PMO located in Mexico.

Methodology

The underlying goal of the surveys was to issue feedback to the PMO governance board and the PM who led the project regarding the client's thoughts on performance related to project delivery. The study employed available surveys of both customers and internal team members to gauge process and overall satisfaction with the results of stakeholders. The research design can be described as a quantitative analysis of the surveys that contrasts the general satisfaction of customers and internal team members across countries, periods, and levels of training of the PMs who managed their projects. The purpose of the research design was to establish a technique for the scrutiny phase that was mostly experimental or survey based.

In early April 2011, there was an application for consent to use the study outcomes attained during the previous 2 years. The request made by management was surrendered to the senior vice president of the ITO's PMO. During the same period of the request, numerous meetings were conducted with the group director for the PMO administration, and details were settled on as to what could be shared. The primary concern was the privacy of individual PMs, followed by the process of sampling the population. The target population in this case was the theoretical population of all latent customers of the ITO provider and all latent team members at the ITO organization.

The sampling outline for drawing inferences concerning the supposed populations comprised the completed surveys taken during the 2-year period. The concept of sample

selection prejudice only emerged with respect to whether the sampling outline signified an unsystematic sample of probable customers in the same or different years. The ITO providers' choice to move its PMO functions out of Mexico, back to the United States after 2009 informed the likely outcomes of the statistical tests for Research Questions 1 through 3 but did not raise any sample selection concerns.

This research consisted of 216 completed projects for the 2-year period between January 2009 and December 2010. PMs residing in Mexico headed 130 projects, and PMs residing in the United States headed 87 projects. Out of the 216 projects, 146 were completed in 2009, and 70 were completed in 2010. In 2009 PMs living in Mexico headed 86 of 146 total projects whereas PMs residing in the United States headed the remaining 60 projects. In 2010 PMs residing in Mexico led 44 of the 70 total projects, and PMs residing in the United States led the remaining 27 projects. This ratio was as expected due to the lower charge-back to clients for PMs who resided in Mexico. It should be noted that while the completed number of projects for 2010 was less than in 2009, the total number of in-flight projects for 2010 was only 12 fewer than the total at the close of 2009. In other words, there were more projects going on but not completed in 2010.

The PMs surveyed for this study worked remotely and were geographically dispersed across the United States and Mexico. They had full knowledge and understanding that the surveys they participated in were a reflection of the work they performed on their recently completed projects. This research was centered on an existing instrument in use since 2002 and was subjected to the rigors of multiple reviews and revisions based on input from clients, PMO leaders, and PMs. It was reviewed annually

during a weeklong boot camp of training and development in which all the tools and instruments employed in the administration of the PMO and projects in general were carefully reviewed for clarity. Team exercises included using and analyzing all of the tools in the end-of-project survey. In order to gain the desired results from the survey, clients came up with a number of questions that the respondents had to answer and were included in the surveys.

The questions were straightforward and required respondents use predetermined answer choices. The rating system issued by the client included options such as *strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree*, and *not applicable*. However, the last question requested the respondents rate their overall level of satisfaction with the performance of the project manager. The respondents had to respond with either *satisfied* or *not satisfied* regarding the performance of the PM. The supplementary survey variables used as independent variables in either the chi-square tests or two-factor ANOVA analyses included the date of the project, the country of the PM, and a binary variable indicating whether the PM had undergone a training program.

The data collection for this study was based on existing data from PM performance surveys and covered the 24 months between 2009 and 2010. At the instruction of the group director for the ITO-PMO, a project analyst removed the PMs' names and other identifying information from the file to maintain anonymity. A copy of the file was provided to the researcher of this study. In order to analyze Research Questions 1 and 2, *t* tests were usually used to determine differences across time periods

and across countries. At the same time, the chi-square test to determine quality of performance was also implemented.

Research Question 3 directly addresses the possible confounding factor of date of project completion on PM location. Therefore, the appropriate analysis was a two-factor ANOVA with date of project completion and PM location as the factors. Given that the responses to the overall internal and customer satisfaction questions were not normally distributed, the nonparametric analysis analogous to a two-factor ANOVA was Freidman's test. Specifically, Friedman's test compared the ranks of the responses to the overall satisfaction questions and did not require a normal distribution (Ward, 2000). One method of obtaining Friedman's test was to rank the responses to questions and then apply a two-way ANOVA to the ranked data. For Research Question 4, a chi-square test was used to compare the distributions of responses across PMs who are certified and those who had not received certification.

The validity and reliability of the study were concrete because the surveys were administered at project completion so recall bias was not an issue. Neither the survey respondents nor the PMs they assessed were directly identifiable in the survey. Moreover, this study benefits the ITO provider's PMO as its purpose was to comprehend performance from a customer perspective through the comparative analysis of the survey questions and a discussion of how clients perceived the work performed from the various groups involved.

Results

The findings of the study indicated that management made the right decision to return the PMO onshore. The first group in support of the decision was the internal

respondents. According to this group, the Mexico projects were not governed effectively, which caused poor project performance. It was not that the PM was unable to perform effectively to the standards expected by the customers but that there was a lack of leadership from the Mexico PMO. The second group of respondents in support of the management decision was the customers, who felt the impact of the project through its products and/or services.

The problem was that the PMs were not willing to integrate ideas or suggestions of the internal personnel as they lack confidence that the PMO governance team would support them. It is extremely difficult for a project to be successful if there is a lack of communication between the governance board and team members (Cooper & Schindler, 2008). It should be noted that good communication between management and team members brings about trustworthy and realistic relationships among all people within the organization. Customers come to learn about poor communication between PMs and team members through poor project performance. This builds mistrust and leaves the customers frustrated.

The results also indicate that the projects were managed by both certified and noncertified PMs. However, it is interesting to note that there was no difference perceived by the clients between the performance of certified and noncertified PMs. However, internal respondents did note a difference. According to the outcomes of the survey, the performance of the PMs in the United States was better than that of the PMs in Mexico.

Implications of the Study Results

As observed in the findings of this survey, the respondents supported the decision to return the PMO onshore. These findings have a number of implications for the study of management and business. To begin with, poor governance and meager communication lead to poor project performance. According to Lock (2009), "The task of project management and governance lies in the hands of the PM and the project management office" (p. 87). This office is responsible for forming the governance board, which also plays a key role in running a project. Quality governance leads to credible performance, which satisfies both the client and the customers. According to the findings, the PMO of the ITO organization was not up to the task because it did not satisfy customers who participated in the earlier surveys. Implicitly, there was poor governance due to a lack of leadership as perceived by the clients.

Lack of teamwork means that each person does as he or she desires, without regard for what others are doing. There is no motivation or urge to perform; therefore most of the team members do not give their best. Once each team member separates, it becomes difficult to meet mutual organizational objectives. One may be lazy whereas the other is hard working. When hard-working employees see others idling and not working as expected, they may become lazy or feel misused. However, when an organization embraces teamwork with good relationships among the workers, it becomes easy to achieve organizational goals and meet the expectations of customers because there is good communication and the ability to help each other.

Peterson and Søndergaard (2008) stated, "Good communication in an organization simply means the workers being close to their supervisors to the extent of

sharing personal issues and being able to get help" (p. 201). It means management moves from spending time in the office to visiting workers and talking to them as they work. Good communication means management becomes close to workers through conversing, advising them on various issues, allowing them to share their ideas concerning the advancement of organizational goals, and giving tips on how to meet their individually assigned goals (Peterson & Søndergaard, 2008). Good communication brings about team spirit and encourages team members to work even harder. Communication is a technique for expressing ideas effectively.

When a PMO employs good communication with clients and PMs, it becomes easier to meet the project goals and increase the competitive advantage of an organization. The ITO organizational projects that were governed by different PMs lacked this kind of communication. The PMs who were responsible for these projects felt a lack of support from the Mexico PMO leadership. The Mexico PMO expected to increase PM performance and satisfy the customers without first establishing good communication and positive relationships with team members. PMs do not need to be overly authoritative or commanding as long as governance procedures are in place and followed.

The second implication of the results attained in this study was that cheap labor can turn out to be expensive. The ITO provider's client moved from the United States to Mexico to seek PMO leadership over projects. Out of the 216 projects, 130 were headed by PMs who resided in Mexico, and fewer than 70 were governed by United States based PMs. The main reason for deploying numerous projects to PMs from Mexico was that they required relatively lower wages than United States based PMs. However, the results

suggested that the respondents were unsatisfied with the performance of most of the projects. According to the results attained, most of the projects led by PMs from the United States performed better compared than those managed by PMs residing in Mexico.

Overall performance was markedly increased when PMO governance was moved back to the United States. This suggests that if all 216 projects were led by PMs from the United States and governed by a United States management team, customer satisfaction might have increased significantly. The ITO provider might have made more profit due to the quality of project performance and customer satisfaction. In fact, the ITO provider lost a number of large accounts when it announced it would be offshoring the PMO governance.

The study suggests that it is worthwhile to have expensive PMs who can deliver versus cheap PMs who are unable to meet the requirements of the organization or deliver for the client. An organization faces massive losses if it becomes unable to generate quality products or services as it diverts customers to attaining similar products or services elsewhere. This can be extremely expensive compared to paying PMs a handsome amount of money to ensure a project is governed well and that the end products or services are satisfactory for both customers and team members.

Lastly, the study suggests that local PMs are more suitable than foreign PMs for any kind of project. To begin with, they easily adapt to the environment and culture of the region because they are part of it. They can easily establish relationships with clients because they have several things in common. Local PMs know how most local workers behave, and thus it is easy to handle and be close to these workers. Foreign PMs usually

take a long time to adapt to the new environment and an even longer time to learn and adapt to the regional culture and practices. This means that outsourced PMs may take longer to show progress due to the challenges they face as outsiders to the country.

The United States has an advanced level of education, meaning that most of its PMs are more highly qualified than PMs from other nations such as Mexico. Most of the projects handled by United States based PMs performed better than projects handled by PMs from Mexico. United States based PMs adapted faster to the project and its expectations and performed to the satisfaction of the customers.

When first developing the program for how a project will be led, clients have the option for hiring an onshore versus offshore PM. An offshore PM lowers their cost at the end of the project. Therefore, the ITO provider presented offshoring of PMO governance, which provided the overall leadership for running the PMO, as saving the clients' money. However, clients had no choice after the governance was offshored in how the ITO would be governing the PMO functions.

Recommendations for Further Research

The field of project management entails many aspects, some of which are covered under this research. Other areas require further research. In regards to this study, it was clear that the clients had issues with the project and/or PM performance. The only recourse clients had was to voice their lack of confidence in the PMO leadership in Mexico. However, the PMs must also take some responsibility for not following very basic project management principles. Had only a few of the following recommendations been heeded, performance would have been much higher on a per-project basis.

Solidifying Project Details

Before the PM initiates a project, it is critical to that he or she have buy-in from all major stakeholders. The PM must comprehend his or her interests, have anticipations, and be familiar with the manner in which the project's success will be determined (Mehta, 2010). The PM must also make sure that the project scope is noticeably agreed to, define a project plan, and confirm that the goals and principal elements are evidently described and closely allied. The PM should also develop a quantifiable and effective evaluation success criterion that includes accomplishing activities on schedule, attaining budget targets, ensuring product functionality is suitable and acceptable to the customer and making sure administrative and/or industry regulations are met. As observed in this study, many of the PMs never met these requirements because the customers were not satisfied with the measurable success criterion.

Identification of Project and Team Requirements

Not all PMs employed by the ITO provider's clients defined the project and team requirements. At the start of a project, PMs must have a strong plan that team members can implement. This means working with the subject matter experts to identify the specific needs of their area of responsibility. An effective project team is a working unit of personal parts involved in a common goal attained through the prearranged application of coalesced skills.

According to Heerkens (2009), teamwork leads to suitable communication that in turn leads to attainment of organizational goals. The initial step to team victory is preliminary organization: bringing together and organizing obtainable resources that can work jointly through the incorporation of personal skills, personalities, and talents. The

PMs are required to align those skills, personalities, and talents with suitable project needs (Heerkens, 2009). They must ensure each person working on the project is clear concerning his or her tasks and what he or she must offer upon completion.

Serving as Project Leader

PMs must develop credible and positive skills that allow them to act as an instructor and/or counselor to all team members. PMs should also be the lead when it comes to attaining input from the project team and key stakeholders and acquiring their buy-in. PMs are fundamentally the commanders of the ship, meaning that they need to navigate the bumpy waters before them.

Additionally, PMs are expected to motivate team members to follow them through disorderly times and calm times as well. If PMs do not have influential leadership skills, they may not have the capacity to triumph over challenges facing the project. This study clearly showed that most of the Mexico PMs employed on ITO projects were not up to the task as they never possessed or displayed the leadership skills mentioned, meaning they faced challenges related to client perceptions of overall performance.

Defining Critical Project Milestones

It is important for PMs to recognize defining moments throughout a project. They can offer a life cycle of the scheme through four primary phases: initiation, planning, implementation, and closure. PMs must undertake a real assessment at the end of each phase. They also must ensure that every deliverable is closely examined. From the product parts to the technical documents to the project scope, PMs require all of the relevant components to ensure the products are consistent with the anticipated results of

the project. Deeprose (2008) mentioned that the manufactured goods must be lined up with the quality the project's customers are anticipating. These highlights will assist the PM not only in mitigating project risk and monitoring project alteration but also in preparing to react to any kind of difficulty and ensure that each piece is perfectly accomplished.

Keeping the Communication Lines Open

One of the most decisive steps in the process of managing a project is ensuring that communication lines are open. PMs must be the operators of this communication structure. They must keep a communications plan and uphold it. Throughout the project, communication must be reliable, truthful, open, and clear (Patel, 2011). Poor communication was one of the key issues that led to poor project performance in this study. Communication was lacking in the ITO organization due to the actions of the Mexico PMO governance team. Many of the projects failed to meet expected performance levels because of poor governance and lack of realistic communication. The PMs failed to maintain contact with all principal stakeholders and team members during implementation of the projects.

The significance of communication to the success of a project is enormous. Vigilant communication planning and establishing the right expectations with the entire team of project stakeholders is exceptionally important (Cooke et al., 2011). Early one-on-one communication among the project team to understand team dynamics and customer expectations are important to the success of a project. Throughout their careers, PMs must reinforce their belief that the success of a project is a matter of efficient communication that must be continuously strengthened.

Efficient communication entails both sending and obtaining information. Keeping this in mind, a proper description of project communication management might be as follows: “Project Communications Management engrosses the procedure needed to make sure appropriate and suitable production, compilation, distribution, storage, and decisive disposition of project information” (Lee, 2002, p. 121). Therefore, communication is the means through which information is switched over between entities. The communication process entails numerous components such as the message, encoding, source, channel, receiver, decoding, noise, feedback, context, and shared meaning. One key aspect of communication in organizations is that it is interactive, meaning that communication plays a key role in establishing relationships and sharing ideas in the organization, which in turn advances performance.

Upholding Cultural Aspects of Project Management

The United States contains many professionals with the knowledge and expertise to run large projects and make sure they perform well. These people understand the cultural requirements and expectations of the nation and can easily integrate them into the organization. It is important to employ such PMs, especially if the projects are undertaken in the United States (Tjosvold & Leung, 2004). They do not need time to learn about the culture and the customs of the people in order to display credible performance. This is in contrast to the outsourced PMs who come to the country to manage projects, as they need a long time to learn the culture and customs of the people around in order to offer them what they expect.

The more time PMs take to learn about the cultural practices and expectations of the people around them, the more they delay the organization from performing well.

They may take up to a year to start meeting the expectations of the customers and their clients. According to this study, the ITO provider offered outsourced PMs from Mexico because of the lower cost. Compounding any problems associated with offshored PMs was the offshoring of the PMO governance function. Nevertheless, the ITO provider failed to understand that those decisions could end up being expensive. In order for a project to have the best outcomes, its needs must be met. Among the project requirements are quality management (Mehta, 2010). Local managers can more easily combine and create reliable teamwork with local workers than with foreign managers. This is because local managers understand the team members well, and some are their friends outside of work. A good relationship between managers and workers leads to quality performance, which in turn leads to customer satisfaction. Outsourcing is good because it is cheap, but it can become expensive, especially if the project is not meeting customers' requirements. Managing to those requirements requires effective leadership and project oversight.

Maintaining Professionalism in Project Management

As observed in this study, the ITO provider employed both certified and noncertified project managers both in the United States and in Mexico. Both certified and uncertified PMs worked effectively as noted by the high ratings. Clients expect organizational projects to generate quality products or services (Ng & Coakes, 2013). However, when projects are not delivered as expected, customers conclude that the performance was poor and demand answers. As overall performance ratings were above a 4 (out of 5), the problem appears to rest somewhere other than the PMs.

Project management experience was shown to be extremely important to clients and the success of projects. Some of the PMs who displayed quality performance had

substantial experience, about 10 years on average, while those who displayed poor performance might have had no credible experience. Quality project management requires personnel with high levels of experience, which enables them to handle all types of situations from simple and straightforward decisions to complex and tricky decision-making processes. Reiss (2006) stated, "It is nevertheless significant for shareholders and managements to employ certified project managers because they have the knowledge and expertise to handle tricky situations and salvage sinking projects" (p. 131).

An individual who spends sufficient time in a classroom studying how to manage and handle projects is different from an individual who knows how to manage a project simply because he or she sees another person doing it (Reiss, 2006). A PM is an individual has substantial knowledge and expertise related to running a project. Such an individual has undergone many situations pertaining project management. They have theoretical knowledge about running a project as well as practical knowledge from experience. This gives them the confidence they need to run a project and ensure it succeeds. Such PMs are very different from PMs who learn from observing other people manage projects or are simple new to the field.

PMO Governance

It is also significant to understand that organizations perform well when there is good association between management and workers. Good associations are mostly brought about by credible communication among stakeholders. PMO leadership needs to manage by example. They cannot expect PMs to the manage client expectations if they lack confidence that they will receive support from the PMO governance team. It is a partnership that requires everyone performing their assigned roles.

The governance team has the responsibility to hold all stakeholders accountable to delivery of the agreed to project scope. The PM implements what has been agreed to and manages any deviations to the approved plan. PMO leadership must provide oversight for the projects to avoid project scope creep or unauthorized changes to the plan. Changes in scope can be very costly to both the client and the ITO.

The clients in this study expressed concern that projects were not being delivered as planned. However, they were also the initiators of the majority of the changes. This typically is the result of missed requirements during the initial scoping of the project. Often the PM discovers these un-scoped requirements during the planning or implementation phase of the project. Scoping of a project at the ITO provider in this study is due by a pursuit team that is a branch of the sales organization. The governance team normally has the responsibility for ensuring that the project deliverables are properly identified prior to assigning a PM. However, it is understood that changes could happen during planning as more detail on system requirements are discovered.

From a leadership perspective, the PMO governance team must lead in setting client expectations and provide cover for the project team when clients demand products or services that were not scoped. In most cases, it would be best to convince the client that changes should be made after the agreed to plan is implemented. This is not always possible depending on whether the change requested is a precursor to an already agreed to deliverable.

Conclusion

This study used the performance surveys for PMs to analyze a management decision of an ITO provider to backsource the PMO from Mexico to the United States. The surveys were conducted for a period of 2 years, from the 12 months before the decision to return the PMO to the United States office to the 12 months that immediately followed that decision. The analysis compared the results of surveys conducted during the two periods to determine if there was a significant statistical difference in the performance ratings. The results may have two different implications: A strong or positive statistical difference favoring the second 12-month period would suggest support for the management decision to backsource the PMO to the United States. On the contrary, a weak or no significant difference in ratings would not support the decision. Supplementary contributing factors could be whether the PM holds PMP credentials and in which country the PM resides.

The findings clearly indicated that the management made the right decision to return the PMO onshore. According to the internal respondents, the projects were not run effectively, which was the reason for poor performance. It was not that they were unable to meet the customers' standards; they failed to deliver because they did not have the opportunity to air their concerns about the progress of the projects. The problem was that the PMO was not ready to integrate the ideas and suggestions of the internal personnel. It is extremely difficult for a project to be successful if there good communication between the stakeholders is lacking.

The results also suggested that there was no significant difference between the performance of certified and noncertified PMs in both the United States and Mexico.

Some of the noncertified PMs managed to satisfy the respondents whereas some of the certified PMs failed in this regard. The results have a number of implications for business management. First, poor governance of a project will always lead to poor performance because poor governance fails to employ key management strategies to ensure good communication, associations among workers and leaders, and teamwork. Second, outsourcing project management work because of lower costs is not always appropriate because in most cases it turns out to be costly.

There are a number of recommendations for further research. Suggested topics include offshore PMO governance, solidifying project details, identifying project and team requirements, serving as a project leader, defining critical project milestones, and keeping communication lines open. Others include upholding cultural aspects of project management and maintaining professionalism in management of projects. These were key factors that the PMs who managed the projects in this study failed to implement and the PMO governance board failed to provide oversight on. These topics are useful for further research pertaining to project management and should be considered in the future when handling other projects.

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APPENDIX A. PERMISSION TO USE PM PERFORMANCE SURVEY RESULTS

From: Mora, Vicente
Sent: Friday, August 05, 2011 9:00 AM

To: levesque@levesqueassociates.net
Cc: Lively, Roger
Subject: Permission for William Roger Lively to use PM survey results for years 2009 & 2010.

William Roger Lively is granted permission to use the research data provided to him in file "PM Surveys_Rogers_Dissertaion_NoName .xlsx". This file is an extract from the main database related to 2009 and 2010 Project Manager surveys. The file contains no names or other identifiers for the Project Managers that were surveyed.

<<PM Surveys_Rogers_Dissertaion_NoName.xlsx>>

The fields contained in file PM Surveys_Rogers_Dissertaion_NoName .xlsx" include:

ID Internal sent Internal average Project Name Internal received Client sent PMP Cert (Y/N) I1 Client received PM Location I2 C1 Client average Project close date I3 C2 Survey Release date I4 C3 Survey close date I5 C4 Survey type I6 C5 Reminders I7 C6 Status I8 C7 Results report I9 C8 Comments I10 PO

Mr. Lively is free to use any or all of the fields and the related data however he deems appropriate for his research paper. It is understood that Mr. Lively's use of the data is for the purpose of analyzing the results in partial fulfillment of the dissertation requirements for his Ph.D. As the PMO Director, I affirm that collection of the data was my responsibility as a function of the Governance Board and that I have the authority to grant Mr. Lively permission for its use.

Very Sincerity,

Vicente Mora, PMP
Group Director
ITO – Portfolio Management Office

APPENDIX B. SURVEY INSTRUCTIONS

PMO survey input form

During the Close phase of all projects and programs, PMO Satisfaction Surveys are required. The surveys are a method for gathering feedback from both the client and internal program contributors on the success of the project or program. The results are used to determine process areas that need improvement or may indicate where new processes are needed. The process flow and instruction set for requesting PMO Satisfaction Surveys is below:

- Within the last 3 weeks of the project or program the project manager will:
    - Complete the PMO Satisfaction Survey Input Form (at the bottom of this document) and submit it to the PMO Program Office. In this form the transition manager will:
        - Input ***all*** contact names from the contact tab in the Program Portal (along with certain other selected information).
        - Designate which client and internal contacts are ***required*** to receive the survey.
        - Identify the following PMO counterparts:

PMO	Internal	Client
<Enter project manager name>	<Enter Internal counterpart>	<Enter Client Counterpart>
<Enter project manager name>	<Enter Internal counterpart>	<Enter Client Counterpart>

    - Distribute an email to every contact included in the Program Portal notifying them that they ***may be*** chosen to receive a PMO survey. Please explain the purpose for the survey and the importance of their participation.
- Upon receiving the PMO Satisfaction Survey Input Form, the PMO Program Office will:
    - Randomly choose recipients from the PMO Satisfaction Survey Input Form that are outside of the required participants. The minimum distribution for surveys is 20% for each client and internal contacts in the program portal. If the 20% for each client and internal contact is less than 10 contacts each, the

PMO Program Office will randomly choose contacts for a minimum of 10 internal and 10 client participants.

- Send an email to survey recipients identifying the purpose of the survey, its availability and the URL where the survey is located. Zoomerang is the web-based tool utilized for surveys. The survey is composed of standard questions for client and internal recipients with a 5-level ranking scale - from "disagree" to "agree". There is also a free-form text area for each question where recipients can provide additional feedback.
- Survey recipients are given 2 weeks to complete the survey. An email reminder is sent 2-3 days before survey close (only to the survey recipients who have not yet participated in the survey).
- Once the survey is closed, the PMO Program Office compiles the survey results. The results are then distributed to the Program Manager and to the PMO Group Director.
- Survey results are also compiled into the PMO's current fiscal year results (e.g. metrics worksheet). PMO survey results for every fiscal year since 2004 are kept on file within the PMO Program Office.

APPENDIX C. PM SURVEY SUBMISSION FORM

Client Name:
Project Name:
Project Manager:
Project Close Date:

Last name	First name	Position	Survey required (Y/N)	Company	E-mail address
Enter Client Participant Information					
Enter Internal Participant Information					

APPENDIX D. CUSTOMER SATISFACTION SURVEY

Project

Name of Project:

Date of Survey:

Surveys:

Survey Ratings Summary

Number	Question	Client Project Rating	FY10 Rating	FY09 Benchmark
1	The project was implemented on time			
2	The project met or exceeded all stated objectives			
3	The project met or exceeded your expectations			
4	During the delivery of the project, there was minimal disruption to personnel and processing environments			
5	Project issues were clearly documented, communicated and resolved in a timely manner			
6	Project tasks were clearly defined, documented, communicated and executed as planned			
7	Status review meetings were effective and informative			
8	Please rate your overall level of satisfaction with the performance of the project manager			

Overall	Other Comments			

5 – Strongly agree	4 – Some-what agree	3 – Neither agree nor disagree	2 – Somewhat disagree	1 – Disagree	0 – Not applic-able

Survey Comments Summary

Question Number	Comments
1	
2	
3	
4	
5	
6	
7	
8	
Other	

APPENDIX E. INTERNAL SATISFACTION SURVEY

Internal Satisfaction Survey

Project

Name of Project:

Date of Survey:

Surveys:

Survey Ratings Summary

Number	Question	Project Rating	FY10 Rating	FY09 Benchmark
1	Scope was clearly defined and communicated.			
2	Project Manager clearly defined expectations.			
3	Project Manager facilitated communication and cooperation within the project team.			
4	Project plans were clearly defined and written, and assisted me in tracking my assigned deliverables.			
5	Project issues were clearly documented, communicated and resolved in a timely manner.			
6	Project tasks were clearly defined, documented, communicated and executed as planned.			
7	Status review meetings were effective and informative.			
8	Project Manager was effective in assisting you with communications and resolution of issues with the customer. I was satisfied with the overall performance of the Project Manager.			

9	Project Manager was effective in assisting you with communications and resolution of issues with other business units and functional areas.			
10	I was satisfied with the overall performance of the Project Manager.			
11	Other project-related comments, concerns or recommendations:			

5 – Strongly agree	4 – Some-what agree	3 – Neither agree nor disagree	2 – Somewhat disagree	1 – Disagree	0 – Not applic-able

Survey Comments Summary

Question Number	Comments
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Other	