

2017

# Experiences of Public Agency Managers When Making Outsourcing Decisions

Shakeel Baig  
*Walden University*

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# Walden University

College of Management and Technology

This is to certify that the doctoral dissertation by

Shakeel Baig

has been found to be complete and satisfactory in all respects,  
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the review committee have been made.

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Walden University  
2017

Abstract

Experiences of Public Agency Managers When Making Outsourcing Decisions

by

Shakeel Baig

MBA, University of Indianapolis, 2005

BSCE, Tri-State University, 1993

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

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## Abstract

Managers in state transportation agencies in the United States must frequently choose between using the talents and abilities of in-house staff or outsourcing for road and bridge design projects. Budgetary crises have strongly affected funding for transportation infrastructure. Facing budgetary pressures to suppress costs, managers must frequently make the choice of outsourcing a project or performing it in-house. Yet, decision-making models for these decisions are inadequate. The purpose of this phenomenological study was to explore and describe the lived experiences of public agency managers when making decisions to outsource the core government functions such as road and bridge design projects. The research question was: What are the lived experiences of managers at the public agency when making decisions about whether to outsource core government functions such as road and bridge design projects? Participants were interviewed about their lived experiences at a state Department of Transportation with “make or buy” decisions. Purposeful sampling was used to select 19 participants for the interviews and the collected data were coded and used a van Kaam approach for analysis. Five themes emerged as findings: acceptance of outsourcing, benefits versus problems, outsourcing propelled by staff limits, loss of control when a project is outsourced, and political pressure for and against outsourcing. These findings may be relevant for management personnel at U.S. public agencies. The implications for positive social change include improved cost, increased efficiency of use of time and talent of management personnel in state transportation agencies, and cost benefits for both management and public.

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## Dedication

First, I would like to dedicate this research study to God who helped me through this journey. Second, I would also like to dedicate this research to my late mother, Najmun Nisa, and my father, Mohammad Rashid Mirza, who taught me through example and continued encouragement that there is never a challenge so big that it cannot be conquered. I also dedicate this research to my wife, Renee M. Stella, my daughter, Seleena M. Baig and my son, Mohammad Zackariah Baig. They were very understanding of my decision, passion, and dream to obtain this doctorate degree and supported me in my endeavor.

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## Chapter 1: Introduction to the Study

Managers often face the decision to make or buy a product or service. At times, it is most economical and efficient to retain the work in-house, while at other times outsourcing a project or service or some component is the best approach. The process by which management personnel at a government agency decide to outsource road design or bridge design is the focus of this study. The outcome of outsourcing decisions by public agencies involves shifting work previously performed by employees that are accountable to taxpayers to suppliers that are not accountable in the context of government. It also involves the prospective benefit of assigning tasks that are internal to a supplier that can perform the task at a lower cost or higher quality level. Government agency personnel operate on a mandate to provide benefit to the taxpayer for decisions they make. Potential social implications include cost savings to taxpayers, as well as increased efficiency at government transportation agencies (Geys & Sorenson, 2016). This chapter includes the background of the study, the problem statement, the purpose statement, research question, conceptual framework, nature of the study, definitions, assumptions, scope and delimitations, limitations, and the significance of the study.

### **Background of the Study**

#### **Outsourcing and Subcontracting**

Outsourcing has become an important strategy for many public agencies, private organizations, and nonprofit organizations (Kotlarsky, Scarbrough, & Oshri, 2014; Kramer, Heinzl, & Neben, 2017; Rajaeian, Cater-Steel, & Lane, 2016; Sharma, Moon, Baig, Choi, Seo, & Donatone, 2015). This is particularly true when it comes to expanding

human and mechanical resources by using the resources of others, through *entangling* of the state with markets (Birch & Siemiatycki, 2015) with a resulting favorable effect on investments and financial return (Iossa & Martimort, 2015; Perez-Lopez, Prior, & Gomez, 2015).

The terms outsourcing and subcontracting are often confused, but there is a distinction. The Association for Operations Management (2014) defined outsourcing as a process through which supplier's contract, to provide goods or services previously accomplished in-house. This process replaces internal capacity and production with that of the supplier. In contrast, subcontracting involves sending work out to another organization, while keeping in-house capacity intact. Subcontracting is usually temporary, while outsourcing can result in reducing the size of an organization. While both processes involve contracts, the structure of these contracts can vary. To further illustrate this differentiation, it is necessary to discuss which party retains control. When an organization (customer) subcontracts services from another organization (supplier), the customer *owns* and controls the process. The customer tells the supplier exactly what is required and how the supplier should perform. The supplier must conform to the process and guidelines defined by the customer, and may not deviate from the customer's instructions without renegotiation. Usually, the supplier avoids deviating from the defined process to avoid the customer canceling the contract. Therefore, the supplier serves the function of providing the customer with additional headcount to satisfy temporary requirements.

In outsourcing; however, the customer turns over the control of the process to the supplier, who assumes responsibility for providing assets and/or people. The customer lays out the desired product for the supplier, and the supplier accepts complete responsibility for the results. This is because the supplier is considered an expert in the process and can provide economies of scale. Examples of such processes in state-run transportation departments might include maintaining and running highway rest areas, or fixing damaged guardrails, among other processes. In outsourcing, the level of supplier accountability is much higher than when a process is subcontracted, because the supplier assumes complete responsibility for the process and the product or service. Outsourcing involves turning over a core function to an outside expert and paying them to manage that function to save money, conserve organizational resources, and improve quality. It is possible that an organization may accept an outsourcing assignment, and then subcontract various related tasks with or without the knowledge of the Department of Transportation. Alternatively, the Department of Transportation may decide to retain the project in-house, but hire subcontractors for various tasks. These scenarios are realistic possibilities, but will not be included in this paper.

### **Comparison of the Processes**

Depending upon the situation, either outsourcing or subcontracting may be successful. However, these processes have evolved rapidly in recent decades, making in-depth analysis by management critical before making a *make or buy* decision. The outsourcing normalization of outsourcing began with reluctance and general suspicion for government agencies abroad as well as in the United States (Berndtsson, 2014; Gorg,



Hanley, & Ott, 2015). Among U.S. companies, outsourcing began with shifting tangential activities like call centers and customer support to locations with low labor costs to raise profitability. In the 1980s, outsourcing was only feasible for noncore functions.

However, this process has consistently expanded to more essential organizational functions, such as manufacturing, research, and design. While there appear to be positive outcomes from outsourcing, it also involves the risk of sustaining long-term profitability while quality declines due to emphasis on short-term cost cutting (Chu, 2016; Hahn, Sens, Decouttere, & Vandaele, 2016; Overby, 2013; Westphal & Sohal, 2016).

Researchers have proposed that outsourcing by large companies is motivated by the desire for short-term benefits such as cost savings rather than long-term competitiveness. This may result in inconsistent quality, poor sustainability of cost benefits, and quality issues (Overby, 2013). While this may be a concern, organizations should not limit their choices solely to solidifying in-house functions. Outsourcing can be useful for extracting the best value from the labor and service marketplace, while also providing companies with a significant competitive edge.

### **Government Agencies**

The choice of whether to perform a project in-house or to outsource extends beyond corporations to the government sector, where local, state, and federal agencies struggle with the make versus buy decision to produce results for taxpayers (Milward, 2014; Rivard & Aubert, 2015; Schneiderjans, Schneiderjans, & Schneiderjans, 2014; Stanger, 2014). A country's economy is dependent on roads, bridges, railway systems,

and other transportation infrastructure. Roads, bridges, railway systems, and other critical transportation networks in the United States are aging rapidly and maintenance costs are expected to increase due to age and subsequent decay, while the replacement cost of this infrastructure is also expected to place a significant burden on state and federal governments.

According to the U.S. Government Accountability Office (GAO) forecasts, the number of highway vehicle miles traveled by Americans will increase from three to seven trillion miles over the next 50 years. This will involve increased budgets for infrastructure maintenance and replacement than previously thought (GAO, 2011). U.S. agencies may experience a significant gap between available funding for these needs, as required expenditures increase in an era of rising national debt and budget deficits. State and local governments are seeking alternatives to fund transportation infrastructure to reduce the fiscal effect of these costs. The highlight of these alternatives is outsourcing, including the use of public-private partnerships (PPPs). These partnerships can enable governments to provide and maintain public infrastructure while minimizing short-and long-term expenditures.

Managers in the public sector should carefully examine the results of contracting to determine whether contracting a core agency service to private sector providers achieves the intended outcomes. Managers should determine whether outsourcing is cost effective, results in increased performance, or requires access to innovation and new technology (Guercini & Ranfagni, 2015; Mazzucato, 2015).

## **Problem Statement**

The outsourcing trend is increasing, without supportive decision-making frameworks or determining if the benefits outweigh maintaining projects or services in-house (Statista, 2015). Positive social change may emerge from studies of the outsourcing process among U.S. state agencies, if the studies were used to provide guidelines for the decision-making process. The ultimate measure of success in a public agency is to deliver a safe, quality product for the public that is more economical than existing approaches. Assessing whether the decisions made by managers at government agencies are economical about making outsourcing choices is important for government efficiency and related efficient use of taxpayer funds. The problem was there is no standardized decision-making framework regarding the guidelines for public agencies to follow when deciding to outsource core government functions such as road and bridge design projects.

If there were a better understanding of the decision-making process that could be standardized, then the decision-making processes used could be compared from one project to another to see how effective the decisions made are in terms of cost, quality, and time. Existing studies on outsourcing do not address the problem from the perspective of U.S. state agencies, yet decisions by these agencies affect transportation systems that are crucial to the national infrastructure.

Agencies need to pay close attention to quality, on-time delivery, safety of the public, and economics in addition to legal factors (National League of Cities, 2014). Taxpayers usually view a public agency that fails to meet these goals negatively. A careful evaluation should be done to understand the cost benefit ratio to retain the work

in-house in absence of required expertise. In such a case, outsourcing may not only amplify the profits but will also provide advantages to other areas to become stronger by gaining knowledge and experience (National League of Cities, 2014). The desired state for public agencies would involve use of a framework that would serve as a guide for the outsourcing decision, including for road and bridge design. No such guide is available for decision makers in public agencies at present (Schwartz, 2014).

### **Purpose of the Study**

The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of public agency managers when making decisions as to whether to outsource core government functions such as road and bridge design projects. For this study, I defined outsourcing as transferring responsibility for a specific agency function from a worker or work group to a worker or work group outside the agency. The study population consisted of management personnel at a Department of Transportation in a Midwestern state. This study design was to gain insight into what it is like for managers to make the decision as to whether to outsource. The significance of the study may be found in discovery of previously unknown factors for establishing guidelines for public organizations regarding when to outsource, when not to, how to outsource, and if outsourcing is an effective measure of managing capital infrastructure projects in the public sector. An increased understanding of the decision-making process may assist in facilitating improvements in the organization's competitive position.

## **Research Question**

I explored the lived experiences of managers at a Department of Transportation in a Midwest state who make the decision about outsourcing projects or maintaining them in-house in the areas of road design and bridge design. The phenomenon under study is the lived experiences of public agency managers when making decisions as to whether or not to outsource core government functions such as road and bridge design projects. The research question was as follows.

Research Question: What are the lived experiences of managers at the public agency when making decisions about whether to outsource core government functions such as road and bridge design projects?

## **Conceptual Framework**

McIvor (2005) provided the conceptual framework for analysis of outsourcing. The McIvor framework, which does not have a specific name, was selected to ground the study due to its explanation of the tension between strategy formulation of the outsourcing decision and implementation of the process (McIvor, Wall, Humphreys, & McKittrick, 2009; Perunovic, & Pedersen, 2007). When addressing the choice of whether to outsource or retain functions in-house, organizations frequently struggle to identify functions that warrant strategic analysis in the context of possible outsourcing. Determining which functions should be retained as internal processes and which should be outsourced is an important initial step that should not be decided based on cost alone. Factors such as knowledge sharing, knowledge lost or gained, the prospective quality of outsourced projects, and size and the location of the project are also relevant.

The framework involves six components that encompass the outsourcing decision process. These are: determining the current boundary of the organization; activity importance analysis; capability analysis; analysis of strategic sourcing options; developing relationship strategy; and establishing, managing, and evaluating an appropriate relationship (McIvor, 2005). This framework can accommodate all the concerns of this study, as it describes the relevant components of an outsourcing decision. Although the framework is designed for use by businesses, it can be adapted for use in this study as the organizational functions are the same. The framework provides a comprehensive perspective on outsourcing, as it addresses the risk that managers responsible for making the outsourcing decision will rely on cost analysis alone, and fail to consider the other influential factors that can lead to success or failure of an outsourcing decision. The methodology of qualitative survey and analysis of data as qualitative responses are also compatible with this framework.

### **Nature of the Study**

This research was based on qualitative data and analysis, rather than quantitative. A quantitative method of research establishes the association, correlation, or relationship relating the dependent and independent variables in a study. In quantitative designs, the subjects are measured once (descriptive) or the variables are examined both before and after the application (experimental) according to Merriam (2014). A qualitative design is appropriate for analyzing the experience or lived experience of individuals. A qualitative design for analyzing the phenomenon of the outsourcing experience was selected for this study.

A qualitative methodology is appropriate for addressing the research question as it was used to explore the lived experiences of individuals involved in the outsourcing decision at the state agency. The purpose of a qualitative study is not to gather or assess numeric data, but to elicit descriptions of self-reported, lived experiences (Corbin & Strauss, 2014). As qualitative data is obtained in the form of stories, it may be as simple as true or false, or much more complex (Collingridge & Gantt, 2008).

As human study participants in qualitative studies describe experiences, events, and their subjective responses, testing of a specific hypothesis was not used in this design. Van Manen (2007) stated that a qualitative investigative approach allows the researcher to “see into the heart of things” (p. 12). From the responses collected, the researcher can reflect on the lived experiences of the study participants, which is the basis of qualitative research. I used interviews as the data-gathering tool. The interview technique includes the researcher as a participant in the study process to understand a phenomenon from the subject’s point of view, with the goal of discovering meaning. Although the interview process may not result in factual data gathering, it may provide meaningful information that may be subsequently coded as data (Collingridge & Gantt, 2008).

After a careful review of different qualitative approaches, the phenomenological research design was selected for this study to answer the research question.

Phenomenological research is a qualitative approach that is used to describe the lived experience of a phenomenon. The study participants may provide complex descriptions of the experiences with the outsourcing decision in a way that may be relevant for other

managers in a similar position. This is the overall aim of life-world research (Merriam, 2014).

The nature of this qualitative phenomenological study was to explore and describe the knowledge, experience, and understanding of the phenomenon of the decision whether to outsource core government functions such as road and bridge design projects of an estimated 20 leaders or until data saturation was reached from the different divisions of the Department of Transportation and/or approved outsource organizations. These interviews focused on the lived experiences of the study participants when making the outsourcing decision of whether to outsource core government functions such as for road and design projects. Safety was not a concern, as there was no risk to participants other than confidentiality, which was addressed in this paper. I audiotaped and transcribed face-to-face interviews and employed a van Kaam method (Moustakas, 1994) to analyze the data.

NVivo 8® qualitative software was used to sort and help identify themes and patterns experienced by these leaders of the Department of Transportation in outsourcing and the quality of the product delivered in this environment. This sample was selected through a convenience-sampling model and helped explore the phenomena of outsourcing. The value of the study included establishing some guidelines for making economic decisions on when and what to outsource, and how to maintain quality. The focus was on the lack of a decision-making framework for the process of outsourcing at the state transportation agency under study.



## Definitions

This section includes the technical terms used in this study to provide a better clarity and understanding.

*Knowledge-based theory*: Provides a lens to explain the findings related to the organization's absorptive capacities (Merriam, 2014).

*Outsourcing*: Transference of responsibility for a business function to a nonemployee work group from an employee group (Schwartz, 2014).

*Relational view theory*: Develops and explains how firms gain and sustain competitive advantage within interorganizational relationships (Puksta & Laurins, 2012).

*Resource-based view theory*: Resources and capabilities can vary significantly across firms and these differences can be stable (Merriam, 2014).

*Resource dependence theory*: Concentrates on the outer context of the organization and contends that organizations partially depend on certain rudiments of their industry atmosphere (Rekik, Boukadi, & Ben-Abdallah, 2015).

*Social relational exchange theory*: Analyzing quality of outsourcing relationships (Gottschalk & Solli-Saether, 2015).

*Stakeholders*: A group or individuals who may influence or be influenced by success regarding the mission, purpose, and values of an organization (Driesen & Hillebrand, 2013). Stakeholders are not just investors and stockholders, but also may include clients, employees, customers, governments, suppliers, or other groups that can influence the success of an organization.

*Subcontracting*: A process by which entities such as government agencies reach out to other companies, to release the pressure of nonwage costs of employment. These include training, pension rights, redundancy payments, and sick pay (Pearce, 2013).

*Transaction cost theory (TCT)*: Analysis of the organization, noted that choices are completed by examining the two categories of costs: (a) transaction costs, which is the expenses of controlling, managing transactions, and monitoring; and (b) fabrication expenses, or the fees associated with materials, capital, and labor (Nickerson & Zenger, 2004).

*Value-based management theory*: A manager's strategic method founded on the fundamental principle that the mission and program in the organization is to increase benefit and value (Schwartz, 2014).

### **Assumptions**

A constant effort at *epoche* (setting aside one's own preconceived ideas about a topic) was an important assumption of this study. Qualitative research is an exploratory process to discover themes and patterns related to attitudes and views of a current paradigm (Merriam, 2014). No matter how objective, researchers begin the scholarly inquiry process with assumptions meant to support knowledge about the topic. The very act of connecting with and interviewing participants and analyzing the data may influence study participants and skew the results (Merriam, 2014).

An assumption of the current study was that a qualitative researcher may purposively bond with or build a sound working relationship with study participants that

is conducive to open and candid dialogue (Collingridge & Gantt, 2008).

Assuming the study participants respond truthfully and as accurately as they recollect, I should have all the data I need to code, analyze it, and present the findings. Interview questions were developed to encourage a participant's recollections of their lived experiences relevant to the study's topic (Merriam, 2014). Participants' recollection of lived experiences in leading outsourcing initiatives provided insight in the process (Merriam, 2014).

The scope of this study included managers and decision-makers involved in the outsourcing initiatives at the Department of Transportation. These experiences may add to the fullness of their experiences given their unique situations and challenges, and may cause them to incorporate multiple perspectives. One assumption was that the leadership could answer the questions in an educated manner.

A potential limitation of the investigation was the ability of the participant(s) to describe their lived experiences accurately and honestly. The ability to recollect lived experiences varied among these study participants; therefore, the accuracy of their stories might differ in levels of the degree to which the quantity of information varied. One must always be aware of potential confabulation in the executives' interview material.

### **Scope and Delimitations**

Delimitations restrict the choices, scope, and range of this study in specific ways. The range of this study was limited to the management personnel at the Department of Transportation, who were in a position to authorize make or buy decisions. The sample size for this study was 20 or to the point of data saturation. I focused the interview with

open-ended questions on lived experiences of outsourcing at a Midwest Department of Transportation. I included both purposive and snowball sampling methods for participant selection. To facilitate candid and open conversations, interviews took place in locations providing both security and privacy, chosen by study participants. The interviews were done in-person at the convenience of each participant.

### **Limitations**

This study was designed for a Department of Transportation in a Midwest state. I coded participant responses and record and analyzed the narratives accurately and without bias. Transferability applied to managers at other public agencies that are tasked with making outsourcing decisions. Any preconceived ideas of the assumptions of the researcher must not be taken for granted (Leedy & Ormrod, 2010). My approach to information gathering was conducted from the perspective of an uninterested observer to decrease potential researcher bias. It was also necessary to consider the degree of honesty of each subject (Corbin & Strauss, 2014). The study was also limited to how accurately the researcher recorded, coded and analyzed information (Moustakas, 1994). I conducted member checking during the interviews by mirroring what the participant said, giving the participant an opportunity to correct errors or expand upon the information provided. Member checking was done so that I could assess the response by confirming that the way participants saw the situation what they intended (Tinggaard, 2009).

A qualitative study is also dependent on the subjective, nonjudgmental, and accurate coding of the data (Corbin & Strauss, 2014). An additional assumption is the degree to which findings of the research can be useful to a wide-ranging population of

decision makers and leaders of organizations. Participants contribute a body of unique observations and perspectives from their lives. According to Moustakas (1994), “The understanding of meaningful concrete relations implicit in the original description of experience in the context of a particular situation is the primary target of phenomenological knowledge” (p. 14). Results may be affected by limitations on the researcher's ability to evoke meaningful responses from interviews, on the ability of the researcher to analyze the information derived from interview sessions, and on their capacity to present that analysis impartially (Corbin & Strauss, 2014).

### **Significance of the Study**

#### **Significance to Practice**

Because of rapidly growing global industry tactics, managers and leaders are creating their own operational definition of success. To accomplish this, they need information on which competencies, or systems define successful project management. At present, few studies have been completed on the lived experiences of personnel who are asked to make outsourcing decisions in public transportation agencies despite a lack of decision-making framework. To reduce this gap, the results of my study may assist in this process as the invariant themes and the experiences of these leaders could contribute to an understanding of the phenomenon of outsourcing.

#### **Significance to Theory**

The significance of this study was to provide information to management that can assist in developing guidelines for making educated decisions as to whether or not to outsource. The study's results may enlighten the decision makers on the strengths and

weaknesses of outsourcing. The findings may also add to managers' and leaders' ideas of what defines successful outsourcing. The findings may further characterize the management of intangible assets and the phenomenon within a greater context. The study may also be useful to leaders seeking ideas on how to enhance their organizational practices. The knowledge gained through this study may advance the knowledge of outsourcing on the quality, knowledge retention, and the effect these practices have on the human capital investment of the organization.

### **Significance to Social Change**

The findings of my study may lead to a model for determining which projects should be performed within the organization and those that should be outsource. A model for these types of decisions for outsourcing would support social change in the way that outsourcing is viewed by the organization's management. The guidelines established by this study may not only help management to make decisions to make or buy, but may also save taxpayers money by outsourcing the right projects, minimizing or eliminating after-the-fact scope changes and minimizing the time to deliver the project. Money saved by adapting this process could be reinvested in other projects to help boost the economy, which would ultimately result in social change.

### **Summary and Transition**

Chapter 1 forms a foundation for the study on outsourcing at a Department of Transportation. I explored the organizational and personal lived experiences in regard to outsourcing. Management experiences are important, because they have the potential to have bearing upon the stability, resiliency, and fiscal soundness of the organization that

are necessary for the health of the organization. Communities rely on the Department of Transportation to provide quality statewide infrastructure. When the Department of Transportation fails in delivering projects of consistent and sufficient quality, the consequences to the community are significant, and the community's sustainability is compromised.

To provide a blueprint for effective outsourcing decision-making and input, I sought to discover leaders' lived experiences in practical applications of considering or using outsourcing. I employed a qualitative method and phenomenological design (Moustakas, 1994). A phenomenological design allows freedom in the interview. It affords the opportunity to share lived experiences and allows the participant the ability to share insights on outsourcing.

Chapter 1 includes the basic outline for the study, the purpose, and the problem of sustainability that plagues outsourcing. The study was limited to the Department of Transportation's executive/leaders and used a purposive and snowball sampling technique. The research question sharpened the focus of the study. An open-ended set of questions permits participants to relay individual experiences of lived experience (Moustakas, 1994). Chapter 2 includes information on the search strategy for the review of the literature, the conceptual framework, and the historical and contemporary trends and practices related to outsourcing. Chapter 3 includes the research method and design.

## Chapter 2: Literature Review

The problem addressed by this qualitative phenomenological study was the lack of information regarding the guidelines for a public agency to follow when deciding whether to outsource a core government function such as road and bridge design. Managers in state transportation agencies in the United States are frequently confronted with the necessity to make decisions regarding outsourcing. The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of public agency managers when making decisions as to whether to outsource core government functions such as road and bridge design projects. For this study, outsourcing is the transferring of responsibility for a specific agency function from a worker or work group to a worker or work group outside the agency.

The literature search for this phenomenological study included concepts, principles, and theories other researchers have found to address outsourcing, including an outsourcing framework that is appropriate for use at a government agency, such as the one under review for this study. This study was about the experience of personnel who must make outsourcing decisions in the face of a lack of a decision-making framework for outsourcing road design and bridge design at a public agency. The search of existing literature was initially focused on road design and bridge design. No matter what the field is, some basic principles apply to outsourcing. Literature on general in-house work versus outsourcing was used for this review of the literature to understand the decision-making frameworks for the decision.



Frequently, these studies addressed the narrow focus that managers and other decision makers maintained on the cost value of outsourcing, when other risks could eventually neutralize the cost benefits that were sought. Existing studies pertained to the decision-making process for outsourcing used by companies and public agencies; general discussions of the outsourcing trend; the value of outsourcing for small versus large firms; international outsourcing as part of the larger trend of globalization; and theories and methodologies for outsourcing. The chapter also includes a description of the search process and search terms used, as well as an explanation of why a broader search was designed when few studies were located that pertained to the narrow focus of public transportation outsourcing. The chapter closes with a summary and conclusions, which place this study within the context of previous work by other researchers. The conclusions note a research gap regarding empirical studies of the effects of outsourcing on overall organizational performance, and the risks of outsourcing.

### **Literature Search Strategy**

The literature search strategy for this project involved accessing a number of scholarly databases using specific search terms and phrasing. I used Google.com to launch the searches, followed by conducting searches in Google Scholar, ABI/Inform Complete, Academic OneFile, Academic Search Complete, Business Source Complete, and Opposing Viewpoints in Context. The search was specifically defined for peer-reviewed articles with full text. The dates specified were from 2013 to the present. Search terms included: *outsource*; *outsourcing*; *outsourcing of government agencies*, *outsourcing of federal agencies*, *multinational company outsource*; *outsource to India*;

*outsource to China; outsource American companies; cheap labor outsource; labor conditions outsourcing; subcontract; subcontracting decision making; subcontract quality standards; outsourcing quality standards; cost savings outsourcing; decision making, and cost savings subcontracting.* As stated, as few articles were found pertaining to outsourcing by public transportation agencies, the search was expanded to include studies of outsourcing as a general term. As a general topic, outsourcing has been the subject of numerous studies since the 1990s. These studies approached outsourcing first as a commodity, and later as a process. Searches of ProQuest dissertation database revealed no recent studies on these topics.

### **Conceptual Framework**

Due to an emphasis on efficiency and performance, outsourcing frameworks derived from business can be useful for public agencies in the phenomenon of outsourcing (Gunasekaran, Irani, Choy, Filippi, & Papadopoulos, 2015; Tjader, May, Shang, Vargas, & Gao, 2014). Mahmoodzadeh, Jalalinia, and Yazdi (2009) proposed enterprise strategy as a primary component of the decision to outsource. When the decision to outsource is performed within the context of globalization and increased competition, problems in communication and coordination between outsourcing partners comprise the main obstacles for success. Attention to communication and coordination between these partners is an important component for outsourcing success.

While use of a business process framework for business process lifecycle management, or process optimization, rather than a traditional focus on hierarchical functions is one way to mitigate these risks. It is also relevant to optimize knowledge

management through generation, sharing, and oversight of information and skills. Inclusion of these processes can support success (Garg, Agarwal, & Jha, 2015; Mahmoodzadeh et al., 2009; Langer, Slaughter, & Mukhopadhyay, 2014; Patil & Wongsurawat, 2015; Wuyts, Rindfleisch, & Citrin, 2015; You, Si, Zhang, Zeng, Leung, & Li, 2015).

Kumar, Deivasigamani, and Omer (2010) developed a decision model for outsourcing, using a closed-loop model that highlighted periodic schedule re-evaluation as a management tool. The factors most relevant to the choice to outsource included supply chain function, market accessibility, access to regional markets, ability to locate a foreign work force, and possible incentives including government subsidies and tax cuts.

Bardhan, Whitaker, and Mithas (2006) addressed the relationship between outsourcing implementation and firm value by examining the relations between investment and outsourcing of the production process. In a comparison of information technology, production process outsourcing, and manufacturing, Bardhan et al. (2006) found that plants with greater investment in information technology were more likely to outsource their production processes. Additionally, these investments were associated with lower cost of goods sold and significant quality improvement. The study provided an integrated model for studying the effects of outsourcing of information technology and production outsourcing on plant performance.

McIvor (2005) provided the conceptual framework for the analysis of outsourcing for the transportation department of a state in the Midwest. The framework addressed the tension between strategy formulation of the outsourcing decision and implementation of

the process (McIvor et al., 2009; Perunovic, & Pedersen, 2007). When addressing the choice of whether to outsource or retain functions in-house, organizations frequently struggle to identify functions that warrant strategic analysis in the context of possible outsourcing. Determining which functions should be retained as internal processes and which should be outsourced is an important initial step that should not be decided on the basis of cost alone.

McIvor (2005) named determining the boundary of the organization as the first component of the framework. When addressing the choice of whether to outsource or retain functions in-house, organizations frequently struggle to identify functions that warrant strategic analysis in the context of possible outsourcing. Determining which functions should be retained as internal processes and which should be outsourced is the way to determine the boundary of the organization. It is an important initial step that should not be decided based on cost alone.

The next component of the McIvor (2005) framework is an activity importance analysis. This involves determining the importance of the function, both in the context of internal performance as well as potential savings to taxpayers. If the organization can perform the function internally at a level of quality that is superior to the capacity of external suppliers and at a cost that is at par or less than external supplier, outsourcing should be avoided. Further considerations are the sustainability of outsourcing position in the future, and whether the function that may be outsourced will be a key influence on organizational performance over the long term (McIvor, 2005).

The third component of the McIvor outsourcing framework is capability analysis. This critical step in the outsourcing decision involves knowing whether the organization can perform the function internally on a consistent basis, at a cost that is favorable to the organization in the context of using human resources, and to taxpayers in the context of cost savings. If this cannot be done, then outsourcing may be a valuable alternative. This step is accomplished by identifying the disparity between internal performance of the organization and the capacity of external suppliers (McIvor, 2005).

The next component of the McIvor (2005) framework involves analysis of the strategic sourcing options. In a comparative analysis of the outsourcing suppliers under consideration, management personnel at the transportation department in the Midwest would consider their level of quality of performance, flexibility, and service. Determining the financial value of the outsourcing agreement must include the costs associated with closing out the agreement when the work is complete, and the strategic importance of organization from the supplier's point of view. If the organization is not going to have strategic value in the opinion of the supplier, it will be difficult to maintain status as a priority. This can lead to service and quality concerns (McIvor, 2005).

Continuing the relationship strategy, the next component of the framework, involves deciding the duration of the outsourcing contract, what type of knowledge will be shared, the ability and willingness of the organization and supplier to share knowledge, the frequency of communication that will be required, and the level and range of personal contacts. Time differences and geographical location can affect performance and costs as well (McIvor, 2005; Perunovic, & Pedersen, 2007). The final

component of the framework involves establishing, managing and evaluating an appropriate relationship with the outsourcing supplier personnel making the outsourcing decision should determine success factors, or how success will be evaluated, and establish benchmarking measures for performance and management.

The McIvor (2005) framework can accommodate all the concerns of this study, since it describes the relevant components of an outsourcing decision. Although the framework is designed for use by businesses, it can be adapted for use in this study. The framework provides a comprehensive perspective on outsourcing, since it addresses the risk that managers who are responsible for making the outsourcing decision will rely on cost analysis alone, and fail to consider the other influential factors that can lead to success or failure of an outsourcing decision. The methodology of qualitative survey and analysis of data as qualitative responses are also compatible with this framework.

### **Literature Review**

The following studies comprise an overview of existing research on outsourcing. The first studies approached the outsourcing trend as a commodity-based process, intended to save on costs. Access to human expertise outside of service or manufacturing arose a topic later, as outsourcing evolved in tandem with increased sophistication in communications technology (Nickerson & Zenger, 2004).

### **Outsourcing vs. Subcontracting**

Outsourcing has become an important strategy for many public agencies and organizations, including nonprofit organizations (Sharma et al., 2015). This is particularly true when it comes to expanding human and mechanical resources by using the resources

of others, through *entangling* of the state with markets (Birch & Siemiatycki, 2015) with a resulting favorable effect on investments and financial return (Iossa & Martimort, 2015; Perez-Lopez et al., 2015).

The terms outsourcing and subcontracting are often confused, but there is a distinction. The Association for Operations Management (2014) defined outsourcing as a process through which suppliers agree to provide goods or services that were previously accomplished in-house. This process replaces internal capacity and production with that of the supplier. In contrast, subcontracting involves sending work out to another company, while keeping in-house capacity intact. Subcontracting is usually temporary, while outsourcing can result in shrinking a company or organization. While both processes involve contracts, the structure of these contracts can vary. To further illustrate this differentiation, it is necessary to discuss which party retains control. When a company (customer) subcontracts services from another company (supplier), the customer *owns* and controls the process. The customer tells the supplier exactly what is required and how the supplier is expected to perform. The supplier must conform to the process and guidelines defined by the customer, and may not deviate from the customer's instructions. Usually, the supplier avoids deviating from the defined process as they could be replaced if the customer cancels the contract. Therefore, the supplier serves the function of providing the customer with additional headcount to satisfy temporary requirements.

In outsourcing; however, the customer turns over the control of the process to the supplier, who assumes responsibility for providing assets and/or people. The customer

lays out the desired product for the supplier, and the supplier accepts complete responsibility for the results. This is usually done because the supplier is considered an expert in a process and can provide economies of scale. Examples of such processes in state-run transportation departments might include maintaining and running the rest areas, or fixing damaged guardrails, among other processes. In outsourcing, the level of supplier accountability is much higher than when a process is subcontracted, because the supplier assumes complete responsibility for the process and the product. Outsourcing involves turning over a core function to an outside expert and paying them to manage that function to save money, conserve company resources, and improve quality. It is possible that a supplier may agree to accept an outsourcing assignment, and then subcontract related tasks with or without the knowledge of the Department of Transportation. On the other hand, the supplier may decide to retain the project in-house, and hire subcontractors to perform various tasks. These scenarios are realistic possibilities, but will not be discussed in this paper.

### **Government Agencies**

The choice of whether to perform a project in-house or to outsource extends beyond corporations to the government sector, where local, state and federal agencies struggle with the make versus buy decision to produce results for taxpayers (Milward, 2014; Rivard & Aubert, 2015; Schneiderjans et al., 2014; Stanger, 2014). A country's economy is dependent on roads, bridges, railway systems, and additional transportation infrastructure. Roads, bridges, railway systems, and other critical transportation networks in the United States are aging rapidly, and are expected to require more costly



maintenance due to age, while the replacement cost of this infrastructure is also expected to place a significant burden on state and federal governments.

According to the U.S. Government Accountability Office (GAO) forecasts, the number of highway vehicle miles traveled by Americans will increase from three to seven trillion miles over the next 50 years. This will involve much greater budgets for infrastructure maintenance and replacement than previously (GAO, 2011). U.S. agencies may experience a significant gap between available funding for these needs, as required expenditures increase in an era of rising national debt and budget deficits. State and local governments are seeking alternatives to fund transportation infrastructure in order to reduce the fiscal effect of these costs. The highlight of these alternatives is outsourcing, including the use of PPPs. These partnerships can enable governments to provide and maintain public infrastructure while minimizing short-and long-term expenditures.

Managers in the public sector should carefully examine the results of contracting to determine whether contracting out by awarding contracts for a core agency service performance to private sector providers, achieved the intended results or not. They should determine whether outsourcing was cost effective, resulted in increased performance, or involved advantageous access to innovation (Guercini & Ranfagni, 2015; Mazzucato, 2015) and new technology.

### **Dilution of Control**

Clark and Monk (2013) noted that as many industries are engaging in widespread outsourcing, discussions of benefits and risks linked to outsourcing are also increasing. While outsourcing can result in initial cost savings such as labor, loss of control over

processes including quality control is a concern. While outsourcing can be beneficial, success cannot be guaranteed, as direct oversight by the customer is reduced. The main areas of concerns are the quality of the service provided by organizations not under the direct control of the customer, unsafe labor conditions at outsourcing sites, and possible deleterious effects on the morale of the remaining workforce. Clark and Monk suggested that ownership of a process must be related to service requirements through functionality, which should balance cost with the need for quality. Another recommendation was better documentation of guidelines and policies between the entities to reduce errors and misinterpretations.

**Lack of an analytic model.** U.S. public agencies frequently omit a key analytic activity regarding measurement of cost savings and performance improvement when making the decision to contract projects. Public managers frequently rely on a performance based specification and *best value* source selection process combined with competition and trade-off analysis to determine whether a contract is cost-effective and allows for access to outside sources of knowledge (Alonso et al., 2015). Yet, contracting officers need to know the actual cost of the contract compared to the cost of performance, and to make this difference a relevant factor of consideration. This specific information is an important line item in the strategic sourcing of contracts. Kotlarsky et al. (2014) proposed contracting professionals should examine the cost structure for contracting out operations, and devise appropriate management initiatives that use less focus on operating internal processes, and more analysis on achieving the kinds of results that are needed. Establishment of a formal process to share knowledge from past outsourcing

management projects would facilitate knowledge sharing for future outsourcing decisions. It could also assist in establishing a method for maintaining control over quality.

It is important to have a good relationship and understanding between the public agencies and the private entities during the process of outsourcing. Mahmoodzadeh, Jalalinia, and Yazdi (2009) suggested that management at public agencies conduct surveys before entering an outsourcing contract. Preliminary surveys can be useful for probing the business partner's rating of a government agency's rating of related tasks in which they interact and vice versa. As outsourcing has increased during the last decade, infrastructure-related managers have become increasingly interested in the Toyota lean management model (Herzog & Tonchia, 2014). In an era of tightened public budgets, governmental agencies are choosing to outsource all or part of essential functions instead of increasing in-house staff. Building a relational contracting strategy for interaction between the public agency and private entities would minimize lump-sum contracting approaches that are commonly used by contractors. It would also support an environment, which nurtures cooperation and long-term relationships, although the risk exists for concentration of a selected group of contractors, which would exclude other qualified candidates (Herzog & Tonchia, 2014).

Researchers who view outsourcing positively suggest using competitive bidding to obtain maximal return on investment (Clark & Monk, 2014; Dan & Andrews, 2015; Ikediashi & Okwuashi, 2015). Acquisition regulations for professional services add another layer of oversight by allowing agencies to delegate management oversight to

prime contractors for pricing, organizing, and monitoring the work of subcontractors. To gain control of quality control issues, public agencies have established results-based certification courses and processes, which support quality control in conjunction with productivity.

Choi, Kwak, Pyeon, and Son (2012) also discussed the effectiveness of alternate contracting strategies for outsourcing infrastructure projects. Choi et al. recommendations emphasized using strategies such as incentive/disincentive (I/D) and cost plus time (A+B) for cost reduction and reducing inconvenience to the public. According to Choi et al., agencies that use A+B and I/D contracting strategies can benefit from contractors' ingenuity regarding realistic estimates of construction schedules, since public contracting engineers are frequently unaware of time set and field related issues that contractors encounter at outsourcing sites.

These researchers also discussed outsourcing by companies in countries like the United States and Japan, where this choice is made to achieve better service, quality, professionalism, diversity, work enhancement, and cost reduction. On the other hand, domestic corporations tend to pursue the reorganization or outsourcing effects of economic potential or efficiency. This can jeopardize customer satisfaction and quality control, both of which are necessary for the health of a company or organization. Assessment of the gains from privatization of local government transportation projects should include factors such as mode of transportation, population density, and type of government. These are likely to be the relevant factors in assessing the performance efficiency and effectiveness of a transit agency, whether the service is contracted out or

retained in-house. Through the outsourcing of components, activities, and processes, most firms seek to improve performance in cost as well as quality and delivery (Schwartz, 2014). Research shows that agencies experienced performance improvements just by outsourcing a single component.

### **Additional Costs**

American state highway agencies are experiencing increased pressure to deliver durable and functional infrastructures at an optimum life-cycle cost (Schamp, 2015). This pressure is challenging agencies to find innovative ways to program and deliver these metrics. One of many innovations agencies have initiated is to use warranties that are like those used by highway industry when outsourcing these jobs. The implementation of long-term performance-based warranties shifts liability for maintenance from public agencies to the highway industry. While these warranties are useful about reducing the cost of maintenance, this approach requires legislation, which can involve changes to state laws and agency regulations, as well as the litigation of new issues (Schamp, 2015).

Many companies are choosing to outsource functions and processes supporting domestic and global operations from outside their home countries, using third-party service providers. The primary reason for this type of outsourcing is cost savings. As more companies are investigating outsourcing, the motive of cost saving is becoming less relevant. These companies are now increasingly outsourcing for more strategic reasons, such as to increase organizational flexibility, and to access talent and specialized capabilities (Handley & Angst, 2014).

## **Resource-Based View Theory**

When making the decision to outsource, companies have tended to focus their primary attention on the expected costs of the operation. In a study of the economic determinants of information systems outsourcing, Wuyts et al. (2015) concluded that organizations are likely to decide to provide commodities and services in-house in areas where it is cost effective for them to do so. The economic pressure to use resources to the best advantage for the organization means that for services and goods that have a comparable cost disadvantage, companies are likely to depend on the outsourcing marketplace. Outsourcing vendors can provide services or products at lower cost because of comparatively lower wage rates at an offshore facility, or through economies of scale that are generated by providing similar services to many clients (Wuyts et al., 2015).

Nickerson and Zenger (2004) proposed knowledge-based theory (KBT) as a departure from transaction cost theory (TCT) in sourcing decisions. Knowledge-based theory evolved from resource-based theory (RBT) that described the firm as resource-centric. Both KBT/RBT viewed a firm as composed of bundles of resources, or sets of knowledge. Firms seek the most effective way to distribute existing resources, while obtaining new capital to achieve economic efficiency. In a case study of the benefits and problems associated with off-shoring knowledge-based jobs, Kumar et al. (2010) developed a decision model for outsourcing. The closed-loop model emphasized the importance of schedule re-evaluation. Kumar et al. noted that factors that are relevant to the choice to outsource include the influence on supply chain and market accessibility, including ease of access to regional markets, access to foreign work force, and incentives

such as government subsidies and tax cuts. Kumar et al. concluded that KBT would be useful to facilitate knowledge creation, application, and dissemination during outsourcing.

Although organizations would prefer to be able to make specific the answers to questions of how scarce resources should be used, and what the outcome of this decision is likely to be, it is not possible to answer this question in advance. This represents an information gap that cannot be addressed through strict use of metrics or other data projections. Instead, techniques, rules, and customs are employed to make decisions about resource allocation. This is the property rights theory (PPT) (Alston & Mueller, 2015) Besides KBT/RBT and PPT, organizational agency theory (Lin et al., 2015) and organizational power theory (Huther & Krucken, 2014) have been used to compete with or complement TCT in outsourcing decisions.

In organizational agency theory, the organization is perceived as an obligation, where the act of assets ownership has the effect of defining the role of entities as either owners (principals) or agents. These roles shape the actions of the participants. Additionally, a moral hazard can arise when an individual makes a decision that has consequences that affect the probability distribution of outcome for the organization. Such decisions are not always subject to oversight by other managers (Lin et al., 2015). This is relevant to outsourcing, where a manager or policy maker at an organization may make a choice that will have significant influence on the performance of the project, as well as the financial health of the organization. The hazard is caused by an asymmetry of information among the individuals that are involved in a project when their actions

cannot be observed and modified as the project proceeds. In these cases, risk-sharing benefits and incentives can become clouded when the decision process is not structured to benefit the organization.

From the resource management perspective, the two major views or theories are resource dependence theory (RDT) as described by Tashman and Rivera (2015) and resource-based view theory (RBV). Every organization is dependent on resources that originate in its external environment. Frequently, other groups or companies control the needed resources, and the organization is vulnerable due to its dependence on resources controlled by others to exercise power. The power of organizations is dependent on situations, relationships with other groups or individuals, and may involve mutual reliance (Tashman & Rivera, 2015).

The resource-based view (RBV) defined an organization as a compilation of profitable resources, such as physical, human, and organizational assets. Resources become a competitive advantage for the firm when they are: valuable; unique; have no substitutes; and are difficult to imitate. Sausen and Tomczak (2015) noted that protection from imitation is a strategic advantage that creates value for a firm when it is sustainable. Transaction costs to invest in the resource should be controlled and not exceed return on investment. Organizational resources may include information. Information resources are not just data and complex information, but are valuable systems that expedite the acquisition of new data, along with processing and access capabilities.

The difference between the resource-based and the transaction cost theory view is that the latter has a primary emphasis on reducing costs with less focus on the worth of



the transaction (Alonso et al., 2013; Berndtsson, 2013; Bhalla & Terjesen, 2013; Collm & Schedler, 2014). Gronseth et al. (2015) proposed that two limitations are associated with the transaction cost perspective: cost minimization for a single party in outsourcing omits interdependence between the partners toward the goal of value for both; and an emphasis on structure of the agreement without including issues related to process. Gronseth et al. (2015) instead proposed a framework based on transactional value that would address maximization of value for both parties, and processes for each to gain and generate value.

As the resource-based view focuses on profits and competitive advantage, it takes into consideration the worth and the expense sides of the business. Gronseth et al. (2015) asserted that by emphasizing the possible benefits of a transaction, outsourcing could be viewed as a way to exploit and develop organizational resources. The authors proposed that the transaction cost approach and the resource-based approach were complementary, and a comprehensive approach that integrates both approaches would be most valuable for firms.

Lee, Wai, and Ramayah (2010) offered a viewpoint on social exchange theory (SET) in the context of inter-firm relationships in Southeast Asia. The viewpoint was based on a review of the literature conducted by Lee et al. (2010) as well as anecdotal accounts and personal observations. The authors reported that the management style employed by Southeast Asian companies to make outsourcing decisions was based on personal relationships. This was in direct contrast to the approach used by managers in developed countries, where processes, contracts, and agreements were organized

according to requirements for a high degree of transparency and accountability to stakeholders. In these countries, transaction cost theory, the resource-based perspective, and resource dependence are dominant. In Southeast Asia, the social exchange theory model was more prevalent among managers regarding outsourcing, while transparency and accountability to stakeholders was a lower priority (Lee et al., 2010; Pannirselvam, 2014).

### **Economics of Outsourcing**

Outsourcing was first adopted as a common operational strategy in the 1990s. In 2004, the State of Washington released a report stating that the results of outsourcing of state highway maintenance in several states had been unsatisfactory. The report analyzed the outcomes for outsourcing of state highway maintenance for Massachusetts, Virginia, Florida, Oklahoma, and Texas in addition to Washington. The report concluded that the decision to outsource by the states had been made based on political interests, and not a business analysis of actual costs. The initial claims of cost savings and service benefits had been overstated, in part because financial projections for the outsourcing initiatives had not been tracked against specific goals from the beginning (State of Washington, 2004).

The report (State of Washington, 2004) concluded that the decision to outsource state highway maintenance should be made after a range of factors had been considered. These should include: scoping and planning; analysis of least cost during life cycle of highway; level of service trends; asset inventories; cost of service delivery in the context of activity or unit costs; and public expectations (State of Washington, 2004). A report

from the National Cooperative Highway Resource Program (2014) noted that outsourcing for highway maintenance was frequently contracted to another government entity, or to local private vendors. The report, which was composed for use among highway agencies across the United States, noted that the most common reasons for this type of outsourcing were: inadequate staff to handle recurring peak workloads or budgetary restrictions on hiring staff; requirement for specialized equipment or expertise; mandated use of private-sector providers due to reductions in agency expenditures. Yet, the report also noted that the decision to outsource was frequently made without complete financial analysis (National Cooperative Highway Resource Program, 2014).

In a report on outsourcing for operations and maintenance of rural roads in Washington County, Oregon (Schamp, 2015), the conclusions showed that the process could deliver the economic savings that were expected. The success described was attributed to the careful construction of a contract specifying the tasks to be done, in detail. This success resulted in an expansion of outsourcing by the county for road operations and maintenance.

The decision to outsource public services has implications for the democratic process, by which public agencies are accountable to voters. Outsourcing by state agencies may prevent citizens of the state from exercising oversight of the activities of the private contractor. Outsourcing means that taxpayers are forced to allow a monopoly run by a single corporation (Martin, 2014) to act without public oversight under terms of contracts that are enforceable for decades (Heinecken, 2013; Ostensen, 2013). Because of outsourcing, wages and benefits for workers in the locale often fall, as the private

companies participate in a race to the bottom to gain outsourcing contracts that are awarded based on lower costs (Cohen, 2014; Wynan & Verhoest, 2015; Wynan et al., 2013).

In the State of Michigan, the Mackinac Center for Public Policy conducted an annual survey of privatization of services for public schools. Privatization represents permanent outsourcing of services that were once provided by state employees (Mackinac Center for Public Policy, 2014). The report summarizing the results of annual surveys of Michigan public schools dating back to 2003 indicated that nearly 40% of schools outsourced food services; nearly 50% outsourced custodial services; and 24% outsourced transportation services. The report showed a consistent escalation of the outsourcing trend since 2003 (Mackinac Center for Public Policy, 2014).

**State prohibitions against offshore outsourcing.** Consideration of outsourcing must include whether U.S. workers would perform the services delivered by a private contractor. Certain U.S. states have enacted prohibitions against offshore outsourcing of state services. Alaska, Arizona, Missouri, New Jersey, Ohio, and Wisconsin have enacted legislation similar to Ohio's Standard Affirmation and Disclosure Form Governing the Expenditure of Public Funds on Offshore Services. An executive order from the state governor resulted in the prohibition, which states, "If awarded a contract, both the Service Provider and any of its subcontractors shall perform no services under this Contract outside the United States" (State of Ohio, 2011). Similar legislation in the State of Wisconsin warned service providers "inability to perform all services in the United States shall be grounds for disqualifying your Proposal for this contract" (State of

Wisconsin, 2013). State agencies that consider outsourcing must also conform to existing federal restrictions. In a report dated April 11, 2014, the U.S. Department of Health and Human Services warned states that under federal law, outsourcing contracts for Medicaid claim processing may not be issued by states to contractors located outside of the United States (Department of Health and Human Services, 2014).

In addition to states, many U.S. cities experience incentives to engage in outsourcing of services to save on costs. A report by the National League of Cities (2014) stated that while cities were in economic recovery from the recession of 2008, significant headwinds remained. The cost of services and employee wages, pensions and health costs represented a burden on budgets. These four factors were characterized as the most pressing negative influences on local budgets (National League of Cities, 2014). Cities may consider outsourcing of services to avoid these fiscal burdens.

Jiang and Qureshi (2006) reported that the outcomes of many outsourcing ventures remain undocumented. In a study of outsourcing literature from 1990 to 2003, Jiang and Qureshi (2006) found three significant gaps in existing literature: lack of objective metrics for measuring the results of outsourcing projects; lack of research on the effect of outsourcing implementation on firm valuation; and little research on the design of outsourcing contracts. The conclusions stated that the final goal of every business activity was to increase valuation of the firm.

Yet, few studies provided evidence for an association between the decision to outsource and its stock market value, and studies were lacking for the effect of cost from the perspective of the management of these projects. “Due to this lack, it seems

reasonable to borrow event study methodology from the discipline of finance to simultaneously analyze the changes of outsourcing firms' performance and their stock market value" (Jiang & Qureshi, 2006, p. 55).

Several financial data analyses in relation to outsourcing have appeared in research journals. Bardhan, Whitaker, and Mithas (2006) examined the role of information technology in the outsourcing of manufacturing production. The research question included whether manufacturing strategies influenced outsourcing of production, and whether outsourcing influenced manufacturing performance. The research proceeded from the perspective of information technology and manufacturing strategies as precursors for outsourcing. After developing a theoretical framework that was validated using cross-sectional survey data obtained from U.S. manufacturing facilities, the study conclusions indicated that plants with larger investments in information technology were more likely to outsource after the investment (Duhamel, Gutierrez-Martinez, Picazo-Vela, & Luna-Reyes, 2014; Marchewka & Oruganti, 2014).

Further, investments in information technology combined with subsequent outsourcing were likely to result in lower production costs of goods and greater increase in quality of product (Bardan et al., 2006). The authors did not address the question of whether an increase in efficiency and the ability to analyze the metrics of production because of advanced information technology application was a motivator for deciding to outsource manufacturing production.

## Research Gap

My search of the literature research aimed at addressing the first two gaps pointed out by Jiang and Qureshi (2006): a lack of objective metrics for outsourcing results evaluation; and lack of research on the relationship between outsourcing implementation and firms' value. Bardhan et al. (2006) addressed the relationship between outsourcing implementation and firm value by examining the relations between investment and production process outsourcing. In a study on information technology, production process outsourcing, and manufacturing, Bardhan et al. evaluated the outcome of production outsourcing at the plant level. The study confirmed the framework using cross-sectional survey data from U.S. manufacturing plants. The study findings indicated that plants with greater investment in information technology were more likely to outsource their production processes. Additionally, investments in information technology and production outsourcing were associated with lower cost of goods sold and significant quality improvement, improving firm value. The study extended existing literature by providing an integrated model for studying the effects of outsourcing of information technology and production outsourcing on plant performance and firm value.

Jiang and Qureshi (2006) investigated the result of outsourcing on organizations, while documenting evidence on how outsourcing affected the organization's cost proficiency, manufacturing, and value. Jiang and Qureshi was particularly concerned with the effect of outsourcing on firms' operational performance, productivity, and profitability. A subsequent study by Jiang and Qureshi (2007) used evidence from Japanese companies to assess the effect of outsourcing on firm value. The study of

Japanese firms examined outsourcing effects from the perspective of the potential for revenue-generation. The market value of the firms before and after outsourcing was used as the prime metric.

This analysis described the effects of outsourcing for future possible revenue potential. Jiang et al. (2007) reviewed the association and interaction between the organization's outsourcing decisions and market valuation. The findings on the Japanese manufacturing industries revealed that offshore outsourcing, core business-related outsourcing, and shorter-term outsourcing were positively associated with the effects on the firms' market value. The limitations of the study included: (a) limitation of data for Japanese manufacturing industries; and (b) limited to a linear regression model.

Kulmala et al. (2006) created an explorative case study concentrating on theory building. The findings were that the public-sector firms have not focused on reviewing the implications of unit cost behavior during outsourcing projects. Public sector organizations have not concentrated on modeling or analyzing the fees associated with these projects. Kulmala et al. suggested that these organizations do not have a systematic process for managing costs. Due to the lack of benchmarks and tools to monitor these costs, the outcome leads to unprofitable outsourcing projects and poorly managed projects. By reviewing the structure of the system from the perspective of directors, and structuring the outsourcing decision as described in this proposed study, a system may be established to allow a public agency to both forecast cost development and rely on judgment in making decisions (Kulmala et al., 2006).



## **Definition of Outsourcing**

Outsourcing is the transference of responsibility for a specific business function from an internal work group to a work group that is external to the organization. It involves assigning tasks to suppliers and distributors for the provision of required services and materials or processes that the organization does not intend to continue performing internally. In addition, it can involve contracting for ongoing services from external providers that a company or organization currently performs for itself.

Outsourcing is classified as follows: (a) traditional; (b) conventional, but as a partnership with an enterprise-wide effect; (c) strategic, but as a partnership with a function-wide effect; and (d) business transformational; or core and enterprise-wide (Gylling et al., 2015; Kulmala et al. 2006).

## **Failure of Initiatives**

Minimal experiential research has been conducted on the root causes of the failure of outsourcing initiatives. For example, even though Gylling et al. (2015) noted that the major factor for failure of outsourcing initiative is fear of loss of employment or change, the study did not provide information on:

- whether this effect of outsourcing could have been predicted before going into outsourcing initiative
- whether this effect of outsourcing was considered while making the decision on outsourcing initiative
- whether this effect of outsourcing was intentionally neglected considering other benefits of outsourcing

In other words, causes of failure could lie in the strategy of the outsourcing initiative, as there could be gain in one functional area, combined with a major loss in another aspect of organizational performance, which was not initially considered (Gylling et al., 2015).

During early studies of outsourcing, the process was viewed as a commodity, and it was studied from the perspectives of duration of the outsourcing contract variety of vendors and structure and management of contracts (Nickerson & Zenger, 2004). This opinion may have originated in the motive for much early outsourcing activity, which was based on the drive for lower labor and production costs. As the outsourcing trend has increased, other motives have emerged for outsourcing, such as transformation of technology sophistication and management approach.

Beyond the context of outsourcing as a commodity, researchers have examined issues such as overall improvements in organizational performance that could be attributed to outsourcing, including increased efficiency, service quality and dependability, or customer/client satisfaction. Subsequently, researchers analyzed the next generation of strategic outsourcing including a range of models for strategic outsourcing and offshoring, and the overall effect of strategic outsourcing on organizational function (Chakravarty et al. 2014; Peslak, 2012).

### **Drivers for Strategic Outsourcing and Their Effect on Organizations**

Strategic outsourcing helps to cut costs (Nordtvedt et al., 2015; Gallet et al., 2015; Peslak, 2012), increase capacity, improve capacity, improve quality, decrease cost of modification and risks, develop supervising competitiveness (Grahovac et al., 2015;

McTaggart & O’Flynn, 2015; Paagman et al., 2015; Peslak, 2012), and increase profitability and productivity to improve financial performance. Some research has been conducted on measures to quantify the outsourcing effects on organizational performance. To conduct research on measures, three types of performance measures are necessary: strategic measures, financial measures, and quality measures (Karlberg, 2015; Peslak, 2012). Some research has also been carried out on the effect of outsourcing on organizational characteristics. Additional research has been done on the reasons for outsourcing, types of activities/functions outsourced, specific goals for outsourcing, and the relationship between the outsourcing strategy and organizational performance.

### **Risks of Outsourcing**

Even though outsourcing has become popular in the last couple of decades, there are significant risks involved in outsourcing long term. Some researchers have focused on the transaction risks associated with this approach, such as a high threat of opportunism, or the possibility of violation of confidentiality (Mohiuddin & Sue, 2013; Nordtvedt et al., 2015).

These threats arise when an organization shares knowledge and access to internal resources out of necessity, to complete a project (Huther & Krucken, 2014). The threat of opportunism appears when a company makes a significant investment in the transaction infrastructure, and moves away from the ability to perform essential functions in-house. The associated dependency that can develop exposes the company to opportunism on the part of the outsourcing vendor.

A breach of confidentiality by the outsourcing vendor may comprise a threat to intellectual property. Some researchers have concluded that careful setup and proper implementation of the contract between company and outsourcer can be used to ameliorate this threat (Lacity & Willcocks, 2014). Although companies may gain advantages over competitors through outsourcing, the risks associated with outsourcing increase when the relationship is sustained for the long term. From the perspective of the company that has made the choice to outsource, significant investment is usually made at the beginning, with the expectation of back-loaded profits. An initial capital payment may be required, along with high costs for transferring responsibility and performing related cost-reduction activities. Just as the company has finished making these cost-heavy adjustments, the outsourcing vendor may express the need to move toward new IT tools or other change.

Jensen et al. (2013) noted that when outsourcing involves offshoring, organizational reconfiguration must be done, which involves three stages of disintegration of the original business model, relocation, and reintegration of the business model with the service provider environment. This is necessary as the service provider operates within an environment that is foreign to the contracting entity (Scalera et al., 2014).

At times, outsourcing fails, and the organization must take up the function again. Fratocchi et al. (2014) noted that tensions may develop, just at the time when a return to insourcing has become nearly impossible for the company. Firms are frequently forced to prematurely terminate contracts with outsourcing vendors, and begin the arduous process

of seeking new vendors and writing new contracts. The study conclusions stated that the limited number of decision models for use by managers in projecting risks and benefits and quantifying benefits was an important cause of outsourcing failure.

Companies seldom project strategy this far ahead when deciding to outsource. This tendency to avoid long-term risk planning is evident in the existing literature, where transaction cost theory (TCT) dominates conduct-sourcing analysis (Gronseth et al., 2015). Production costs are the most important predictor of make-or-buy decisions, with competition in supplier markets and volume uncertainty following in importance. In outsourcing arrangements where a company is unable to supervise the actions of the outsourcing vendor, decisions by the vendor could involve significant risk.

Ang and Straub (1998) noted that if the company has dedicated nonfungible (irreplaceable) assets to the transaction, risk increases. These assets could not be recovered or retrieved easily if the transaction failed. The study conclusions included recommendations that the projected dollar measure of efficiencies of outsourcing a function should include the savings on administration of production. Mode of governance should be examined as part of this process. Ang and Straub (1998) examined the economic factors that determined information systems outsourcing for banks. The results of the study indicated that production cost advantages offered by outsourcing vendors were the primary attraction for banks. Transaction costs were less influential than production costs in this regard.

The decision to outsource involves risks for an organization, such as loss of core competencies and exposure to unpredictable costs if the collaboration fails (Scalera et al.,

2014). A failed collaboration or one that fails as planned can exert a negative effect on an organization, as uncertainty leads to tensions and added expense. The authors provided modeling strategies for predicting relevant aspects of outsourcing to single and multiple vendors. The strategies included the probable costs of vendor shirking once the choice has been made to work with them, as well as incentive strategies to neutralize this tendency. While cost savings is the primary objective of every manager when faced with a decision whether to outsource, an outsourcing decision that is made solely based on TCT is far from perfect. Single-minded focus on cost minimization draws the most criticism of this theory, due to the risks cited above.

Fratocchi et al. (2014) listed the possible issues that are associated with failed outsourcing initiatives. These are: (a) outsourcing the *wrong* processes or functions, (b) selecting the wrong vendor, (c) committing to a contract that is not structured to the firm's advantage, (d) overlooking personnel issues in the organization, (e) losing control of the outsourced activity, (f) not considering all the costs, especially the hidden costs, and (g) failure to incorporate the exit strategy in the contract.

Scalera et al. (2014) discussed the effect of outsourcing on information technology functions. Information systems play a specific role in organizations, which involves handling and processing highly confidential information and data. Threats emerge when outsourcing models for information technology are frequently one-sided, with an emphasis on cost savings. The models do not include comprehensive descriptions of the dimensions of this relationship. The necessary relationship factors and governance mechanisms differ between outsourcing relationships. Threats could emerge when the

role of relationship factors in outsourcing is assumed to require a one size fits all concept. As the expectations and context of the outsourcing arrangement differ, any model must be able to accommodate these variations to be effective. A possible solution to this deficiency would be to construct a taxonomy of various outsourcing relationships, based on empirical evidence derived from a comprehensive review of existing studies.

Beasley et al. (2004) defined the risk of the make or buy decision from the perspective of its effect on the enterprise as follows:

1. **Market Risks.** These are the risks to the organization's market share, revenue or the customer base because of the poor quality of customer service from the outsourcing vendor, or unauthorized disclosure of confidential information.
2. **Operational Risks.** These are the risks in implementing the outsourcing strategy effectively and in turn losing the perceived benefits of outsourcing. These may include choosing the wrong vendors, disputes in contracts, and issues in actual implementation of the initiatives.
3. **Financial Risks.** These may occur due to failure to account for all costs or undervaluation of some considered costs, which can endanger the objectives of the outsourcing initiative.
4. **Human Capital Risks.** These risks are related to the human resources employees of the companies. These could occur through loss of the skilled resources, operational slowdowns, or in some cases, strikes, all of which may affect the outsourcing initiative and the company.

5. **Information Technology Risks.** Since IT is currently one of the most common functions to be outsourced, the risks are related to data security, virus attacks, a need for constantly changing technological infrastructure, loss of intellectual property, exposure of confidential client data, and associated litigation, etc.
6. **Legal and Regulatory Risks.** These are possible legal and regulatory risks related to the privacy, confidentiality, and security of business transactions as per norms of the country or industry.

Organizations need to weigh each of these risks and minimize or eliminate their effects. Wu et al. (2005) focused on the impact of outsourcing on the long-term function of an organization. Protection of core competencies may become a concern when an organization persists in outsourcing if the functions assigned to vendors are integral to the firm. The process of outsourcing these competencies often involves knowledge sharing and transfer of intellectual assets (Teo & Bhattacharjee, 2014). There is a risk that component/process technology that is the property of the organization would be disclosed to suppliers, and that the organization would lose control after disclosure about how it may be used or transferred to others (Wu et al., 2005).

### **Background on Outsourcing**

In general, outsourcing addresses the issue of whether an organization or a firm should make or buy products and services. Firms would prefer to buy them if they can be assured that outsourcing will be more cost effective than the cost of producing it themselves without jeopardizing the quality of a product. In the case of international



outsourcing, firms can obtain the production inputs from a foreign country where the market wages are lower due to abundance of labor. The firm may still pay high efficiency wages to skilled domestic workers, but other activities that do not involve specific skills could be outsourced at a lower cost (Peslak, 2012).

Peslak (2012) indicated that most outsourcing decisions are influenced by three factors. These are the way that negotiating power is distributed between subcontractors and final producers, the caliber of existing competition, and the total number of prospective partners involved with the venture. Intuitively, one may expect that a firm with high market share or larger size may be in a better position to exert significant bargaining power with suppliers and may hence be better able to benefit from outsourcing.

In addition, large firms may want to outsource intermediate goods in the production process in order to save the material cost or to achieve competitiveness. Larger firms may be able to exert greater pressure on vendors with regard to pricing in return for a promise of larger volume of goods or services to be produced. Increased competition (lower market share) in an industry may increase incentives for outsourcing because the firm is forced to sell at a lower price and increase their output in order to avoid loss of market share (Peslak, 2012). Outsourcing is seldom seen as a strategic competitive advantage in project management of technical knowledge projects when detailed planning has not been done to investigate the pros and cons of in-house work versus outsourcing. However, there is no single best approach or model for determining

which public sector projects should be outsourced. However, there may be better decision-making processes that consider the critical issues to make better decisions.

A firm can experience lower marginal production cost via outsourcing. When the competition increases, the demand for labor adaptability also increases, resulting in a diminishment of the wage response. This in turn makes outsourcing more attractive to firms. Peslak (2012) showed that the small or medium size firms might be better off outsourcing full-range-of-support services from specialized providers outside instead of providing them from within the firm. The study provided plausible evidence that indicated that business services (except janitorial services) were favored by small-size firms (Peslak, 2012).

In relation to infrastructure and transportation projects, there is inconvenience for the public associated with transportation infrastructure improvement projects (Duncan et al., 2014). Traffic flow is inevitably disrupted during these improvement projects. Severe congestion, safety problems, and limited access to commercial and residential property are among the undesirable impacts created by lane closures during construction. State highway agencies (SHAs) are charged with supervising and executing construction while also assuring safety for the traveling public (Duncan et al., 2014).

The SHAs have tried to minimize these undesirable effects by adopting alternative contracting strategies that can reduce construction duration and lessen unfavorable impact on traffic together (Duncan et al., 2014). State agencies frequently offer contractors an early-completion incentive bonus that is greater than the cost of extra resources that would be needed to support a slower construction schedule.

Incentive/disincentive (I/D) contracting has become a popular scheme for state agencies to motivate contractors to fulfill the public's expectation that projects will be completed early (Duncan et al., 2014). The time-based I/D contracting strategy for reducing construction time has gained favor among managers in the governmental sector but also liked by contractors because it can establish win-win situations for both parties.

The Federal Highway Administration (FHWA) is also very interested in minimizing inconvenience for motorists (Duncan et al., 2014). The agency has recommended experimenting with new approaches that have the potential to reduce the time that construction will disrupt traffic flow. Like the time-based I/D contracting strategy, the Cost-plus-Time (A + B) bidding has been introduced as an innovative contracting method to accomplish early project completion (Duncan et al., 2014).

In summary, when discussing outsourcing decisions, two major branches come to mind: governmental policy decisions and individual firm choices. For government policy makers (both federal and local), selecting the best outsourcing policy options will have a direct effect on the economic and social wellbeing of the nation and for local regions as well. At the individual firm level, the decision about whether to pursue outsourcing, and how to pursue it, may determine the success or failure of the company. This in turn may have consequences for shareholders, employees, and local communities. Some studies indicate a need for an approach to assess internal organizational capabilities and available resources in a way that facilitates improvements in the organization's competitive position (Hesterly & Barney, 2015; Kumari et al., 2015). At the same time, the approach

should avoid emphasis on processes that are not cost effective for the organization to perform.

The review presented in this chapter include a number of findings and aspects of the existing studies on outsourcing, especially international outsourcing. Although it is hypothetically possible for organizations to outsource within their national borders, and some observers have predicted that domestic outsourcing will reemerge (Pearce, 2013), the outsourcing trend appears to favor looking abroad, primarily due to the search for lower cost. This trend has been exacerbated by the 2008 economic crisis, which has influenced government agency budgets (Peck, 2013). The studies provided an overview of the constituent features of outsourcing relationships, and the overview makes it possible to identify gaps in the research on this topic. These gaps in prior research on outsourcing and outsourcing alliances pertain to a lack of empirical data, and a deficiency of models that encompass the risks associated with outsourcing, such as vendor shirking and vendor drift when cost is the primary motivation for outsourcing (Gerbl et al., 2016).

### **Lack of Empirical Approach**

Most of the studies reviewed above lacked empirical data on the impact of outsourcing on cost, firm valuation, and profitability. The administrative costs of outsourcing, expenses related to loss of in-house capacity, cost of reversing a contract with an outsourcing vendor that has become unsatisfactory, and financial losses associated with finding a new vendor are some factors that were seldom addressed in the studies.

Some studies included in this literature review have approached outsourcing from an empirical perspective. Bardhan et al. (2006) conducted an empirical analysis of the influence of information technology on outsourcing of manufacturing. The research proceeded from the perspective of information technology as a precursor of outsourcing. After using cross-sectional survey data obtained from U.S. manufacturing facilities, the study conclusions indicated that plants with larger investments in information technology were more likely to outsource after the investment. Further, investments in information technology combined with subsequent outsourcing were likely to result in lower production costs of goods and greater increase in quality of product (Morais et al., 2014). The limitations of the study included data that was only obtained from manufacturing facilities located in the United States, and associational patterns only, since the data used was cross-sectional. Bardhan et al. (2006) provided an integrated model for other researchers seeking to compare the effects of information technology and outsourcing of manufacturing on the overall quality of plant performance. The authors did recommend that researchers used longitudinal data for further studies.

### **Risk of Drift**

The risk of drift in a client-vendor relationship, where performance of the vendor shifts from adherence to the original terms of the outsourcing contract, comprises a significant risk for organizations (Overby, 2013). Extricate from an arrangement in which the outsourcing vendor has gradually moved away from the terms agreed upon can involve a process of escalating tensions, followed by a costly termination and the need to locate another vendor or transfer capacity to in-house employees usually involves

significant financial loss and delays. Vendor shirking, where an outsourcing vendor accepts an investment in the project, then fails to perform according to specific benchmarks, is another significant risk that is assumed by an organization when they surrender direct supervision and oversight of performance. Detection of shirking may involve a time span during which production falls, quality declines, or delays accumulate, all while the organization receives assurances that these problems are merely temporary occurrences.

Concluding that the relationship cannot be repaired, Overby (2013) described the necessity to manage the risks of outsourcing in the context of vendor shirking, as well as incentive strategies to neutralize this possibility. While cost savings is the primary objective of every manager when faced with a decision whether to outsource, an outsourcing decision that overlooks this risk, especially if direct oversight of outsourcing vendor performance is not possible, will lack rigor. Vendor drift, where the outsourcing vendor acts with good intentions but begins to move away from strict compliance due to an accumulation of factors, may also result in poor performance. This may be particularly common when the outsourcing vendor is in another country from the organization.

### **Summary and Conclusions**

This chapter includes the detailed literature review of outsourcing, the evolution of the theoretical framework, definition of a cost-based outsourcing model, definition of variables for total cost-based outsourcing, and the risks associated with outsourcing. It addressed the deficiencies of a focus on cost of production when numerous other risk factors invariably come into play during an outsourcing initiative. These risks include

vendor shirking, vendor drift, advances in technology during a short period of time that render the original terms of outsourcing contracts obsolete, and the need to locate a replacement vendor or return a project to in-house status when a vendor proves unsatisfactory.

The risks described in these studies show that the outsourcing decision usually involves considerations that extend well beyond cost reduction. The outsourcing trend is increasing, and this is expected to continue, since it is supported by increased globalization of workforces and resources. Organizations currently have the ability to search for labor, resources, and expertise on a global basis in order to reduce costs and gain access to talented personnel. The phenomenological qualitative approach for this study may provide a valuable perspective on the experience of individuals who are responsible for making this choice. Chapter 3 includes the research methodology, population, sample size, limitations of study, methodology, the data collection plan, the data analysis plan, issues of trustworthiness, ethics, among others.

### Chapter 3: Research Method

The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of public agency managers when making decisions as to whether to outsource core government functions such as road and bridge design projects. The study population consisted of managers employed by a Department of Transportation in a state in the Midwest. The managers had experience in making outsourcing decisions. This chapter includes a description of the research design and why it is chosen for this study. A description of the participants and the sampling technique that will be used to select them, the researcher's role in this study, the data collection instrument, the data collection plan, and the data analysis plan are presented. Approaches that will be employed to support the trustworthiness of this proposed study are presented, and ethical issues in relation to this study are discussed. This chapter includes: the research methodology, population, sample size, limitations of study methodology and assumptions, data collection, data analysis, issues of trustworthiness, among others. In addition a description of the phenomenological research approach, and the ways in which this approach can support the study, is included.

#### **Research Design and Rationale**

The research question for this study focused on the lived experiences of the participants. The question revolved around the lived experience of managers in arriving at a decision whether to outsource or not based on the primary factors for deciding if a



road or bridge design project should be outsourced. The desired or expected outcome in the decision-making process is considered when determining whether these kinds of projects should be outsourced.

Three approaches for conducting a study are quantitative, qualitative, and mixed methods. Quantitative studies are designed to collect information as data that can be measured and assessed through statistical tests. Qualitative studies are designed to collect narrative descriptive data from subjects. Mixed-methods studies use a combination of both of these approaches. For this study, qualitative information was important as the focus of the study was to understand the decision making process as it currently exists. I wanted to explore the lived experiences of the study participants, and not specific data about the decisions that they have made. The process of deciding to outsource includes the potential to design a outcome that may be successful or not. That is why it is worthy of study. As the study was intended to explore the process of making the decision to outsource, and not the outcome of those decisions, the information that is sought is subjective. I was not looking for quantifiable data, so neither mixed methods nor a quantitative approach was selected.

The five main types of qualitative inquiries and research designs are phenomenology, grounded theory, ethnography, narrative research, and case study (Merriam, 2014). All these qualitative methods have strengths and weakness; some are effective in one environment while others are appropriate in different settings. Grounded theory involves numerous rounds of data collection and interpretation in order to arrive at an abstract concept that applies to the experiences of study subjects. The goal of this

study was pragmatic, so grounded theory was not a good fit. Case study is based on the experience of an individual, an event, or a process (Yin, 2014). As a case study would not be suitable for interviews with participants to understand their personal experience with a phenomenon, it was not suitable for this study. As narrative research is used to explore the personal lives of individuals, it would not be useful for this study. Ethnography explores the experience of individuals in terms of their ethnic affiliation. As this has no bearing on the study, it also would not be appropriate for the present study (Merriam, 2014).

Out of the five methods of qualitative research, phenomenology is the most appropriate. The study included a semi-interview-driven to explore lived experiences of the managers in the process of deciding to retain a project as in-house work or to outsource it from the Department of Transportation. The manager participants were interviewed to obtain their lived experiences with outsourcing. This approach illustrated important points such as: whether the managers perceived the phenomenon of outsourcing as cost effective for core activities such as road and bridge design projects; if size and location of projects matters for outsourcing; any effect of outsourcing on knowledge transfer. I interviewed managers to obtain their lived experiences with outsourcing, including projects that were considered for outsourcing but were finally retained for in-house performance.

In an interview-driven study, the way the interviews are set, conducted, recorded, type of questions (open ended or closed) interview questions, and transcription are of major importance. In this type of study, the researcher works closely with the

interviewees to understand their lived experience with regard to the research question and problem (Merriam, 2014). The phenomenology approach was important for this study, as it was useful for understanding the lived experiences of management when it comes to making in-house work versus outsourcing decisions, which was the focus of this study.

This approach was useful for gathering data on lived experiences, exploring those experiences and ideas, and finally analyzing the data to see a pattern, which might help to establish some guidelines for making future in-house versus outsourcing decisions. I explored the managers' perceptions of their experiences in terms of (a) if outsourcing was beneficial or had any potential risks, (b) types and size of projects to outsource, (c) when to outsource, (d) quality of outsourced projects, and finally (e) cost difference between doing a project in-house versus outsourcing.

Phenomenology can be defined as the process of understanding phenomena as it is perceived and described by the persons who experience it. Phenomenological studies are conducted primarily through interviews (Collingridge & Gantt, 2008). In addition, Moustakas (1994) described the concept of *epoché*, which requires the elimination of all suppositions about a phenomenon. Another core concept of this qualitative tradition or design includes dividing the participant's responses into individual statements, a process known as horizontalization. The nonrepetitive and nonoverlapping constituents are clustered into themes. As Moustakas (1994) noted, the phenomenological concepts are expressed by the units, which are changed into cluster meanings.

Statements were then integrated together to include general descriptions of the experiences, attitudes, and perceptions, which are textural or what will be experienced, and structural, which are how the phenomenon is experienced. Finally, the phenomenological analysis and findings may provide the reader with a better understanding of the most meaningful aspects of the experience (Moustakas, 1994).

### **Role of the Researcher**

Based upon the qualitative research paradigm, I was the interviewer for this study. The interviewer gathers and describes the lived experiences of the participants in the study from the analysis of the responses of the participants. The primary instrument to collect the data is the researcher (Merriam, 2014). A set of semistructured open-ended qualitative questions is listed in Appendix A.

Collection and mining of data from the participants from management at the Department of Transportation's lived experience of outsourcing was the responsibility of the interviewer (Collingridge & Gantt, 2008). The quality of the data obtained was dependent on the interviewer's manner of conducting the inquiry. I maintained a demeanor that indicated interest and engagement, but did not indicate favor or dislike toward anything the participants said. I did not relate my own experiences with outsourcing, and did not reinforce their reports of emotions about the experience either. The demeanor of the researcher helps to set a relaxed tone that aids in eliciting lived experiences (Collingridge & Gantt, 2008). If participants were not comfortable during the interview, the depth and breadth of the information gained could have been negatively

affected. Leedy and Ormrod (2010) recommended that the researcher quietly listen as the participants share their experiences.

The goal was to obtain the richest quality of information from the participant (Leedy & Ormond, 2010). Themes and patterns were extracted from the data and the findings were organized and prepared for data analysis (Moustakas, 1994). Leedy and Ormond (2010) stated that if the researcher has previously experienced the same phenomenon as the participants, care must be taken not to allow this personal experience to introduce bias into the study. Suspension of the personal experience of the researcher, as mentioned earlier, is called *epoche* or bracketing (Moustakas, 1994). The researcher must be careful to avoid bias or prejudice, and to acknowledge the possibility of these occurring as appropriate. Although I had personal experience with the outsourcing decision process, I did not express this personal perspective during the study participant interviews. During those interviews, I was careful to control my facial expressions, body language and vocal tone not to express approval nor disapproval. I listened with an interested but neutral demeanor.

Phenomenological inquiry requires a loose structure with open-ended questions to discover a phenomenon from the perspective of the study participant (Collingridge & Gantt, 2008). The purpose of the study questions was to guide participants as they relate their lived experience of outsourcing. The underlying assumption was that the insights that are gained from this process will inform the decisions of managers at other government agencies once this study is complete. I developed the research and the interview questions for this study. To assure the value of the questions, some

professionals and topic experts were contacted to review the language and themes of questions. Additionally, committee members were requested to provide further guidance and input. The members commented that not all participants would have the same degree of authority or experience regarding the outsourcing decision. The interview questions should include latitude for this variation, and I did consider this when formulating the questions. I had originally intended to conduct the interviews via telephone with participants as they sat at their desks at work. The committee members indicated that participants would be uncomfortable doing this due to the sensitivity of the matters under discussion. They might fear a negative the effect on their employment status should they be overheard. So, I conducted the interviews in a soundproof conference room at a public library.

## **Methodology**

### **Participation Selection Logic**

After IRB approval (IRB #07-18-16-0167054) of this study, I contacted officials at the Department of Transportation to obtain their approval to interview the management level staff in addition to providing them with the background and details of this study. A request was also made for help in identifying the appropriate staff that are responsible for making the make or buy decisions at this agency. I also made a request to have access to the guidelines on this subject literature for better understanding of the current process. The participants were contacted to discuss the interview location at their leisure and in a place, whereby they could maintain their confidentiality for the interview. I ensured that the conversations and the interviews would be conducted in an isolated space to further

help guarantee the privacy of those that choose to participate. There were 19 participants from the management level when data saturation was reached where replies/data sounded similar or repetitive. The only participants selected were those with at least 10 years of experience in making or buying decisions. These participants had technical as well as managerial experience.

After the initial approval from the commissioner, I contacted the human resources department and the supervisors of the identified participants to complete the research. This Department of Transportation and the participants were purposefully selected for this research for three reasons. First, many of my colleagues and employees who are responsible for deciding on in-house work versus outsourcing were easily accessible. Second, it was due to my interest, previous experience with the department, understanding the outsourcing phenomena, and a desire to gain a more complete understanding of the process, as well as intangible assets that were gained and lost in the make or buy decision. Third, I had a professional interest in monitoring the effect of these decisions on the organization's bottom line. However, there was no conflict of interest, as my employment with the department had ended. Although I have left the department, I was granted written permission from the DOT to contact employees there to gather data and conduct follow up as needed.

After the gaining approval from the IRB at Walden and permission from the Department of Transportation to conduct this study, I sent a package to potential participants. The package included the first three questions of the interview protocol (see Appendix A), consent forms, a confidentiality agreement (see Appendix B) to be signed

by the participant and myself, and an introductory letter (see Appendix C). This invitational letter included the purpose of the study, criteria for participation, clarification about compensation for participation, the significance of the study, and contact information.

A few days after mailing the information, I contacted the participants via email to request their assistance in the study. This email included contact information of the committee chair and the IRB in addition to the researcher's contact information, in case they want to contact them. At time of the interview, the participant was again given a consent form that included the purpose of the study, background information about the study, and contact information. In addition, the participant was advised that he or she may withdraw from the study at any point without any penalty. If a participant chose to withdraw, their interview form would be stamped *withdrawn* to ensure data was not used in the final analysis. The consent form also informed the participants that the interview would be taped. A confidentiality letter was sent to all potential participants signifying that steps would be taken to ensure the privacy of participants' responses as well as their personal identity.

McLaughlin (2004) stated that the number of participants required for the phenomenological research was a minimum of six. On the other hand, Leedy and Ormrod (2010) suggested using up to 20 or until data saturation of the information has met the requirements. The participants for this phenomenological study were selected based on their experience in the make or buy process. Participants were not contacted until after IRB approval was granted to begin the study. The standards that were used for selecting



participants for this proposed study were: (a) the participant had processed projects for the Department of Transportation and followed the department protocol in deciding to outsource or not to outsource the project; (b) the participant was currently working for the Department of Transportation; (c) the participant had more than 5 years of experience in this capacity of decision-making with the Department of Transportation.

### **Instrumentation**

For phenomenological research, the researcher is often the sole person responsible for data collection and for the design of the instrument that is used to collect the data. According to Collingridge and Gantt (2008), individual interviews are generally the principal source of data collection for phenomenological studies. The use of interview forms or conversational guidelines help keep the interview centered and on target. A critical means for data collection is interviewing, because it provides a view to the past. By using interviews, a deeper understanding of the lived experiences of the participants can emerge.

The semistructured interview questions were derived from the research question and were related to the framework and the review of the research literature for this study. These questions considered the attitudes and beliefs of participants, as well as their lived experiences of making the make or buy decisions. Questions for the initial interview began with background questions related to the participant's degree of experience deciding to make or buy. These introductory questions allowed participants to become acquainted with the interview process. Next, there were several descriptive questions, which were designed to encourage participants to provide detailed information about

their lived experiences about in-house versus outsourcing. In addition, the questions explored how the participants lived experiences shaped their attitudes and beliefs about outsourcing.

A digital recorder was used to preserve the content of the interviews. I conducted member checking as the interviews proceed, to confirm an understanding of what the participant meant to convey. In addition, I used probing via follow up questions during the interviews. This allowed participants to elaborate further on meaning of their responses provided during the interview or in an interview after the data was categorized and/or reviewed. Transcribing the audible data was the first step in the process of analysis (Bailey, 2007).

### **Pilot Study**

As this was a qualitative study, I conducted a pilot study with three participants to assure that the instructions were clear and understandable, the questions were clear and understandable, and the questions were complete and did not need to be modified or changed. The characteristics of the pilot participants mirrored the characteristics of the sample in the study. The pilot study included three professionals who met all the criteria for participants. These three professionals were not a part of the main study. The aim of the pilot study was to help me adjust the clarity of the interview instructions or questions as needed. I conducted the pilot study in the same way as I subsequently conducted the primary study. The three professionals all participated willingly in the interviews, at the conference room in the public library where I conducted all interviews for the study. The process of interviewing went as I had expected. As I did not find that changes to the

introductory package of documents, the interview questions or interview process were necessary, the instructions and questions were appropriate to use in the main study.

### **Procedures for Recruitment, Participation, and Data Collection**

The data collection procedures for this study were as follows. For data accuracy and record keeping, the interviews were digitally recorded. Participants were scheduled for interviews based upon their availability. After gathering scheduling information from the participants, I developed an interview schedule. I sent the participants an email reminder 3 days before the scheduled interview time to confirm their appointments, as these initial interviews were conducted individually. I scheduled the use of a conference room at the local public library for the interviews.

Permission of the study participant to record the approximately 1-hour interview was obtained before the interview. The semistructured interview was digitally recorded. The data was tabulated and analyzed electronically as well as manually. Study participants were asked open-ended questions about their experiences and perceptions of outsourcing at the Department of Transportation, specifically as their lived experiences. Semistructured qualitative interview questions are meant to allow for emergence of rich experiential data (Merriam, 2014). Since quantitative interviews are limited to collecting data pertaining to a pre-determined hypothesis, and are not useful for gathering data on little known phenomena (Merriam, 2014) this type of interview was not used.

The interviews were scheduled outside of working hours for the Department of Transportation, in a setting agreed upon by the participant and myself. Each interview

lasted between 60 and 90 minutes. Before beginning the interviews with the participants, I explained that the purpose of this proposed qualitative analysis was to explore the knowledge, experiences, and practices of individuals employed in management of the Department of Transportation, who were responsible for making daily decisions to make or buy products and services.

### **Data Analysis Plan**

Member checking was done after the interviews were complete. Participants were provided with a transcript of their interview to make sure that the transcript reflected what they meant to say during the interview. As this study was qualitative in nature, the analysis process began with the transcription of the data from the interviews, and the use of NVivo 8® software. NVivo 8® is qualitative software to aid in the classification, sorting, and analysis of the data. The software enabled me to search for common word usage, attach codes to textual patterns, identify themes, and develop meaningful conclusions related to the phenomenon of outsourcing. Once the data from the interviews was coded, I used a van Kaam method of analysis for phenomenological data recommended by Moustakas (1994). According to Moustakas (1994), the first step in the data analysis process is horizontalization, which requires nonoverlapping and nonrepetitive statements to be identified from the transcribed interviews. Coding is the process through which raw qualitative data in the form of words, phrases, sentences, or paragraphs is examined. There are several types of coding and I used open coding and axial coding. In open coding, the researcher goes through the data and either circles or highlights sections of the text and codes them. In contrast, in axial coding, the researcher

has a large number of codes and sorts them into a predetermined order or groups. There are several ways to perform open coding, but the most general method is line by line coding that is used to build concepts and categories. In this process, the concepts emerge from the raw data and are grouped into conceptual categories for later analysis. In my research, I used the open coding technique to initially code my data.

The next step of the data analysis process involved deleting those statements not relevant to the participant's lived experiences in outsourcing. A cluster of the statements was categorized into themes or meaningful units (Moustakas, 1994). The data was synthesized into themes that were descriptive of the textural experience, using specific examples. The patterns were reflected on the textural descriptions and the research constructed a description of the structures of the participant's experiences. From the textural and structural descriptions of all participants' experiences about outsourcing, a composite emerged of both the textural and structural descriptions of the meanings and the essence of the phenomenon of outsourcing. Finally, all individual textural and structural descriptions were integrated into a universal experience about outsourcing that represented the group.

During data analysis, discrepancies may arise, which Merriam (2014) noted should not be discounted by the researcher. The researcher should conduct a systematic search of the entire body of data, looking for nonconforming and confirming evidence. If the discrepant cases outnumber those data that fit the assertion, the assertion would not be warranted by the data. Even if most of the cases fit the assertion, the discrepant instances would be noted for subsequent analysis. This information will be documented and

discussed. During data analysis, I was surprised to discover that despite some trepidation about surrendering control by outsourcing projects, participants did report acceptance of outsourcing as a trend, and looked forward to the knowledge sharing and added creativity that outsourcing brought. This theme was noted in the study results.

### **Issues of Trustworthiness**

#### **Credibility**

Lincoln and Guba (1985) stated that in qualitative research, trustworthiness parallels internal validity. Lincoln and Guba also noted that credibility can be tested by asking, “Is there a correspondence between the way the respondents actually perceive social constructs and the way the researcher portrays their viewpoints?” (p. 105). When conducting a qualitative study, member checking is a critical strategy for establishing credibility (Tanggaard, 2008). I sent participants a copy of the transcript of their interviews and invited their responses regarding the accuracy of the transcript for what they recalled saying in the interview. I added follow-up questions by telephone if the participant disputed the transcription, or if the original audio data was unclear for transcription purposes. Three participants noted small inaccuracies in the transcription, but these discrepancies were grammatical and not significant regarding meaning.

I also sent participants a summary of the tentative findings of the study and asked them to comment on the plausibility or credibility of the findings. The findings of the study were adjusted to reflect their comments. The comments all pertained to the mixed feelings about outsourcing about the need to accept outsourcing for pragmatic reasons, and feeling apprehensive about surrendering control while hoping that outsourcing would

enhance performance and quality of outcome. In addition, the participants were asked to review the transcription of the interview. The participants were asked the following questions in relation to the review:

1. Does the transcription accurately describe your attitudes and beliefs regarding outsourcing?
2. Is there anything in the transcription that has been misinterpreted?
3. Is there any additional information you would like to share in relation to your lived experiences or to your attitudes and beliefs about outsourcing?

Participants were given a choice to listen to their digitally recorded interviews while reviewing the transcription, if they were interested in doing so. None expressed interest in listening to their recorded interviews, but three noted minor discrepancies in the transcription that were grammatical and did not change meaning. I summarized their responses and had them sign a form to confirm that I had not missed anything. All participants agreed to review, and upon completion of this transcription review, participants signed a form indicating that they had reviewed the transcription, and to the best of their knowledge, the responses were accurately transcribed.

### **Transferability**

One strategy that can be used to enhance transferability is to carefully select the study sample so that maximum variation is provided, whether it is the selection of the site or the participants that are interviewed. This study included some variation in the characteristics of the participants in relation to gender, age, education, and experience. In addition, this study used the strategy of typical sampling; I purposely selected a research

site and participants who were typical of having knowledge of outsourcing.

Transferability was not expected, given a small sample from one state. To make sure that quality control was done, member-checking technique was used with no requested changes.

### **Dependability**

When discussing dependability, it is important to be more specific about the term as it is used in qualitative research. Lincoln and Guba (1985) use dependability to describe the extent to which it is possible to replicate the research findings. Merriam (2014) noted that possible strategies to ensure the consistency and dependability include triangulation, peer examination, clarification of the researcher's position, and the audit trail. For this study, the design maintained an audit trail, which described in detail how the data were collected, how categories were coded and categorized, and how decisions were made throughout the study. In the appendixes, I included the data collection instruments as well as samples of coding for the interview data.

### **Confirmability**

A research journal was maintained during the research process to record my experiences. During the interview process, a journal was maintained as a reflective journal in which the researcher documented observations, thoughts, and emotions about the interviews. The reflective journal included a description of the participant's behaviors during the interview process.

Corbin and Strauss (2014) noted that self-reflective journals were a strategy used to encourage reflection, during which researchers could use the journal to examine



personal assumptions, biases, and goals as they clarified the research process in personal terms. Reflective journals can also be used as an interactive tool of communication between the researcher and the participants. Reflective journals allow researchers to analyze their influence on the research process. Reflective journaling may also assist the researcher in documenting any nonverbal feedback that may appear contradictory to participant responses to the interview questions.

### **Ethical Procedures**

The identity of the participants, the facility names, client affiliations, and the data was maintained as confidential and will be kept locked in a safe in my care as the researcher for a period of 5 years after the conclusion of the study (Leedy & Ormond, 2010). Five years after the conclusion of this study, the materials including the recordings will be shredded and/or destroyed. An identifying letter was assigned and used for identification of the participant to provide anonymity and protect confidentiality (Leedy & Ormond, 2010). As noted above, the study's editor also signed a confidentiality form stating that the data was not to be disclosed.

A letter of invitation was sent to all potential participants outlining the procedures, which were exercised to gather, evaluate, disseminate and handling the data. Every effort was made to make sure that all participants fully understood the study at hand. To record the agreement, all participants were requested to sign the consent form read as shown below:

1. Participants understand the objectives of the research and that participation is strictly voluntary.

2. Participants may cease participation in the study at any time.
3. Participants will receive a copy of the participant consent form and sign it, before the commencement of the interview.
4. Participants will sincerely communicate their experiences in as much detail as possible.
5. Participants will consent to participating in an interview that may last one to two hours, with potentially further follow-up interviews at a mutually agreed-upon time and place.
6. Participants grant permission for digital recording the interview and for the data to be used in a dissertation and possible future publications.
7. Prior to the interview, participants will be granted the opportunity to examine open-ended interview questions.
8. Participants will be informed that they would receive a copy of the transcribed interview to substantiate the documentation of their experiences.
9. Participants are guaranteed that all identifying data will be eliminated and that confidentiality is paramount.
10. Participants realize that no compensation will be offered
11. Data will be maintained as confidential and will be kept locked in a safe in my care as the researcher for a period of 5 years after the conclusion of the study. Five years after the conclusion of this study, the materials including the recordings will be shredded and/or destroyed.

The Institutional Review Board (IRB) at Walden University conducted an ethics review of the research as it pertains to the participants in the current examination to ensure that the study aligned with all of Walden's ethical standards and U.S. federal regulations (Walden University, 2015). I obtained approval from the Institutional Review Board (IRB) at Walden University to conduct this study (IRB #07-18-16-0167054). After gaining approval, all prospective participants were contacted and the data collection phase of the study began.

Each participant was assigned a four-digit number at the beginning of the study to avoid any confidentiality and ethical issues. To protect the participant's name, prior to conducting the study, participants signed an informed consent form and confidentiality form, which included the following information: a brief description of the study and procedures, risk and benefits of the study, confidentiality issues, and contact information of the participant.

In addition, participants were asked to indicate on the consent form whether they consented to the digital recording of their responses. Participants were also informed that the study was voluntary, and that at any time, they could choose not to continue their participation. Data was stored on a flash drive. The flash drive was stored with the data in a safety deposit box and I was the only person who had access to this data, which will be erased 5 years after completion of the study.

### **Summary**

This chapter included a description of the qualitative research approach with the phenomenological research design and the rationale for the selection of each. In addition,

this chapter included a description of the role of the researcher, the setting of the study, the selection of participants, the sampling technique that will be used, the data collection instruments, and the data collection and analysis plans. The number of participants was 19, when data saturation was reached. In this study, the participants shared their lived experiences with outsourcing. Systematic data collection and analysis was used to gain a better understanding of the attitudes and beliefs of participants about outsourcing.

Chapter 4 includes a description of the results of this study. The chapter begins with a description of the data collection process and how the data was organized and prepared for analysis. The van Kaam method of data analysis for phenomenological studies recommended by Moustakas (1994) was used for this study. Further into the study, statements that were significant to the study were considered and then divided into themes, textural and structural descriptions. Finally, the textural and structural descriptions for each participant were merged to enable an understanding of the universal experience of outsourcing. In addition, the specific strategies used in the study to support the issues of trustworthiness of this study were presented.

## Chapter 4: Results

The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of public agency managers when making decisions as to whether to outsource core government functions such as road and bridge design projects. For this study, outsourcing is defined as transferring responsibility for a specific agency function from a worker or work group to a worker or work group outside the agency. The study population consisted of management personnel at a Department of Transportation in a Midwestern state.

This study was designed to assess internal organizational capabilities and available resources that would facilitate improvements in the public organization's competitive position and provide insight into what was like for managers to make the decision whether to outsource. The significance of the study may be found in discovery of previously unknown factors for establishing guidelines for public organizations regarding when to outsource, when not to, how to outsource, and if outsourcing is an effective measure of managing capital infrastructure projects in the public sector. I used the responses of the study participants to explore the research question: What are the lived experiences of managers at the public agency when making decisions about whether to outsource core government functions such as road and bridge design projects?

This chapter is organized to provide detailed information on the results of the study, including the pilot study, research setting, demographics of participants, data collection, analysis of the data, among others.

### **Pilot Study**

After IRB approval was received, three individuals participated in a pilot study of the interview questions (see Appendix D) on November 2, 2016. These individuals were managers in the same state agency where the study was conducted, and they satisfied the same criteria as the study participants. The results of the pilot study indicated that no changes to the interview instructions or questions were necessary. The participants responded easily and coherently to the interview questions, giving responses that were similar to the responses that were eventually obtained in the research study.

### **Research Setting**

The research setting did not change during the period of the study. I was able to conduct all interviews in the manner and setting described in the interview protocol. Conditions that influenced the interpretation of results included budget cuts and hiring freezes at the agency. Participants described budget cuts and hiring freezes at the public agency where they worked, but these had all been in place for some time. These events had influenced the tendency to outsource projects. That tendency had become a trend.

The study sample included 19 managers at the public agency. Inclusion criteria for selecting participants included having 10 or more years of experience in making or buying decisions, and technical as well as managerial experience. All participants were willing to participate in the study and to share their experiences with outsourcing and the factors involved in the decision. Most (14) had direct experience with making the decision whether to outsource agency projects. Five others did not have direct experience

with making decisions about whether to outsource, but were involved indirectly as consultants and were familiar with the parameters of this choice.

Several participants noted that since retired personnel were not replaced, and the positions of other personnel who left for other reasons were usually not refilled, this constrained the ability of the agency to take on complex projects. A few stated that although the staff at the agency could be relied upon to fulfill the needs of mandated programs, creativity was usually the province of outsourced contractors. In such conditions, staff members at the agency were usually willing to accept the outsourcing of projects, as it allowed them to focus on existing work. These few did note the risk that this shrinkage of staff could eventually have the influence of lessening the quality of staff talent. Although the participants expressed pride in being able to complete projects in-house, they recognized the need to use the talents of staff members without straining these resources. Potential study participants were sent a letter of introduction (see Appendix C) explaining the purpose of the study, the criteria for participation, significance of study, and researcher contact information. Transcript checking and member checking were conducted after the interviews were complete to ensure that the information was accurate.

### **Demographics**

There were 19 participants for this study. All participants were men, except for one woman. All participants were from the management level. Data saturation was reached at 19 participants; replies/data sounded similar or repetitive by the time this number was reached. The only participants selected were those with at least 10 years of

experience in making or buying decisions, who had technical as well as managerial experience. Van Manen (2007) stated that the qualitative investigative approach provides an opportunity to “see into the heart of things” (p. 12). Using the responses as a data-gathering tool, I reflected on the lived experiences of the study participants. The interview process provided meaningful information that was coded as data (Collingridge & Gantt, 2008). The study participants all worked at the same state transportation agency in the Midwest; Table 1 includes the demographic information that was disclosed by each of the 19 participants.



Table 1

*Demographic Information of Participants*

Participant	Gender	Age Group	Outsourcing Experience (Years)
P1	M	40-45	15
P2	M	35-40	12
P3	M	45-50	18
P4	M	40-45	16
P5	M	50-55	20
P6	M	40-45	17
P7	M	35-40	13
P8	M	50-55	19
P9	M	35-40	11
P10	M	40-45	16
P11	M	50-55	18
P12	M	35-40	13
P13	F	40-45	14
P14	M	50-55	17
P15	M	35-40	13
P16	M	50-55	17
P17	M	35-40	12
P18	M	50-55	15
P19	M	40-45	16

**Data Collection**

The purpose of the interview process was to conduct data collection about the research question, which was: What are the lived experiences of managers at the public agency when making decisions about whether to outsource core government functions

such as road and bridge design projects? I wrote interview questions that would elicit interview responses that would describe what it was like to make this decision. The interview questions were the instrument for exploring and describing the participant's lived experience of making the outsourcing decision.

Participation selection using purposeful sampling started on August 1, 2016 and ended on August 16, 2016. An Introductory Letter (see Appendix C), Consent Form and the first three questions of the Interview Protocol (see Appendix A) were e-mailed to 19 managers at the state agency). All of those invited consented to participate in the study. After 14 days, I scheduled private interviews with each participant. These were conducted in a quiet conference room at the local library. The participants answered the 14 interview questions as shown in Appendix A. Table 1 includes some demographic characteristics of the participants. All participants contributed the same type of data, which were responses to the interview questions. The same data collection instrument (see Appendix A) was used for all participants. Each interview lasted for approximately 45 minutes. Interviews were audiotaped. No unusual circumstances pertained to the data collection, such as language barriers or technology use. All participants were fluent in English and in the use of email.

The data collection procedure implemented for this study conformed to the procedure that was described in Chapter 3. Potential participants for the study were identified through information provided by officials at the Department of Transportation. Potential participants were contacted via email addresses provided by these officials to invite them to participate after providing details of the study.

## **Study Responses and Bias**

No participant chose to drop out of the study after consenting to participate. All 19 participants answered each of the 14 interview questions. As the interviews were conducted in person, there was a possible bias on the part of the interviewer. I conducted the interviews using the perspective of a disinterested observer to minimize this possibility. The interviews involved personal opinions about the experience of outsourcing projects for the agency. Possible bias would include favoritism toward unionized employees who might be adversely affected by outsourcing. Although the possible adverse influence on unionized employees was noted by P6, that individual did not indicate any bias toward or against those employees. This issue was not mentioned by any other participant.

A second possible bias was the pride that participants (P14, P15, & P16) expressed about being able to complete projects in-house, without use of outside contractors. This in-group sentiment could foster bias against outsourcing. Yet all of those who mentioned this pride also acknowledged that outsourcing could be helpful when necessary.

## **Data Analysis**

The data analysis procedure involved use of Moustakas' (1994) modified Van Kaam method for analysis of phenomenological data combined with the use of NVivo8® software for qualitative data coding. The NVivo software allows researchers to detect shared themes among the interview responses, revealing the common problems and experiences associated with making the outsourcing decision. The Moustakas (1994)

modified version of van Kaam method of analysis for phenomenological data and the NVivo software provided tools for this process.

I used a precoding structure consisting of a basic list of codes that were likely to correspond to the themes found in the interview responses. These themes had emerged during the informal process of the pilot study, and I anticipated that they would also become evident in the study interviews. This proved to be true. The theme that I did not anticipate was the ambiguity that participants expressed about outsourcing. They would often have preferred to avoid it out of concern about surrendering control, but accepted that it was often necessary. After acceptance came anticipation that the outsourcing process would enhance the quality of the outcome.

### **Evidence of Trustworthiness**

#### **Credibility**

Member checking was done to provide each participant with an opportunity to correct errors in transcription or meaning, or to expand upon the meaning of their responses. The purpose was for the researcher to confirm that the way that participants spoke about the situation matched their intention (Tanggaard, 2009). Chapter 3 included a note that I would perform member checking by mirroring what the participant said during the interview. This was changed to member checking via a letter to participants after each interview was complete. The letter contained three questions for the participant: Does the transcription accurately reflect your attitudes and beliefs regarding outsourcing? Is there anything in the transcription that has been misinterpreted? Is there any additional

information that you would like to share in relation to your lived experiences or your attitudes and beliefs about outsourcing?

The results of an interview survey may be influenced by the ability of the researcher to elicit meaningful responses, the ability of the researcher to code the interview responses for meaning (Corbin & Strauss, 2014). I randomly selected three participants (P14, P17, & P3) for additional member checking after data analysis was complete, and themes had been selected. This secondary member checking confirmed the findings, and no modification to the data analysis was required. As all participants agreed to respond to the member checking process, no modification was needed for the member checking process.

### **Transferability**

One strategy for enhancing transferability is to carefully select the study sample so that maximum variation is provided, whether through selection of the study location or through characteristics of the study participants. Therefore, this study included some variation in the characteristics of the participants such as gender, age, and experience. The study used the strategy of purposeful sampling; participants were chosen for their experience with and knowledge of outsourcing. Due to the small size of the sample (19 managers) as well as their employment at a single state transportation department, transferability was not expected. However, the findings may be transferable to other managers working in state transportation agencies within the United States as their working conditions and problems are likely to be similar.

**Dependability**

Dependability refers to the extent to which the research findings can be replicated. Some strategies that can be used to ensure the dependability of a study include clarification of the researcher's position or an audit trail (Merriam, 2014). For this study, I maintained an audit trail, which provided detailed information on how the data were collected, how categories were coded and categorized, and how themes were selected for the study. This audit trail proved to be essential when assembling the data and assigning codes and themes to the interview transcripts.

**Confirmability**

Chapter 3 included that confirmability could be done using a research journal, in which the researcher confided personal feelings and observations about the process of assembling the study as well as events. Confirmability was supported for this study through a research journal. This journal was maintained throughout the research process to record the experiences of the researcher. The journal served as a repository of the researcher's observations, thoughts, and emotions about the interviews as well as the coding process. The journal also incorporated descriptions of the behavior of participants during the interviews, such as body language that contradicted the verbal responses. Self-reflective journals are a strategy used to encourage reflection, allowing the researcher to examine their subjective assumptions, biases, and goals and clarify the research process (Corbin & Strauss, 2014). The journal supports the researcher in analyzing their influence on the research process.

## Study Results

All interview questions were derived from the research question: What are the lived experiences of managers at the public agency when making decisions about whether to outsource core government functions such as road and bridge design projects? The van Kaam method of data analysis for phenomenological studies recommended by Moustakas (1994) was used for this study. Statements that were significant to the study were divided into themes, and descriptions. The descriptions for each participant were merged so that the universal experience of outsourcing could be understood. The interview questions pertained to the problems in making decisions about outsourcing projects at government agencies that were described in the literature review (Mackinac Center for Public Policy, 2014; Schamp, 2015; State of Wisconsin, 2013).

### Interview Question 1

How would you describe your experience in making an outsourcing versus in-house decision when it comes to road design or construction projects?

#### **Theme 1: Acceptance of outsourcing.**

According to the responses of the 19 participants, there was a need to balance the desire to retain road projects in-house with the limitations of staff with regard to performing the task. Not all participants had direct experience with making this choice. Out of 19 participants, 14 (P1, P2, P3, P5, P8, P9, P10, P11, P12, P13, P14, P15, P17, P19) had at least 10 years of direct experience with making outsourcing decisions. Participant 3 (P3) stated that “I am the one that has to balance work utilizing in-house staff versus outsourcing. I think that is the key to sum up my experience—balance. It is

important to be able to keep the in-house staff adequately engaged, while leveraging outsourcing as an option for those projects that cannot feasibly be done in-house.” P5 noted that “I would typically set the ground rules for the decisions and allow my direct reports to determine which projects were most suitable for outsourcing.” P2 stated that “Making the wrong [outsourcing] decision can put your business at a disadvantage . . . You may lose control of proprietary information.”

Four participants, (P4, P6, P7, P18), did not currently have direct decision making authority, but did have experience with process of making the decision. One participant’s (P16) experience with outsourcing was restricted to construction inspection.

### **Interview Question 2**

What are the factors that you consider regarding outsourcing of roads and bridges?

**Theme 2: Benefits versus problems.** The benefits of outsourcing had to be balanced with the problems involved. Contractor expertise was the main concern, followed by staff ability to perform a project in-house, staff availability to perform in-house, cost, schedule, complexity, time needed, quality expected of outside contractor, software availability, scope of project, and political pressure to outsource or not to outsource. P2 stated that “Making the right decision can add significantly to your organization’s bottom line in terms of cost efficiency. It can also free up time for innovation and other vital tasks.” P1 noted “Municipal engineering departments typically don’t have the staff or expertise to undertake complicated projects.” See Table 2 for these responses.



Table 2

*Responses to Interview Question 2*

Concern	Number of Participants Expressed Concern
Contractor Expertise	7
Staff Skill	6
Staff Availability	5
Cost	4
Schedule	3
Complexity	3
Time Needed	2
Quality Expected	2
Software	1
Scope of Project	1
Political Pressure	1

**Interview Question 3**

How would you describe your in-house abilities, values, and needs that supported your outsourcing decision of road or bridge projects?

**Theme 3: Staff limits.** The main concern expressed was preference to perform projects in-house, but inability to do so. Limitations included not enough staff, sometimes due to hiring freeze or budget. Other reasons were lack of the necessary software to

perform task in-house, or staff lacked necessary skills. Lesser concerns included need to have a quick turnaround which made keeping in-house necessary, and lack of dedication from outsource contractor. P2 noted that “Right now our in-house team is not capable to do entire road and bridge design, review, and monitoring the projects because of a hiring freeze on all vacant and newly vacated positions . . . these positions have not been filled during the past few years.” P3 noted that “I am very fortunate to have a pretty well-rounded, experienced in-house team . . . they take great pride and value their work.” See Table 3 for responses.

Table 3

*Responses to Interview Question 3*

Skills/Concerns	Number of Participants
Limited number of staff	4
Prefer to do in-house when possible	3
Staff do not possess skills needed	3
Budget	3
Hiring freeze limits staff	2
Lack of software	1
Projects with quick turnaround kept in-house	1
Outsource Contractor not Dedicated	1
Scope	1

**Interview Question 4**

Describe learning experiences and feelings that you expect from outsourcing of road or bridge projects?

**Theme 2: Benefits versus problems.** Participants cited delays as the main problem that they had experienced with outsourcing. The process of outsourcing was also described as disruptive, since it required time to find an outsourcing consultant, with less

ability to perform oversight to the degree that would be possible for in-house projects. Outsourcing can cause delays, both in the time required to select an outsourcing contractor, and in waiting for them to complete a project. Concerns about loss of control and delays were offset by possible savings on costs, the benefits of knowledge sharing, and expansion of capacity. P4 stated, “Through the consultant selection process and specific assignments issued, we fully expect an outside resource to bring “value” to the project. I look at “value” in other ways besides cost. A well thought out project scope and scope of services minimizes administrative time and possible delay in development.” See Table 4 for responses.

Table 4

*Responses to Interview Question 4*

Experiences/Feelings	Number of Participants
Can Cause Delays	4
Outsourcing Can Save Costs	3
Outsourcing Can Improve Quality	3
Loss of Control	3
Knowledge Sharing a Benefit	3
Expands Capacity	2
Time Consuming to Set Up	1
Cost Overruns	1
Importance of Good Communication	1
Expertise Valuable	1
Timely Completion	1
Problem Solving	1

**Interview Question 5**

What are your feelings and experiences regarding keeping road and bridge projects in-house?

**Theme 2: Benefits versus problems.** Participants responded to this question with Theme 4 again. Participants expressed a preference for keeping projects in-house when possible. In-house staff possessed agility to make quick changes, and control was also retained in-house. Outsourcing often cost more, but creativity was often enhanced. P4 stated “projects requiring short development time frames are most often not cost effective to outsource. These include adding lanes to a roadway or intersection, bridge or small structure replacement, and project specific contracts if multiple services are necessary.” P1 stated, “Plan set are simpler for in-house projects, important when there are many field changes.” See Table 5 for responses.

Table 5

*Responses to Interview Question 5*

Concerns Reported	Number of Participants
Simpler Overall	7
Agility to Make Changes	6
Keep Control if In-House	5
Whatever is Most Efficient	2
Outsourcing Costs 15%-40% More	2
Outsource only if Project is Too Complex	1
Only if Workload Manageable for Staff	1
Outsourcing Enhances Creativity	1

**Interview Question 6**

Describe any issues in the areas of quality control, time, and money that you faced when road or bridge projects have been outsourced.

**Theme 4: Loss of control.** Participants reported concern about loss of control of outsourced projects. Substandard quality, cost overruns due to delays and necessity to

redo later on were primary negative concerns. P1 noted, “It is harder to conduct quality control and quality assurance when project is outsourced. We have to depend on the contractor’s specs for that.” P4 noted “Consultant was late on project delivery due to staffing changes and an insufficient plan to account for such changes; wasn’t forthright in sharing that staffing changes had occurred.” See Table 6 for responses.

Table 6

*Responses to Interview Question 6*

Issues	Number of Participants
Loss of Control/Oversight	6
Need to Trust	1
Quality Substandard	6
Cost Overruns	3
Project Delays	4
Outsourcing Takes More Time	1
Redo Needed Later	4
Poor Communication	1

**Interview Question 7**

Describe specific events when it would have been better to keep the road project in-house but it was outsourced anyway. What were the reasons for doing so?

**Theme 5: Political pressure.** The main reason for doing so despite best practices was in response to political pressure. Prospective outsourcing contractors made political donations, and then the recipients pressured the public agency to give business to

contractor. In other instances, legislative budgetary decisions forced outsourcing. P4 noted “The magnitude of a program year . . . following legislative budgetary decisions often requires more projects to outsource, many of which would be more cost-effective to keep in-house.” Outsourcing can also become necessary when staff members leave and skills are not adequate. P1 described a large culvert project that was outsourced “because engineers left the agency for private industry. Project was delayed and I had to re-explain the requirements.” See Table 7 for responses.

Table 7

*Responses to Interview Question 7*

Reasons	Number of Participants
Staff Brain Drain	1
Political Pressure	4
Cost Overruns In-House	1
Delays In-House	1
Tried New Consultant	1
Insufficient Staff	2
Enhance Skills of Staff	1

**Interview Question 8**

How is infrastructure outsourcing perceived by employees, managers at public entity as compared to the public?

**Theme 1: Acceptance of outsourcing.** Nearly half (9 of 19) of participants reported staff acceptance of outsourcing as a benefit. P4 stated, “Employees are aware that outsourcing is very much needed to deliver the annual capital program and provide

support in that effort.” Some (two of 19) reported staff were resistant due to lack of trust in contractor. P1 stated that “Large or complicated projects are typically outsourced by municipalities.” Some (two of 19) referred to unionized staff members resented work going to outsourcing contractors. Two participants (of 19) described the public as largely unaware of or unconcerned about outsourcing. P4 stated, “Public interest tends to focus on the work involved, the cost to build and when construction will occur.” Two (2 of 19) noted public resistance due to extra cost of hiring outside the public agency. See Table 8 for responses.

Table 8

*Responses to Interview Question 8*

Reasons	Number of Participants
Accepted by Staff as a Benefit	9
Staff Wary Due to Lack of Trust in Contractor	2
Public Largely Unaware	2
Public Resists Extra Cost	2
Unionized Employees Resent	2

**Interview Question 9**

What extra things do you have to do when a road or bridge project is outsourced?

What things are easier when outsourced and what things are not?

**Theme 4: Loss of control.** Seven (of 19) participants expressed concerns about the loss of control associated with outsourcing. They noted that oversight of outsourced projects was more difficult than for in-house projects. P4 noted that oversight involved extra work such as “advertising for an outside consultant, seeing that purchase orders are

created and notice to proceeds are issued timely.” Seven (of 19) stated that when a project is outsourced, the process of hiring a contractor takes up staff time. P3 stated that considerable upfront work “is not what is easier about outsourcing a project. In addition, if they request additional money or the scope of the project isn’t followed – that makes it harder as well.” See Table 9 for responses.

Table 9

*Responses to Interview Question 9*

Extra Work/Less Work	Number of Participants
Oversight of Outsource More Difficult	7
Hiring Outsource Contractor Takes Up Staff Time	7
Outsourcing Good Can Spread Risk	2
Better Quality Sometimes	1
Lower Quality Sometimes	1
Outsource Contractor More Agile re: Regulations	1
Outsource Contractor More Efficient	1
Frees Staff for Other Jobs	1

**Interview Question 10**

How do politics affect outsourcing at public entity?

**Theme 5: Political pressure.** Four of 19 participants recalled instances where prospective outsourcing contractors made political donations, and then the recipients pressured the public agency to give business to contractor. P2 stated “The political color of the ruling majority matters for outsourcing.” Four of 19 participants also noted that political officials might influence which outsourcing contractor receives project regardless of their ability. Two (of 19) participants reported that the patronage model in their region supported in-house performance and opposed outsourcing. P3 stated that “the



presence of a strong lobby” influenced the awarding of outsourcing contracts.

P2 noted, “Politicians derive significant from in-house production by public employees, such as unions.” See Table 10 for responses.

Table 10

*Responses to Interview Question 10*

Political Pressure	Number of Participants
Political Pressure to Outsource Regardless of Ability	5
Political Pressure to Outsource Regardless of Need	4
Political Only re: Funding	4
Patronage Model Supports In-House	2
Political Pressure to Outsource to Reduce Staff	1

**Interview Question 11**

What is your experience regarding the primary factors in deciding whether the design or the construction of a public agency project should be outsourced?

**Theme 2: Benefits versus problems.** Participants named staff availability, staff skill and project complexity as the primary factors in deciding to outsource. Five participants mentioned concern that staff have enough work to do, but not be strained to produce projects. P5 stated, “From a business standpoint, we first would always make sure that was fully utilized [before outsourcing]” while also considering if staff could perform the tasks involved. P1 stated “project complexity and schedule” were more important than cost. See Table 11 for responses.

Table 11

*Responses to Interview Question 11*

Primary Factors	Number of Participants
Staff Skill	5
Complexity	3
Staff Availability	3
Time	3
Citizen Lobbying for Outsourcing	2
Size of Project	1
Whatever is Most Efficient	1
Schedule	1

**Interview Question 12**

What is your experience regarding desirable or expected outcomes when a project was outsourced, and could this be achieved in-house?

**Theme 4: Problems versus value.** Participants acknowledged problems with outsourcing, while citing the value of doing so. Eleven participants reported no difference in expectations between outsourced versus in-house projects. Three of the 19 participants reported a high rate of success with outsourced projects. P1 reported that outsourced projects “were completed on time and within budget. In-house staff was unable to handle the complexity of these projects.” Three of 19 in contrast reported failure, usually due to a breakdown in communication. P3 stated, “It is often a breakdown in communication when outcome isn’t what is desired.” See Table 12 for responses.

Table 12

*Responses to Interview Question 12*

Expected Outcome of Outsourcing	Number of Participants
Success Rate High	3
Failure	3
No Difference	11
Outsource Complex Projects to Spare Staff	1
Completed Within Budget	1

**Interview Question 13**

What is your experience regarding differences in quality controls between outsourcing road and bridge projects and those handled internally? Or are there any?

**Theme 4: Loss of control.** Five of the 19 participants noted that internal quality control was easier to assure than when projects were outsourced. P3 described outsourced projects as “having no accountability.” P3 noted that “For outsourced projects, we rely on our in-house project managers and reviewers to be able to keep on top of projects.” Six of the 19 participants noted that it was essential to be able to trust the contractor on outsourced projects. Four of the 19 stated that outsourced projects were often of higher quality than those completed in-house. See Table 13 for responses.

Table 13

*Responses to Interview Question 13*

Differences in Quality Control	Number of Participants
External Must Trust Contractor	6
Internal Better Quality Control	5
Outsource Contractor Higher Quality	4
No Accountability of Outsourced	3
Insufficient Staff to Supervise Outsourced	1

#### Interview Question 14

Describe any guidelines that you would consider best practices in deciding to outsource road and bridge projects.

**Theme 2: Benefits versus problems.** Participants concluded that a hybrid model of in-house performance and outsourcing was best to balance the problems versus value of outsourcing. P2 suggested, “Training so that [consultants] can understand departmental needs would be invaluable when an emergency arises.” A hybrid model was recommended by P2: “I recommend a hybrid model, a combination of outsourced and in-house teams.” See Table 14 for responses.

Table 14

#### *Responses to Interview Question 14*

Suggestions for Guidelines	Number of Participants
Providing Training to Contractors	4

Hybrid Model	15	104
Funding Limits Make Outsourcing Necessary	12	

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## Summary

The research question inquired: What were the participant experiences of making a decision whether to outsource? Participants reported that while they would usually prefer to complete projects in-house, this choice was frequently not practicable. Participants reported being constrained from keeping projects in-house by a variety of factors, including hiring freezes that limited the size of staff, no access to required software, complexity of project beyond the skills of staff, or concern about workload straining the capacity of staff. Regarding the desired outcome of outsourcing, and whether projects could be done in-house, participants reported that keeping costs within limits, completing on time, and maintaining quality were the desired outcomes whether a project was outsourced. Knowledge sharing and increased creativity were two other benefits that some participants mentioned as a desirable outcome of outsourcing.

## Chapter 5: Discussion, Conclusions, and Recommendations

Managers often face the decision about whether to make a product or perform a task in-house, or buy the product or service from an outside provider. At times, it is most economical and efficient to retain the work in-house, while at other times outsourcing a project, service or component is the best approach. For this study, outsourcing was defined as the decision to transfer responsibility for a specific agency function from an in-house worker or work group to an outside worker or work group. The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of public agency managers when making decisions as to whether to outsource core government functions such as road and bridge design projects. The population consisted of management personnel at a Department of Transportation in a Midwestern state. This research was based on a qualitative design for analyzing the phenomena of the experience or lived experience of individuals that have made the decision to outsource.

### **Interpretation of Findings**

The problem addressed was the lack of information regarding the guidelines for a public agency to follow when deciding to make a decision as to whether to outsource important functions such as road and bridge design. Managers in state transportation agencies in the United States frequently confront the necessity to make this choice, while lacking a decision-making framework.

I used the responses of the study participants to gain an understanding of the research question of: What are the lived experiences of managers at the public agency when making decisions about whether to outsource core government functions such as

road and bridge design projects? Each interview question related to the research question. The theme of participant responses was that while retaining projects in-house was preferable, it was often not realistic. Obstacles to keeping projects in-house included budget-related hiring freezes that forces staff to be inadequate for the workload that was needed, no capacity to purchase software required for projects, complexity of project that staff could not address, or concern about overloading the capacity of staff. The interview questions also addressed the desired outcome of outsourcing, and whether projects could be done in-house. Themes of the participant responses were that certain outcomes were more important than keeping a project in-house. These desired outcomes included adhering to a budget, completing project on time, and satisfying standards of quality. Participants also stated that they appreciated the knowledge sharing and added creativity that often occurred when outsourcing a project.

The study participants frequently stated that their choices regarding outsourcing were driven by budget cuts and hiring freezes at their agency. They all noted that these constraints had been in place for some time. These events had influenced the tendency to outsource projects. That tendency had become a fixed trend. These reports reflected the findings of the literature review that was conducted for this study. The findings of the interviews confirmed the findings of the literature review, that outsourcing was an established trend, and would persist due to the movement toward globalization of workforces and resources.

The participants reported that access to labor, resources, and expertise on a global basis was beneficial to their agency since it permitted reduction in costs and access to



talented personnel. Yet they also reported that a cost-based assessment of using outsourcing would be inadequate since this model overlooked the risks of allowing an outside vendor to perform critical tasks without supervision. The risks in the outsourcing process related to inability to closely supervise the quality of the work, and vulnerability to unexpected delays that led to cost overruns and sometimes the need to replace the outsourcing vendor mid-project.

The studies cited in the literature review also noted that using a cost-based outsourcing model alone raised the risks associated with the process, since numerous other risk factors invariably were involved with an outsourcing initiative. These risks included vendor shirking, vendor drift from the agreed requirements, advances in technology occurring after a contract is signed that render the original terms of the outsourcing contract obsolete, and the need to locate a replacement vendor or return a project to in-house status when a vendor proved unsatisfactory. Maintaining a narrow focus on cost savings the narrow focus meant that these other risks might neutralize the benefits that were sought in cost savings.

Five themes emerged from the interviews with study participants: (a) Acceptance of Outsourcing; (b) Benefits versus Problems; (c) Staff Limits; (d) Loss of Control; and (d) Political Pressure. The theme that emerged most strongly was Theme 2: Benefits versus Problems. This was due to the pragmatic reasons for outsourcing, which usually overrode the problems involved.

Most of the participants could report significant experience as managers with making outsourcing decisions, and all had some experience with it in the context of

working at the transportation agency. Interview Question 1 pertained to the amount of experience that each study participant had with making the outsourcing decision. Responses pertained to Theme 1, Acceptance of Outsourcing. Out of 19 participants, 14 (73.68%) had at least 10 years of direct experience with making outsourcing decisions. Interview Question 2 pertained to the factors that managers considered regarding outsourcing of roads and bridges. Responses pertained to Theme 2, Benefits versus Problems. Cost was not the main concern for managers. Rather, contractor expertise came first, followed by the capacity of staff to handle the project, followed by cost.

Interview Question 3 pertained to in-house abilities, values, and needs that supported the outsourcing decision. Responses pertained to Theme 3, Staff Limits. Participants most often expressed a preference to perform projects in-house, but inability to do so. Limitations included limited number of staff, often due to hiring freeze or budget. Other reasons were lack of the necessary software to perform task in-house, or staff lacked necessary skills. Lesser concerns included need for quick turnaround, which made in-house performance necessary.

Interview Question 4 asked participants about the learning experiences and feelings that they anticipated because of outsourcing road or bridge projects. Responses pertained to Theme 2, Benefits versus Problems. Participants reported a range of expectations, some distinctly negative. Outsourcing could result in delays and loss of control. These were offset by possible savings on costs, knowledge sharing, and expanded capacity. Interview Question 5 inquired about participants' feelings and

experiences about keeping road and bridge projects in-house. Responses pertained to Theme 2, Benefits versus Problems. Participants expressed a preference for keeping projects in-house but were willing to outsource when that was more efficient. In-house staff were often more efficient due to agility to make quick changes, but creativity was often enhanced when a project was outsourced.

Interview Question 6 asked participants to describe issues in the areas of quality control, time, and money when a project was outsourced. Responses pertained to Theme 4, Loss of Control. Participants reported concern about loss of control, related to substandard quality, cost overruns due to delays, and necessity to perform do-overs as the primary negative concerns. Interview Question 7 asked participants to describe the reasons for specific instances when it would have been better to keep a project in-house, but it was outsourced anyway. Responses pertained to Theme 5, Political Pressure. The main reason that participants cited for doing so despite best practices was political pressure. When prospective outsourcing contractors had made political donations, the recipients pressured the public agency to give business to the donor contractor. In other instances, legislative budgetary decisions forced outsourcing.

Nearly 50% (nine out of 19) of participants responded that outsourcing provided more benefits than problems when responding to interview Question 8. This pertained to Theme 1, Acceptance of Outsourcing. Those that did not view it favorably noted that outside contractors were frequently unreliable, and that the public did not pay much attention to whether agency projects were outsourced. Interview Question 9 pertained to the extra work related to outsourcing a project. Responses pertained to Theme 4, Loss of

Control. Seven of 19 (37%) participants noted that oversight of outsourced projects was more difficult than for in-house projects. P4 noted that outsourcing made extra work for staff, including finding an outside consultant and keeping track of costs.

Interview Question 10 pertained to the influence of politics on outsourcing at the agency. Responses pertained to Theme 5, Political Pressure. Four of 19 (21.5%) of participants described instances where prospective outsourcing contractors made political donations, then the recipients pressured the public agency to give business to contractor. Four of 19 (21.5%) of participants also noted that political officials may influence which outsourcing contractor receives project regardless of their ability. Interview Question 11 asked participants about the primary factors in deciding whether the design or the construction of a public agency project should be outsourced. Responses pertained to Theme 2, Benefits versus Problems. The responses focused on staff availability, staff skill and project complexity, with concern that staff have enough work to do, but not be strained to produce.

Interview Question 12 asked participants about their experience with desirable or expected outcomes when a project was outsourced, and whether these outcomes could be achieved in-house. Responses pertained to Theme 2, Benefits versus Problems. Eleven of 19 (57%) participants reported no difference in expectations between outsourced versus in-house projects. Just three of the 19 (16%) participants reported a high rate of success with outsourced projects. Interview Question 13 inquired about the differences in quality controls between outsourcing road and bridge projects and those handled internally. Responses pertained to Theme 4, Loss of Control. Five of the 19 (26%) participants

noted that quality control was easier to assure in-house than when projects were outsourced. Six of the 19 (32%) participants noted that it was essential to be able to trust the contractor on outsourced projects. Four of the 19 (21%) stated that outsourced projects were often of higher quality than those completed in-house. Finally, Interview Question 14 asked participants to recommend guidelines for best practices in deciding to outsource road and bridge projects. Responses pertained to Theme 2, Benefits versus Problems. Recommendations included training consultants to understand departmental needs, and using a hybrid model of a combination of outsourced and in-house teams. These responses indicate that the participants were in favor of outsourcing, but wary of the potential risks.

### **Limitations of the Study**

One limitation of the study was that not all 19 participants had direct managerial decision-making experience with outsourcing. Of the 19, 14 (74%) had direct experience with making the decision whether to outsource agency projects. Five others did not have direct experience with making decisions about whether to outsource, but did have indirect experience due to their role as consultants in the process. These five participants were familiar with the parameters of the choice. The individuals that served as consultants advised during the outsourcing decision but did not directly make the choice.

Another potential limitation of the investigation was the ability of the participant(s) to describe their lived experiences accurately and with candor. As participants had a different ability to recollect lived experiences, the stories varied about content and emotion, and a potential limitation of this qualitative study involved coding

of subjective data (Corbin & Strauss, 2014). I minimized this risk by using software that was designed for the coding of qualitative data. The study was also limited by surveying only 19 participants, all of whom were from the same geographic location and of similar age. These factors may have skewed responses in one direction or another. The transferability of the study was limited by the small size of the study; I interviewed only 19 members of management personnel at a single Department of Transportation. The value of the data involves reporting of lived experiences, which other managers at public transportation agencies may find useful. Another limitation is giving out three sample questions (#1, #2, and #3) ahead of time. Did you give all of them or just a few sample questions?

### **Recommendations**

I did not include research into the science and theory of decision making as that was not the focus of this study. It would be a good topic for further research. None of the study participants reported having access to training or guidelines for making the outsourcing decision. Each reported that the decision was made according to empirical factors such as prior experience with outsourcing, projected cost savings, the constraints of budgets and hiring freezes that forced the decision to look outside, and concerns about strain on staff. It was clear from the interview data that outsourcing was accepted by most participants as necessary and desirable due to pragmatic concerns, despite the risks involved. It is recommended that further studies be performed on outsourcing by public transportation agencies in the United States. Larger studies, from which the results and conclusions could be extracted and placed in a database that would be easily accessible to

managers at public transportation agencies, would support the development of guidelines for outsourcing by these agencies. Managers at these agencies are currently working alone, with no access to the experience of others in their role. Knowledge sharing between these managers would support their ability to make informed decisions, with benefits for the taxpayer as well.

### **Implications**

The choice of whether to perform a project in-house or to outsource is critical to the U.S. government sector as local, state and federal agencies struggle to cost-effective results for taxpayers (Milward, 2014; Rivard & Aubert, 2015; Schneiderjans et al., 2014; Stanger, 2014). Government agency personnel operate on a mandate to provide benefit to the taxpayer for decisions they make. The potential social implications of this study, which explores the factors that are relevant to effective guidelines for managers include cost savings to taxpayers and increased efficiency at government transportation agencies. While the U.S. economy relies on roads, bridges, and other transportation infrastructure, these require costly maintenance due to age, and the replacement cost is also expected to place a significant burden on state and federal governments even as budget constraints force decisions based on cost.

The U.S. Government Accountability Office (GAO) predicts that Americans will increase travel as measured by number of highway vehicle miles three to seven trillion miles over the next 40 years. This required a related increase in the budgets for constructing and maintaining transportation infrastructure (GAO, 2011). As transportation agencies experience the need to use the funds allocated for this while

conforming to budgetary constraints in an era of rising national debt, the agencies will continue to seek alternatives to fund transportation. These alternatives will include outsourcing.

Few studies that were cited in the literature review pertained to outsourcing of road design and bridge design. There is a research gap regarding this subject, which this study addresses. This study was designed to assess internal organizational capabilities and available resources and provide insight into what was like for managers to make the decision whether to outsource. The significance of the study may be found in exploring the lived experiences of transportation agency managers, which can be used to establish guidelines for public organizations regarding when or when not to outsource, and whether it is an effective measure of managing capital infrastructure projects in the public sector.

### **Conclusions**

Managers in state transportation agencies in the United States must constantly choose between using the talents and abilities of in-house staff and outsourcing for road and bridge design projects, within the stringent constraints of budget-related hiring freezes and slashed public funding. Participants in this study constantly reported that the budgetary crises of the last several years at the state and federal level have strongly affected the funding available for transportation infrastructure such as roads and bridges. They must work within these constraints, which have been in place for some time and are expected to continue (Shrestha et al., 2016). This qualitative phenomenological study addressed a lack of information regarding the guidelines for a public agency to follow



when deciding to decide as to whether outsource a core government function such as road and bridge design. The literature review for this study confirmed that little information was available about this topic; I could locate only a few references on the topic. This study addressed this gap on a small scale, by interviewing 19 people. Additional studies are needed, as well as communication and knowledge-sharing among such managers of transportation agencies throughout the United States. This is the next step that is needed in outsourcing for this population of public servants.

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## Appendix A: Interview Protocol

Thank you for participating in the study. The results of the interview may help researchers and public agencies to construct a framework on making decisions as to what and when to outsource road design and bridge design, and to offer a foundation for further inquiry. You do not have an answer any question that you do not wish to, and you may ask for a break or stop the interview at any time.

Time of interview:

Date:

Place:

Interview Code:

The purpose of this qualitative phenomenological study is to explore and describe the lived experiences of managers at this public agency when making the outsourcing decision for road and design projects.

Interview questions

1. How would you describe your experience in making an outsourcing versus in-house decision when it comes to road design or bridge design projects?
2. What are the factors that you look into regarding outsourcing of design of roads and bridges?
3. How would you describe your in-house abilities, values, and needs that supported your outsourcing decision of road or bridge design?
4. Describe learning experiences and feelings that you expect from outsourcing of road or bridge projects?

5. What are your feelings and experiences regarding keeping road and bridge projects in-house?
6. Describe any issues in the areas of quality control, time, and money that you faced when road or bridge projects have been outsourced?
7. Describe specific events when it would have been better to keep the road project in-house but it was outsourced anyway. What were the reasons for doing so?
8. How is infrastructure outsourcing perceived by employees, managers at public entity as compared to the public?
9. What extra things do you have to do when a road or bridge project is outsourced? What things are easier when outsourced and what things are not?
10. How do politics affect outsourcing at public entity?
11. What is your experience regarding the primary factors in deciding whether the design of a public agency road or bridge project should be outsourced?
12. What is your experience regarding desirable or expected outcomes when a project was outsourced, and could this be achieved in-house?
13. What is your experience regarding differences in quality controls between outsourcing road and bridge design projects and those handled internally? Or are there any?
14. Describe any guidelines that you would consider best practices in deciding to outsource road and bridge design projects.

Thank you for your participation. The information you shared with me today will remain confidential. I will not use your name or other identifying information in the dissertation coming from this study. I will send you a transcript of this interview, and you may respond with any questions or comments at that time. I may contact you to ask more follow-up questions, with your consent. Finally, do you have any questions?

## Appendix B: Confidentiality Agreement

Name of Signer: Shakeel Baig

During the course of my activity in collecting data for this research: “Experiences of Public Agency Managers when Making Outsourcing Decisions” I will have access to information, which is confidential and should not be disclosed to anyone. Only data without any names attached may be reviewed by my committee members and the reviewers in the Walden dissertation process. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant’s name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification, or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I’m officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

I accept the above terms.       I do not accept the above terms.  
(CHECK ONE)

Signature \_\_\_\_\_ Date \_\_\_\_\_

## Appendix C: Letter of Introduction

My name is Shakeel Baig and I have worked for the Indiana Department of Transportation for twenty (20) years. I am currently a student at Walden University working on a Doctorate degree specializing in Engineering Management. I am conducting a research study entitled *In-House versus Outsourcing of Road and Bridge Projects at Department of Transportations: A Phenomenological Study*. Despite growth in outsourcing, public agencies still vary in their criteria for making decisions about keeping work in-house versus outsourcing. The purpose of the qualitative phenomenological research is to explore and understand the lived experiences of managers to understand the beliefs and practices of managers when making the decisions to keep work in-house or to outsource.

I am looking for volunteers to participate in individual digitally -recorded interviews that focus on obtaining your experiences and perceptions of why you chose to outsource or keep projects in-house in the field of road and bridge design. The interview is expected to last no more than 90 minutes or less and will be hosted in a private room at Pike Library on Zionsville Road. If this is not convenient, I am willing to meet you at another mutually agreed upon location that is conducive to the interview. The address is XXXX. The interview will be scheduled at your convenience. Your participation in the study is strictly voluntary. If you choose not to participate or wish to withdraw from the study at any time, you can do so without any consequences. The results of the research study may be published, but your identity will remain confidential and your name will not be disclosed to any outside party. Participation poses no foreseeable risks to you.

If the study piques your interest and you would like to participate, or would like more information please contact me.

Sincerely,  
Shakeel Baig



### Appendix D: Pilot Study Questions

Thank you for participating in the study. The results of the interview may help researchers and public agencies to develop a framework for deciding what and when to outsource in the areas of road design and bridge design and offers a foundation for further inquiry.

Time of interview:

Date:

Place:

Interview Code:

The purpose of this qualitative phenomenological study is to explore and describe the lived experiences of successful public agency managers to obtain insight into the criteria they use in making the decision to outsource government functions in the areas of road design and bridge design. Interview questions are listed in Appendix A. Some additional questions are introduced in the pilot study to avoid any glitches and make things easy to understand in the interview process. Interview questions

1. Are the instructions clear and understandable?
2. Are the interview questions clear and understandable?
3. Should any question be changed, added or deleted?
4. Do you have any suggestions to make this process better or clearer?

Thank you for your participation. The information you shared with me today will remain confidential. I will not use your name or other identifying information in the dissertation coming from this study. Finally, do you have any questions?