

Management of Facility Commodity Contracts:

A Model for the Furniture Services Industry

by

Jake Smithwick

A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Science

Approved March 2012 by the
Graduate Supervisory Committee:

Kenneth Sullivan, Chair
Dean Kashiwagi
William Badger

ARIZONA STATE UNIVERSITY

May 2012

ABSTRACT

Commodity contracts are often awarded on the basis of price. A price-based methodology for making such awards fails to consider the suppliers' ability to minimize the risk of non-performance in terms of cost, schedule, or customer satisfaction. Literature suggests that nearly all risk in the delivery of commodities is in the interfacing of nodes within a supply chain. Therefore, commodity suppliers should be selected on the basis of their past performance, ability to identify and minimize risk, and capacity to preplan the delivery of services. Organizations that select commodity suppliers primarily on the basis of price may experience customer dissatisfaction, delayed services, low product quality, or some combination thereof.

One area that is often considered a "commodity" is the delivery of furniture services. Arizona State University, on behalf of the Arizona Tri-University Furniture Consortium, approached the researcher and identified concerns with their current furnishing services contract. These concerns included misaligned customer expectations, minimal furniture supplier upfront involvement on large capital construction projects, and manufacturer design expertise was not being utilized during project preplanning. The Universities implemented a best value selection process and risk management structure. The system has resulted in a 9.3 / 10 customer satisfaction rating (24 percent increase over the previous system), for over 1,100 furniture projects totaling \$19.3M.

ACKNOWLEDGMENTS

I wish to express a tremendous amount of gratitude and appreciation to my Graduate Supervisory Committee: Dr. Kashiwagi, Dr. Badger, and my chair, Dr. Sullivan. Professor Sullivan's guidance, expertise, mentorship, and support has been exemplary; I am very humbled to have had such an incredible opportunity to work with him.

I also thank the staff at the Performance Based Studies Research Group for their continued support and firsthand experience.

Finally, I am forever grateful for the encouragement, love, and support of my beautiful wife, Mallorie. She has unselfishly and wholeheartedly supported me these past several years, in so many ways.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
LIST OF FIGURES	viii
CHAPTER	
1 INTRODUCTION	1
Overview	1
Problem Statement.....	1
Hypothesis	6
Research Objectives	7
Research Scope	7
Research Methodology Summary	10
Summary of Thesis.....	11
2 LITERATURE REVIEW	13
Summary of Findings.....	13
Introduction	14
Issues Typically Encountered Within Bureaucracies	17
Identify how Facility Managers Identify, Manage, and Minimize Risk.....	26
Risk Measurement of Commodity Services	34
Summary and Conclusion	42
3 RESEARCH METHODOLOGY	44
Introduction	44

CHAPTER	Page
Phase One: Project Scoping and Current Conditions.....	45
Phase Two: Vendor Selection and Contract Award.....	49
Structure of the PIPS RFP and Evaluation Criteria.....	52
Past Performance Information.....	53
Project Capability and Financial Proposal Submittals.....	55
Interviews.....	63
Prioritization.....	65
Pre-Award Phase	66
Phase Three: Risk Management Structure	68
Best Value Information System	71
Summary	73
4 DATA COLLECTION	75
Introduction	75
Furniture Industry Vendor Survey	75
University Buyer Satisfaction Survey	77
Selection Phase Results.....	80
Project Performance Information.....	92
5 DATA ANALYSIS	96
Introduction	96
Furniture Industry Perceptions of Best Value.....	96
University Buyer Satisfaction Survey	100
Selection Phase Results.....	108

CHAPTER	Page
Project Performance Information.....	117
6 RESULTS.....	120
Introduction	120
More Efficient Procurement Model for Facility Managers ...	121
Impact of a Value-based Leadership and Risk Management	
Structure	125
Limitations.....	131
7 CONCLUSION	133
Summary	133
Research Benefits	137
Recommendations for Future Research	138
Conclusion.....	139
REFERENCES	141
APPENDIX	
A FURNITURE INDUSTRY SURVEY	149
B INITIAL BUYER SURVEY	152
C PAST PERFORMANCE INFORMATION SURVEY	155
D TRI-U FURNITURE CONTRACT, RFP NO. 080909.....	157
E RFP 080909 ADDENDUM AND CLARIFICATION	256
F BEST VALUE INTERVIEW QUESTIONS	263
G EVALUATION COMMITTEE TRAINING SLIDES	268
H EVALUATOR RATING FORMS	272

LIST OF TABLES

Table		Page
1.1	Geographic Comparison of University Locations	8
2.1	Facility Management Outsourced Functions	33
3.1	Schedule of Research Methodology Execution	45
3.2	Evaluation Criteria from State of AZ, ASU Traditional, and Best Value RFPs	50
3.3	Project Type Definitions	52
3.4	Risk Management Tools	68
4.1	Furniture Industry Perceptions of Best Value	76
4.2	University Buyer Satisfaction Survey	79
4.3	Summary of University Performance Differential	80
4.4	Initial Financial Evaluation – Primary Award	83
4.5	Initial Financial Evaluation – Budget Award	84
4.6	Summary of All Proposers' Risk Categories	85
4.7	Primary Award Evaluation, Raw Data	87
4.8	Budget Award Evaluation, Raw Data	88
4.9	Financial Proposal Clarification (Low-End) – Primary Award	90
4.10	Financial Proposal Clarification (Low-End) – Budget Award	90
4.11	Primary Award Evaluation, Comparisons of Raw Data	91
4.12	Budget Award Evaluation, Comparisons of Raw Data	92

Table	Page
4.13	Summary of Delivery Volume by Dealer 94
4.14	Project Schedule Deviation Summary 94
4.15	Project Cost Deviation Summary 95
5.1	T-Test of Furniture Industry Perceptions of Best Value 98
5.2	Selected Furniture Industry Survey Vendor Comments 100
5.3	ANOVA ASU, NAU, UA Initial Buyer Survey Responses .. 102
5.4	T-test of ASU,UA and NAU, Initial Buyer Survey 103
5.5	ANOVA of ASU, NAU, UA, PIPS Buyer Survey 104
5.6	T-test of ASU,UA and NAU Buyer Responses, Best Value System 105
5.7	T-Test of ASU Buyer Responses 106
5.8	T-Test of NAU Buyer Responses 106
5.9	T-Test of UA Buyer Responses 107
5.10	T-Test of Initial and Best Value Buyer Responses 108
5.11	Initial Financial Evaluation Summary 109
5.12	Proposers' Total Score from Initial Evaluation 112
5.13	Primary Award Evaluation, Point Differential from Firm F 113
5.14	Budget Award Evaluation, Comparisons of Raw Data 114
5.15	Primary Award Evaluation, Δ from Best Score 115
5.16	Budget Award Evaluation, Δ from Best Score 116
5.17	Summary of Relative Delivery Volume by Dealer 117
5.18	Schedule Deviation Differential (from Firm F) 118

LIST OF FIGURES

Figure		Page
3.1	Previous Tri-University Furniture Purchasing Process	49
3.2	Executive Workstation Cost Template	61
3.3	Professional Workstation Cost Template	62
3.4	Best Value Furniture Services Purchasing Structure	70
3.5	Best Value Information System	73

Chapter 1

INTRODUCTION

Overview

The objective of this thesis was to address the unrealized efficiencies buyer organizations can achieve by using a structured approach to identify and minimize risk. An area of significant potential improvement is in the selection and delivery of services that are perceived to be a commodity. Because commodities have minimal distinguishing characteristics, price is used as the deciding factor for which product or service to purchase (Rayburn, 2010; Reimann, Schilke, & Thomas, 2010; Rushkoff, 2005). When a buyer incorrectly assumes that price alone is a sufficient data point to make a decision, they expose their organization to risk that could have otherwise been minimized by considering additional factors besides cost alone (Gransberg, 1996; Kashiwagi & Savicky, 2003); the researcher defines this buyer behavior as exhibiting a “commodity mentality.”

Problem Statement

One of the core groups within a large organization is a purchasing department, and part of their responsibility is to acquire commodity services and materials (Writing, n.d.). The researcher has observed that organizations may fail to identify and minimize risk from commodity services. This would be evidenced by increased levels of dissatisfaction from customers, lack of measurements that drive accountability,

customers not receiving what was expected, and surprises or risks that cause delays or cost increases. The nature of a large bureaucratic organization may foster “commodity mentalities” towards the entire supply chain that delivers goods and services which are (incorrectly) perceived to be “commodity.”

The researcher proposes that certain behaviors and characteristics are indicative of when an organization, or its agents, has a commodity mentality. One characteristic is that they use price as the primary differentiating factor when selecting a supplier. Certainly, they may consider other factors when evaluating a supplier, but the primary decision-making differentiator is cost. A prime example of the manifestation of a price-based mentality is the use of computerized auctioning systems, where competitors methodologically lower their price for a given service until they can go no lower (Gentile, 2004; Kutty, 2004). If one assumes that a resource is commodity and arbitrarily applies these assumptions to the rest of its supply chain (Katz, 2003), it therefore follows that a buyer may perceive there is limited risk in successfully delivering the good to the buyer. A second trait of organizations exhibiting a “commodity mentality” is the absence of measurements that drive accountability. These measurements, when they are used, track critical performance metrics of not only the supplier or the product they deliver, but also of the buyer’s organization. If a buyer organization assumed that price was the only important differentiating factor, they would therefore not

need a performance measurement system in place (because they assume there is no risk).

This “low-price” focus exists with government bureaucracies in their attempt to use a selection process that is fair and can be defended against protests (Gransberg, 1996). The reader must understand the inner workings of bureaucracies to know why this behavior is so prevalent. Bureaucracy is a structured entity whose members have specialized functions that collectively carry out the organization’s mission (Bureaucracy, n.d.). A bureaucratic configuration is the most efficient way to achieve results in large organizations, and is especially applicable in Facility Management departments (Cotts, 2010). However, this structure comes at a cost: effective communication decreases, change is slow (if not impossible) to implement, and overall performance can decrease (Dell, 2005; Drucker, 2002; Raina, 2010;). Commodity mentalities can therefore be prevalent within bureaucracies (Kashiwagi, 2002; Semon, 2004).

Many times, when people hear the term ‘bureaucracy’, they make one of several assumptions (Toye, 2006):

- bureaucrats are only accountable to their supervisors
- bad bureaucracy is monopolistic in nature and is inefficient in delivering goods and services
- private interests can dissolve the regulatory responsibility of the bureaucracy

- rules developed by the bureaucracy are sweeping and can be enforced without regard to its original intent
- bad bureaucracy has multiplicity of departments and points-of-contact, which creates confusion and inefficiencies

Large organizations inherently face increased difficulties in maintaining high levels of efficiency; that is, to create the greatest impact with the least amount of resources (Efficient, n.d.; Snyder & Morris, 1984). A Facilities Management department has established rules, a defined chain-of-command, and many of its members have specialized functions (EN15221 – EuroFM, 2011; Payant & Lewis, 2007). Therefore, it follows that FM groups are also be susceptible to the negative characteristics of bureaucracy, and sometimes lack effective communication tools (den Otter & Emmitt, 2007).

For example, in the late 1980s, the Pentagon pushed for changes to their procurement practices (Pasztor, 1989). In particular, officials wanted to reduce the work force size, increase the quality of products delivered under the acquisition system, and become more efficient at procuring prototype technology. Members of Congress and the Secretary of Defense identified that change was very slow, and may be altogether impossible to implement. The Pentagon has 100,000 purchasing agents who procure over \$300B annually. The reader can therefore infer that the Pentagon is hampered by its bureaucratic structure, due to its incredible size and level of hierarchical complexity.

Another way to imagine bureaucracy is an illustrative concept of silos. Functional silos exist are when departments and groups have a specific function or specialty, and as a result, the silos tend to focus on achieving their own results (Armajani, 2010; Dell, 2005). Recall that one characteristic of bureaucracy is a highly task-centric structure, where individuals are assigned specific roles and duties. So in essence, the nature of a bureaucratic organization leads to the creation of silos that are primarily focused on their own work and achievements.

The concept of organizational silos can also be extended to the supply chain. Individual nodes along the supply chain that are operating in silos would not consider the profitability, efficiency, and interoperability of their value-adding functions as it relates to the rest of value chain (Blount, 2008; Katunzi, 2011; Milligan, 1999). Kashiwagi (2012) suggests that organizational silos create the following environment:

- Silo builders take a more detailed view that is very short sighted, and restrict people to their own silo. They think only in their own best interest.
- Individuals within silos create their own terminology, more details, more rules, and more decision making.
- “Us” against “them” attitudes are prevalent.
- Non-transparency exists.
- Effort is minimized internally, and maximized externally.

In an effort to meet their own performance goals, silos may use lower-cost suppliers, ignore the needs of the final end customer, and assign inadequate resources to new products and service design (Katunzi, 2010). Therefore, the nature of a large bureaucratic organization may foster “commodity mentalities” towards the entire supply chain that delivers goods and services which are (incorrectly) perceived to be “commodity.”

Hypothesis

The purpose of this research was to test the applicability of a value-based risk management system in services which are typically viewed to have limited and quantifiable differences, with exception to price (commodities). The first hypothesis was that while a service may generally be perceived as a commodity, there are actually differing levels of service performance between suppliers. Performance is defined in terms of cost deviation, schedule deviation, and customer satisfaction.

The second hypothesis was that implementing a best value business and leadership structure at the final buyer’s position in the supply chain will increase upstream performance, and thereby result in increased performance at the buyer’s site.

The third hypothesis was that implementing a structured pre-planning, risk identification, and risk management system will stabilize overall system performance in the buyer’s organization.

Research Objectives

There were two primary research objectives for this thesis. The first was to identify a more efficient methodology for procuring commodity services. The new approach requires less effort, decision making, and technical expertise of the buyer organization, and instead allows them to select commodity services on the basis of the providers' ability to identify and manage risk in delivering their service.

The second objective was to implement a Best Value business leadership and risk management structure for a service that is typically perceived as a commodity. The researcher proposed that organizations need a "cradle to grave" approach that allows service providers to identify and manage the risk that they do not control. Once the procurement of a service has already been completed, owners need a structure to monitor the performance of the supplier for the life of the contract.

The researcher proposes that the tools documented in this thesis will help organizations become more efficient in their selection and management of services. There is very limited research in using best value concepts in the delivery of traditional commodity services, and this thesis seeks to add to that body of knowledge.

Research Scope

In 1994, the Arizona Board of Regents (ABOR) mandated that the Arizona's three largest public universities (Arizona State University (ASU), Northern Arizona University (NAU), and the University of Arizona (UA))

abide by the Tri-University Furniture Contract (Tri-U Contract or Tri-U). The goals of the Tri-U Contract are to allow the participating universities to, "...enjoy the benefits of lowest price, established quality, best delivery, and ease of ordering..." (PUR 401–08: Furnishings, Flooring, and Window Coverings, 2007). The Universities may transfer the managerial and renewal responsibilities of the contract between each other at the expiration of each contract term; however, ASU normally takes the lead on managing the contract.

ASU and UA are similar in size and surrounding geographic conditions, while NAU is a smaller, more remote campus. Table 1.1 summarizes each campus' characteristics (2010 demographic profile, 2010).

Table 1.1

Geographic Comparison of University Locations

No	Geographic Characteristic	Unit	ASU	NAU	UA
1	Total City Population	#	1,445,632	65,870	520,116
2	Total University Population	#	84,472	25,364	50,920
3	Distance from Phoenix	Miles	0	146	116

ASU is located in the Phoenix-area, NAU in Flagstaff, and UA in Tucson

The researcher utilized a best value selection and contract management processes called the Performance Information Procurement System (PIPS) and the Performance Information Risk Management Systems (PIRMS), developed by Dr. Dean Kashiwagi at the Performance Based Studies Research Group (PBSRG) (About PBSRG, 2012). The

process has been used to procure over 975 projects, totaling \$4.7B, and resulted in a high level of performance (9.5 out of 10).

In July 2008, ASU's Ray Jensen (Associate Vice President, University Business Services), John Riley (Executive Director of Purchasing and Business Services), and Liz Chandler (Senior Buyer), approached the Performance Based Studies Research Group (PBSRG), where the researcher is employed as a project manager, and requested assistance to improve the delivery and performance of the Tri-U Contract. An interview with these individuals identified the following problems with the current Tri-U system:

- Customers do not always receive at the end of a project what was originally expected
- Lack of communication between the Capital Programs Management group, general contractors, furniture installation service providers, and University Business Services personnel
- Lack of performance measurements in terms of risk (on-time, on-budget)
- Lack of performance measurements in product deficiencies
- Manufacturer design expertise is not fully utilized during project pre-planning

Based on these problems, the researcher identified that the University may be using a commodity mentality towards the management of the Tri-U Furniture Contract.

Upon further discussion with the ASU key staff, the researcher proposed that PIPS and PIRMS may have new application in the field of risk management of services typically perceived and managed as “commodity.” The research test was facilitated through ASU’s Purchasing Department, with support and input from the Purchasing Departments at NAU and UA. The researcher believes that while any organization applying the basic principles identified in this thesis will achieve some level of success, the overall implementation strategy may be different.

Research Methodology Summary

The researcher conducted the tests described herein in three major phases. The first phase began with a literature review that identified the overall use of performance metrics within business, and specifically, how metrics are used within bureaucracies. The review also summarized inefficiencies within a bureaucratic structure, and classified these issues within the context of Facility Management organizations. The review concluded with an analysis of how Facility Managers typically identify and manage risk, and specifically within the management of commodities contracts. In general, the literature indicates that suppliers face inherent risk, regardless of whether the owner perceives the delivery of the service to be a “commodity.”

The second part of the first research phase was to determine the scope of research efforts. The researcher conducted surveys with the furniture supplier industry and buyers at each of the Universities. With

feedback from both groups, the researcher collaborated with the ASU Purchasing group to develop a Request for Proposals that included best value selection criteria and a contract pre-award clarification process.

The second phase of the research involved the shortlisting, and eventual identification of the best value furniture suppliers. The researcher also educated the suppliers during a pre-award clarification phase. Once the Universities were comfortable their suppliers' risk management plans, three awards were made (to three different furniture dealers).

The final phase of research was to monitor contract performance. The researcher collected data on the performance of all furniture projects and the dealers' abilities to identify and manage risk. The data represents furniture projects completed from July 2009 – January 2012.

Summary of Thesis

This thesis documents the testing of the hypotheses through the implementation and documentation of a best value business and leadership structure. The following is a summary of the thesis:

- Chapter 2 is a literature review summary of bureaucratic structures and characteristics, and discusses the role of Facilities Management within a bureaucracy. The review closes with a high level analysis of risk within the supply chain, and identifies techniques that Facility Managers can use to minimize risk.

- Chapter 3 is a detailed explanation of how the research was carried out to test the hypotheses. The chapter is presented chronologically as the research progressed through the supplier selection process and project performance monitoring.
- Chapter 4 presents all of the detailed raw data collected during the supplier selection process and post-award project delivery.
- Chapter 5 is an analysis of the raw data presented in Chapter 4.
- Chapter 6 summarizes the significant results in relation to the hypotheses and research objectives.
- Chapter 7 concludes the thesis and provides recommendations for future research.

Chapter 2

LITERATURE REVIEW

Summary of Findings

This chapter presents a summary of the literature reviewed while investigating exploratory and background information for this thesis. The literature showed that bureaucracies, due to their nature and size, face inherent problems in being efficient and operating in the best interest of its constituents. Additionally, the Facilities Management function, as part of a larger corporate structure, shares similar characteristics of a bureaucracy and may therefore encounter many of the same challenges. Because of these traits, effective communication is difficult and critical information is not always delivered in a timely fashion to those who need it most.

This chapter also surveys information on the current use of performance metrics within bureaucracies, and specifically Facilities Management. While most organizations use some limited metrics, they do not use it as an integral part of their day-to-day operations. The literature identified that performance measurements are not widely used because of the difficulty in the collecting them.

Finally, the researcher examined the risk management practices of organizations, and specifically, how these practices were used for management of commodity services. The literature shows that, while actual products delivered were important to end users, most risk that commodities and services encountered are found throughout the supply

chain. This implies that organizations should focus on the measurement of services at all major transactional points throughout the supply chain.

Introduction

Performance information, balanced scorecard results, and key performance indicators can be useful data to predict current or future performance of a company. A 1999 case study found that nonfinancial performance metrics in the airline industry (such as on-time flights or mishandled baggage) had a significant impact on future financial performance of the airline (Behn & Riley, 1999). Organizations may begin using non-financial metrics when their traditional processes or metrics no longer add meaningful value (Fakhri, Menacere, & Pegum, 2011). Fakhri *et al.* further identify that these types of non-financial metrics are becoming more common due to their ability to provide meaningful information used to increase organizational performance (as compared with purely financial information). While the Facilities Management function is making progress, it still lacks adequate customer satisfaction information that is readily available (Tucker & Pitt, 2009).

State governments are also without performance data that allows it to make effective decisions. A May 2011 Pew Center report identified that out of 50 States, only 13 (26 percent) have implemented systems, with supporting data, that show how federal dollars positively impacted the local state's economy ("Many States Fail to Measure," 2011). Pew Center director Robert Zahradnik identified that, "unless states have clear goals,

performance measures and data to generate that information, it is very difficult for policy makers to prioritize transportation investments effectively, target scarce resources and help foster economic growth” (“Many States Fail to Measure,” 2011).

Companies may also begin using data to increase performance in an effort to encourage personnel accountability. Hatry (2006) also identified that performance metrics help managers better allocate their limited resources. An effective metric simply identifies the risk an organization faces, which allows leaders to make adjustments to increase efficiency. Finally, Hatry (2006) identifies that performance measurement systems must produce accurate data from the beginning; not doing so may lead to decisions based on faulty information, and ultimately loss of confidence in the measurement system.

Using performance metrics in a large company can help set the overall direction of the group and allows the creation of goals that better meet their strategic objectives (Romeo, 2011). In an anecdotal example, a Criminal Justice Inspection report for a police district in Northern Ireland found that crime reporting and resolution, and community interaction was inconsistent (“Dissident threat and red tape”, 2011). The report found that, in the absence of goals, managers of individual groups may establish their own local policies and procedures, which may not necessarily be in alignment the organization’s overall goals.

The United States Federal Government has made legislation that requires government entities to measure their performance. One of these laws is the Government Performance Results Act of 1993. The Act strives to, “improve the confidence of the American people in the capability of the Federal Government, by systematically holding Federal agencies accountable for achieving program results”, requires agencies to preplan in order to meet objectives, and mandates that objective performance information is available so that policymakers can make better decisions. Initially, the Act was considered to be nothing more than additional paperwork, and in response to the lack of adhering to its requirements, President George W. Bush created the Program Assessment Rating Tool (PART) (Schoen, 2008). In the Fiscal Year 2004, only 11 percent of the 407 federal programs rated with the PART received scores of “effective”, and 38 percent could not provide documentation that supports their reported performance levels (Gruber, 2005). The article by Gruber provides clear evidence that using performance metrics in a very large bureaucracy is not only possible, but can allow lawmakers to make data-driven decisions. Any organization that is developing performance information categories should base them on the overall goals; they should be, “measurable, time limited, and realistically attainable” (USAID, 2010).

There are three objectives of this literature review. The first is to provide a concise synopsis of problems that bureaucracies typically face. Next, the researcher will consider how the Facilities Management function

typically identifies and minimizes risk, within the framework of the bureaucracy in which it operates. Finally, this literature review will conclude with an analysis of risk management practices, specifically in the delivery of commodity services.

Issues Typically Encountered Within Bureaucracies

The first objective of this literature review is to summarize the nature of bureaucracies, and identify the challenges that manifest within its structure. A bureaucracy is defined as, “a body of non-elective government officials” that are “characterized by specialization of functions, adherence to fixed rules, and a hierarchy of authority” (Bureaucracy, n.d.). While the definition explicitly states a bureaucracy is within ‘government’, this literature review will generalize the definition, and apply it to any organization which shares similar characteristics to the typical ‘bureaucracy’.

When people generally think of “bureaucracy”, they do not imagine a structure needed to facilitate the operations of a large organization (Toye, 2006). Rather, Toye (2006) identifies most people would characterize bureaucracy using one, or more, of the following five traits.

1. First, individuals in a bureaucracy are, “accountable only to their superiors, and not to those whose affairs they administer.” In other words, even though a worker may be completing tasks for the constituents the bureaucracy serves, the worker is only concerned with, and accountable to, their direct supervisor.

2. Second, bureaucracies, and especially governmental bureaucracies, operate without competition and are therefore less likely to be efficient in allocating and using resources (Gratzer, 1998; Toye, 2006).
3. Next, in regulatory bodies, individuals are more susceptible to have conflicts of interest with the party for which they are supposed to regulate (Toye, 2006).
4. Fourth, bureaucracies may perform their tasks without discretion to the actual intent of the rules and regulations they enforce. In other words, “officials may apply the written rule literally and exactly, and without the exercise of any judgment and discretion.” (Toye, 2006).
5. And finally, bureaucracies may tend to duplicate the efforts of other similar entities within the organization. This overlap not only leads to waste of resources, it is frustrating for constituents to identify which department they actually need to work with.

A bureaucratic structure is generally most efficient when the organization is large and complex (Schneider, 1994). However, Schneider and Kiser (1994) argue that bureaucracy is not efficient when control of individuals within the system is not possible. If control were possible, Schneider and Kiser suggests that the leader can ensure the subordinates are acting in the best interest of the organization by monitoring and modifying their behavior.

In addition to these traits, a bureaucratic hiring structure can be cumbersome. Within a fixed bureaucratic structure, hiring based on merit does not always lead to the employment of an individual that aligns well with the organization (versus the process of hiring based on dependence) (Schneider & Kiser, 1994). Merit-hiring is to consider an applicant's overall capabilities and aptitude, while dependence-hiring is to mainly consider their willingness to actually perform the task (Schneider & Kiser, 1994). Schneider and Kiser (1994) also argue that dependence hiring should be done when the task is simple, because it reduces cost to the organization by minimizing the approvals required to authorize the hire (compared to approvals required for a merit-based hire).

Another challenge bureaucracies face is their general inability to provide financial incentives to employees who perform well, or conversely, bureaucracies are unable to enact regulations that would have negative impact on employees who do not perform (Schneider & Kiser, 1994). Schneider suggests that when inspection of the work being performed is minimal (employees are less supervised), financial perks that are directly contingent upon an employee's performance are more important, and lead to better results.

A bureaucratic structure with one individual holding an authoritative position can create a situation that is susceptible to corruption (because of the authority the persons has) (Schneider & Kiser, 1994). An alternative, as discussed by Schneider and Kiser, is a board of individuals that share

the collective responsibility of decision making. While this may reduce corruption and better represent the views of a larger audience, a board can be very slow in initiating change and developing new methodologies to increase efficiency.

Finally, bureaucracies can limit the ability of employees to provide constructive feedback to improve operations because of the hierarchal structure of the organization (Raina, 2010). As Raina identifies, “establishing rules also to achieve predictability also means imposing control using power, and rewarding or punishing. The consequence is a loss of critical employee input, commitment, and motivation.” Therefore, the reader may deduce that a situation where employee input is not considered can drastically reduce morale and motivation to do good work.

The researcher also examined the communication process and its efficiency within large organizations. Merriam Webster defines communication as, “a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior.” (Communication, n.d.) A study completed by Snyder and Morris (1984) identify that as a bureaucracy increase in size, they face increased difficulty in effectively communicating what needs to be done, and, how it should be done. The study also found that the amount of communication increases as the organization gets larger. The increased number of communication transactions combined with ineffective communication

suggests that large bureaucracies can be slow to change (Haveman, 1993; Snyder & Morris, 1984).

This same study by Snyder and Morris also found that the critical information is also not always effectively communicated.

“Quality of supervisors as communicators and the extent to which job related information was shared within work groups were associated with lower workloads (number of clients served, clients served per employee) and higher levels of organizational efficiency (relative and total costs of the operation)” (Snyder & Morris, 1984).

This suggests that leaders can overcome the impact of ineffective communication in a large organization by breaking the work into smaller units, which collectively allow the organization gain the performance benefits of smaller, more nimble, groups.

Raina (2010) identifies that “inadequate information is the major cause of more than half of all problems with human performance. By improving the quality and timeliness of the information people receive, you can improve performance by as much as 20 to 50 percent.” This literature review has previously identified that large organizations may communicate inefficiently, slowly, and ineffectively, and when considering Raina’s supposition above, the reader can presume that organizations will improve performance by reducing its size, or increasing the quality of information communicated.

Many organizations have developed tools to increase the quality and timeliness of communication. However, the effective use of these tools on a project is dependent on an upfront agreement among a team as to how they will communicate, and with what tools (den Otter & Emmitt, 2007). Most project teams face three main obstacles when establishing protocols for communication:

“First, the number of electronic tools for design team communication is increasing and therefore both users and managers need to develop specific skills for collective use. Second, differences between participants’ mother organizations’ use of electronic information systems and variety of communication practices may create problems with compatibility. Third, difficulties may occur in differences of opinion and understanding on an individual level, including differences in the use of specific electronic means for team communication and the lack of a collective framework for meaning.” (den Otter & Emmitt, 2007)

Interestingly, de Otter and Emmitt (2007) also identify an “IT productivity paradox” whereby organizations will spend more resources on information systems, and yet, have no measurable increase in productivity.

Communication problems are also related to the nature of a bureaucracy, and that the use of new tools alone will not resolve the issues. Literature identifies several changes that organizations can make to improve communication. One approach is to minimize the amount of

information passed between entities by only communicating what is critical (Swanson, 1966). Kashiwagi proposes that when communicating with experts, even less information needs to be conveyed because of their ability to predict the future outcome (Kashiwagi D., 2010). Project teams should establish at the beginning how they will communicate which will set the tone for rest of the project (den Otter & Emmitt, 2007, "Many States Fail to Measure," 2011).

Part of establishing a communication protocol is to identify the actual means and methods for how communication will take place. Nepal, Yadav, and Solanki (2011) identify two principles to establish the medium for discussion:

Communication in the form of written reports and memos lacks the richness of information and the interactive qualities needed for problem solving. On the other hand, face-to-face meetings are costly in terms of time and efficiency, and usually involve limited value-added work per person. Also they easily lose focus and drag on longer than necessary. In lieu of regularly scheduled meetings, therefore, Toyota emphasizes written communication supported with visuals... If there are disagreements, then it is considered best to hold a well planned, agenda-based meeting to hammer out a decision face-to-face.

The researcher has thus far defined some common traits of a bureaucratic structure, and the associated communication inefficiencies of

a large organization. The researcher will now examine the role of Facilities Management (FM) within the context of a bureaucracy. According to the International Facilities Management Association (IFMA), FM is, “a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology” (“What is FM?”, n.d.). A 2010 report compiled by IFMA and Today’s Facility Manager identified several characteristics of the FM profession (Schwartz, 2010):

- Most FM professionals work in the services industry (management or task-based functions)
- Facility Managers work and manage various buildings throughout a company’s site
- Several planning and project management duties are performed internally
- Services that require a specific technical expertise are outsourced (janitorial, construction, etc.)
- The average staff size for an FM group is 59 people
- FM personnel saw an average salary increase of 2 percent in 2009. (It is interesting to note that in the same timeframe, federal employees saw an average pay increase of 3.9 percent, with all fields receiving an estimated average increase of 3.8 percent (Stone, 2009; “U.S. workers can expect skimpy raises in 2009.”, 2008)).

- In 2008, 40 percent of Facility Managers reported that space they were responsible for increased.

The researcher's review of literature has identified that the role of Facility Managers can be generally divided into two categories. The first are technical responsibilities that require an expertise in specific areas relating building maintenance and operations ("Administrative services managers", 2009). The FM may be required to provide knowledge on resolving problems, monitor and improve energy efficiency, or provide input on design. Their second role is to help organizations achieve their goals and be an integral part of long term facilities planning. Tucker and Pitt (2009) suggest that FMs "should be viewed strategically, where the integration and alignment of non-core services required to operate and maintain a business fully support its core objectives." Tucker and Pitt (2009) also recommend that FMs measure the performance of their services as a method to add strategic value to the organization. As with many other FM functions, performance management must be integrated between FM and the company's culture in order for it to be successful (Amaratunga & Baldry, 2002). FM has a direct impact on the bottom line so the successful implementation of performance metrics is critical (Tay, 2006).

These characteristics and roles of an FM department have shown that it serves a specific purpose and function within an organization, and by Toye's definition, the Facilities Management department is itself a

bureaucracy (Toye, 2006). Therefore, the researcher proposes that FMs face the same difficulties and inefficiencies of a bureaucracy as this literature review has previously identified. However, due to the specialized and hierarchical nature of the FM function within an organization, it is still structured best as a bureaucracy (Cotts, 2010).

In summary, the first objective of this literature review has been to identify the difficulties that bureaucracies face. Individuals within a large organization may only be accountable to their direct supervisor, and therefore may not always have their customer's best interest in mind. As organizations get larger, effective communication that relays critical information in a timely fashion becomes increasingly difficult. The multiplicity of communication tools (many of which do not adequately address the receivers' various levels of understanding) have not substantially improved an organization's communicatory abilities. Finally, this literature review has established that Facilities Management shares many similar characteristics of a bureaucracy, and therefore faces several of the same difficulties and inefficiencies. FM can improve its value to an organization by using performance metrics that are an integral part of company cultural.

Identify how Facility Managers Identify, Manage, and Minimize Risk

Risk is defined as anything that affects time (schedule delays), cost, or customer satisfaction (Kashiwagi, 2002). In a broad business context, risk is anything that affects financial operations, and risk

management is the process of preventing events from affecting such operations (Kraman & Hamm, 1999). While these definitions of risk are more measurable when applied to a project that has defined a cost and duration, understanding risk in a Facilities Management functions requires a different perspective.

The researcher next attempted, albeit unsuccessfully, to find a simple explanation of how Facility Managers should minimize risk. Instead, the researcher has identified a general three step approach to risk management based. The first step is that FMs must measure their performance to get an accurate snapshot of reality. Tucker and Pitt (2009) suggest that it is especially important for FMs to measure performance in a variety of key areas that include both the financial and 'intangible' aspects of their profession. Measuring different areas of performance helps organizations have a well-balanced approach to setting and monitoring their objectives. Cotts (2010) provides a succinct explanation of why measurement is important.

We intellectualize the need for measurement, but none of us likes to be measured, because our experience shows that there is always some sort of punishment for failing to measure up. But how will we ever know if we are meeting objectives and customers' expectations unless there is a dispassionate, consistent way to measure progress – or failure? How do we know that we are achieving constant improvement if we are not measuring against

some baseline? ... Measurement – consistent measurement over time – is fundamental to good-quality facility management. (p. 467)

The next step is to assess the probability of the risk occurring, and to develop plans that minimize the risk (Alexander, 1992). The key in minimizing the risk is to plan ahead before the risk actually occurs (Boehm, 1991). Facility Managers should also address any activity that could harm the financial viability of the organization (Barton & Hardigree, 1995). Much of the facilities risk management literature focuses on planning, and responding to, these types of catastrophic events; however, there is a lack of resources on managing the day to day risk (anything that may affect time, cost, or customer satisfaction). More recent literature suggests that FM departments should focus on the risks (or metrics) that have an impact on the value they add to the organization (Cotts 2010). Regardless of how a facilities manager views the type of risk to be managed, the common theme from the literature is to plan ahead before the situation arises.

An alternative approach to risk management, found as a component of the PIPS, is to transfer the risk and accountability to the expert (Sullivan & Guo, 2009). The philosophy can be used by Facility Managers to better manage their areas of responsibility. The PIPS process identifies that risk should be managed in the following manner (Kashiwagi, 2012a; Sullivan & Guo, 2009):

1. The expert should first identify what their overall plan is to complete the project.
2. They should then address anything that could stop them from being successful on the project, and provide a simple plan how they will minimize the potential risks.
3. Once the project or service has begun, the expert vendor should track any changes from their baseline expectation.

The actual process of transferring the risk to the expert occurs when vendor completes these steps, and the owner releases control and accountability to the vendor.

Risk management and transparency can also reduce an organization's litigation costs, as seen in a case study of the Veterans Affairs (VA) Medical Center in Lexington, Kentucky (Kraman & Hamm, 1999). The authors of the case study identified that the Lexington facility had a policy of full disclosure to patients when faulty care was provided, which is not necessarily the norm for VA hospitals, and the private sector in general. The policy states that patients must not only be told when a problem has occurred, but that the Hospital must also provide assistance in filing a claim. In Lexington facility, the average malpractice claim was \$720,000 compared to \$1,484,000 in the private industry. While the study is limited to performance in a single facility, the results seem to indicate that a policy of openness minimizes patient frustration. The authors proposed that the reduced litigation costs were due to fewer claims being

filed because information was passed to the patients with transparency. Costs were also minimized because settlements more accurately reflected the actual need, and were without the burden of additional punitive damages included in the claim.

So far, this literature review has framed risk management in the following context:

- Risk is defined as any event that may affect time, financial resources, or end-user expectation.
- Facility Managers can minimize risk by allowing an expert vendor to identify their scope of work, document and plan for anything that may stop them from being successful, and track any deviation from the baseline expectation.
- FMs can show the value of the services they provide by consistently documenting and measuring their performance.

Performance metrics can be used to identify how effective the FM's risk management techniques are. Some of these metrics are time to respond to requests for service, time to respond to emergency calls, or perhaps the overall quality of services provided to the customer (Cotts 2010). It is important to also note that measurement can be quite difficult, especially when FMs attempt to gather metrics on cost. This is because oftentimes the accounting and budgeting systems are too complicated to allow the FM to extract the simple data needed for analysis (Cotts 2010). Whatever metrics a FM uses to monitor performance, the information

needs to show the department's overall ability to meet the needs of the customer, and identify how the FM function serves to help achieve the company's goals (Brackertz & Kenley, 2002; Cotts, 2010; Tucker & Pitt, 2009).

Most organizations do not effectively use performance metrics to manage performance (Tucker & Pitt, 2009). One of the reasons is that upper management has not pushed to measure risk as a core operational procedure within their company (Bekefi & Epstein, 2007). The difficulty is that management has no way to effectively consider risk from a holistic standpoint, partly because the strategy to minimize risk is solely based on financial information. The result is the managers fail to consider other factors that are not included in analyses. In fact, 97 percent of 4,238 executives surveyed identified that their companies do not do enough to preplan for risk (Bekefi & Epstein, 2007).

A second reason why companies fail to measure performance or quality of service is that it is difficult. It is labor intensive, meaning that it is costly (Quesada & Gazo, 2007). Secondly, there is no widespread agreement on what Facility Managers should actually benchmark (Tucker & Pitt, 2009). The disparity of what organizations measure inhibits their ability to identify relative performance (Cuthbertson & Piotrowicz, 2008). However, many industries recognize the need to use metrics to improve performance (Quesada & Gazo, 2007).

Finally, organizations often do not have incentive to measure performance because it is not tied to the company's goals (Tucker & Pitt, 2009). In other words, if a company is able to move past the difficulties of benchmarking, there may only be negligible impact in identifying the improvement organizations make. Cuthbertson and Piotrowicz (2008) identified that organizations within a supply chain may work in silos, and only focus on the internal workings of their business. As a result, their incentive to monitor performance of other nodes in the chain is minimized.

The researcher also examined the outsourcing practices of Facility Managers, and identified how these services are measured. A 2002 survey published by FMLink identified that most organizations may outsource to save money ("FMLink outsourcing survey", 2002).

Organizations may see cost savings from outsourcing for a variety of reasons, including (Maechling & Bredeson, 2005):

1. Opening the service to competition may achieve lower costs than those of the in-house function (because of the lack of internal competition to minimize costs).
2. Because the vendor being hired to perform the service is an expert, they may be able to modify the level of service provided, while still meeting the organization's goals and requirements.
3. The service providers have access to the latest tools that an internal FM functions would not otherwise be able to use.

4. Finally, external vendors have access to suppliers and may be able to trim costs in ways internal FM departments cannot.

The same survey identified the following areas as most commonly outsourced (“FMLink outsourcing survey”, 2002):

Table 2.1

Facility Management Outsourced Functions

No	Function	Percentage of Respondents that Outsourced
1	Custodial and Housekeeping	72%
2	Design and Architecture	65%
3	Landscape Maintenance	63%
4	Major Moves	54%
5	Security	51%
6	Preventative Maintenance	50%
7	Engineering	46%
8	Utilities Maintenance	45%

Commentary included in the survey indicated the following (“FMLink outsourcing survey”, 2002):

- FM departments choose to outsource to acquire a service for which they have no specialized skilled in-house to perform.
- The most difficult part of the outsourcing was hiring the best contractor for the job.
- Contrary to other literature in this review, which identified that FMs should transfer the risk of nonperformance and accountability to the expert, most respondents to the FMLink survey identified that the best way manage the performance of a

hired vendor is to review, evaluation and inspection of the work performed.

- To a lesser degree, the respondents also identified that the use of surveys and performance-based measures was also effective in managing performance.

Risk Measurement of Commodity Services

The final objective of this literature review is to establish a broad definition of commodity services, and the current risk management practices for these services. The service industry is one that, “creates services rather than tangible objects” and include sectors such as, “...banking, communications, wholesale and retail trade, all professional services such as engineering, computer software development, and medicine, nonprofit economic activity, all consumer services, and all government services, including defense and administration of justice” (“Service industry”, n.d.).

A commodity, in its simplest definition is, “a mass-produced unspecialized product” (Commodity, n.d.). Title 7, Chapter 1 of the United States Code defines commodities as various foodstuffs for which “contracts for future delivery are presently or in the future dealt in” (Commodity Exchanges, 2004). Some literature references the terms “commodification” and “commoditization”, and it is important for the reader to understand the subtle differences between the two. Generally, “commodification” refers to the practice of assigning a market value to a

good or service that it did not previously have (Rushkoff, 2005).

“Commoditization”, on the other hand, is the process where a good or service previously has distinguishing attributes and limited quantities, and becomes mass-produced and nearly identical, with price being the primary differentiating factor (Rayburn, 2010; Reimann, Schilke, & Thomas, 2010; Rushkoff, 2005).

An industry that has been commoditized is often identified by the presence of fierce price-based competition, which results in lower profitability (Reimann, Schilke, & Thomas, 2010). In fact, Reimann *et al.* identify four metrics that can be used to identify the level of commoditization of an industry:

- The first is the level of product homogeneity; that is, the ability to exchange a widget with a competitor's with no noticeable difference in terms of quality or performance to the buyer.
- The second metric is price sensitivity, wherein a customer seeks to obtain the lowest price, and assumes that most other factors of a product are equal.
- Switching cost is the third trait, and measures the cost a buyer incurs when moving their business to a new supplier.
- Finally, the fourth measurement is industry stability, as reflected by a consistent demand for product and unchanging customer base.

A commodity, or perfectly competitive, market exists when the following characteristics are present (Baumol & Blinder, 2009):

1. Multiple buyers and sellers
2. Indistinguishable products
3. Companies' ability to easily participate in, and disembark, as suppliers in the given market
4. Well-informed consumers armed with accurate data about the product they are purchasing

The researcher now examines the level of risk associated with the delivery of commodities. Supply chain is a, "network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers" (Bhatnagar, 2010). A commodity chain is simply a subset of the supply chain definition: "a network of labor and production processes whose end result is a finished commodity." (Korzeniewicz & Gereffi, 1994).

Korzeniewicz and Gereffi extend this definition to a global supply chain (GCC), which is the consideration of international organizations whose focus is a single commodity that links consumers, businesses, and governments together. Activities or entities within a commodity chain can be represented by nodes that are connected through networks (Korzeniewicz & Gereffi, 1994). These different entities interact with multiple components: procurement of inputs (raw materials), labor utilizes

these inputs, transportation, distribution, and finally, consumption (Dicken, Kelly, Olds, & Wai-Chung Yeung, 2001). The level of profit at each node is relative to the overall degree of competition in the market that each node operates (Korzeniewicz & Gereffi, 1994). Korzeniewicz and Gereffi also identify that there is more wealth found in segments of the commodity chain that are critical to the creation of the commodity at hand, compared to those that are “peripheral” in nature (for example, providing raw inputs to a non-essential component of the final product).

Korzeniewicz and Gereffi identify that the structure of global supply chains is divided into two approaches: producer-driven and buyer driven. A producer-driven GCC is typically characterized by a large international company being the key role in managing the production network. These may include companies in the automobile, aircraft, and other related industries. A buyer-driven GCC is identified by large retailers that coordinate the production networks, and is especially typical of labor-intensive production activities (clothing, toys, etc.).

The value-chain approach is a firm’s consideration of how they use their supply networks, labor force, and other resources to create value (Nicovich, Dibrell, & Davis, 2007; Porter, 1998). Porter’s generic value chain defined an overall approach for how companies can measure value. Each unique activity that a company performs is a “value activity”, and is categorized into primary and support activities. Primary activities are anything that directly impacts the creation of product, transfer of the

product to the consumer, and follow-on customer support. Support activities provide ancillary input in product creation, which may include the procurement of raw materials, the technological infrastructure to facilitate delivery of product, and human resources.

Value is what a consumer is willing to spend for a given product, and is reflected by total revenue (price per unit multiplied by the total number of units sold) (Porter, 1998). Margin therefore is the difference between value and what it actually costs a firm to produce the product. Value creation is, “the ability of the components of the value system or chain to work together as a cohesive whole in determining the level of value provided to the ultimate consumer” (Nicovich, Dibrell, & Davis, 2007).

Porter (1998) identifies that buyers also have value chains, and like a firm, the inputs of a buyer’s chain is delivered by other institutions and organizations. Porter provides keen insight on how differentiation should actually be viewed:

‘Quality’ is too narrow a view of what makes a firm unique, because it focuses on the product rather than the broader array of value activities that impact the buyer. Differentiation, then, derives fundamentally from creating value for the buyer through a firm’s impact on the buyer’s value chain. Value is created when a firm creates competitive advance for its buyer – lowers its buyer’s cost or raises its buyer’s performance. The value created for the buyer

must be perceived by the buyer if it is to be rewarded with a premium price... (Porter, 1998, p. 53).

In other words, buyers and firms should consider an input's placement in the overall value chain, and not solely consider quality as the differentiating factor.

The global commodity chain framework and Porter's value chain concepts are similar because they both identify that firms should subdivide their production processes into related categories to help realize where value and efficiencies may be created (Korzeniewicz & Gereffi, 1994). In the manufacturing industry, a value chain is often realized through the cooperation of different manufacturers to deliver value to their common customer or market; and for some companies, there is no difference between a "value" chain and a "supply" chain (Bititci, 2006).

Supply chains deliver goods, services, and decision making data to the customer; commodities are part of the supply chain, and therefore encounter similar risks as any other product or service in a supply chain ("The supply chain management processes", n.d.). Goldsby and Rao (2009) categorize the general types of risks that a supply chain may encounter:

1. Environmental factors – issues that affect the overall environment or situation that supply chain operates (politics, society, etc.).

2. Industry factors – issues within the market that the product is being sold.
3. Organizations factors – issues relating to the firm level, including behavior and research and development.
4. Problem-specific factors – issues relating to single issues that affect the entire supply chain.
5. Decisions-maker factors – issues relating to an executive, or steering committee, and the individual's or committee's level of expertise in making the decisions.

Production uncertainty is the only issue mentioned above relating specifically to the product delivered to the buyer. Therefore, the literature indicates that most supply chain risk is not related to the actual product being delivered, but risk is in the processes or systems that supply the good.

There is a wealth of literature discussing supply chain risk management. However, there does not seem to be singular approach to mitigate all risk. Supply managers at IBM identified through a survey that, “Overall, it appears that supply management professionals do recognize that risk exists in their upstream supply chains, though often it is discussed only when a problem occurs. The extent of formal systems to make risk visible is not prevalently used” (Basu et al., 2008). Salonen (2010) suggests that suppliers take the following steps to minimize risk:

- Create an internal team that attempts to identify and minimize the risk.
- Eliminate barriers between the Finance and Procurement departments.
- Create transparency within the supply chain that allows each participant to view critical information. With full transparency, risk managers can now adjust their risk management practices to focus on the suppliers that may bring risk.
- Identify who the top suppliers are to the business, and help to ensure they are successful.
- Once these steps and philosophies have been achieved, the risk manager can now take steps to minimize the risk

A slightly different approach that the IBM White Paper (Basu et al., 2008) suggests is to identify the current risk organizations face in the supply chain, and like many other processes, prioritize the risk, manage it, and develop a plan to implement the company's risk mitigation strategy. Performance measurement in a supply chain is slightly different (compared to performance measurement on a single project), in that the organization should maintain an array of critical metrics about various suppliers (Trent, 2010). The literature identified that risk is often encountered as product traverses the supply chain, and metrics should focus on the entire system (Barber, 2008; Rao 2009).

Summary and Conclusion

This literature review first identified that while most organizations do not use performance metrics, increasing its use can be a catalyst to make improvements within the company. The review defined bureaucracy, and identified that many are inefficient, are susceptible to collusion with the private interests they are meant to regulate, and that due to the size and structure of a bureaucracy, communication of critical information is slow and inaccurate. The literature then identified that Facility Management departments share similar characteristics of a bureaucracy, and therefore may encounter many of the same problems.

This review then described how the FM profession minimizes risk. The consensus is that measurements should be used, but are often not because of their financial burden to implement, lack of agreement of what aspects of FM should be monitored, and no incentive to actually use measurements (because they are not tied to the organization's strategic objectives). The literature also shows that FMs typically outsource to reduce costs or because the department does not have the technical expertise to complete the tasks required.

Finally, the researcher defined commodity services as a situation where owners perceive price as the differentiating selection factor. Commodities, like most other products and services, are part of the supply chain, and encounter similar risks. Commodities, however, are viewed to be nearly identical (to a buyer), which implies that managing the delivery

of the commodity is more critical (in terms of cost and time savings) than the actual product itself.

The researcher surmises, and is confirmed by literature, that most FM Functional Groups do not have available a simple performance information system that tracks risks according to time, cost, and client satisfaction. The literature has also shown that owners should consider factors outside of price when selecting commodities. Organizations can improve the value they provide to customers utilizing Porter's Value Chain framework.

Chapter 3

RESEARCH METHODOLOGY

Introduction

The researcher divided the research methodology into three main phases. The first phase gathered background information and current conditions of the Tri-U Furniture Contract. The second phase used the results of phase one to develop a Request for Proposal (RFP), identify the potential best value vendors, and require the vendors to develop a detailed plan for their approach to manage and minimize contract deviations and risk. The final phase was to assist the vendors in implementing their risk management structures, monitor contract deviations, and as needed, make adjustments to the system. As the researcher progressed through execution of the research methodology, certain key indicators identified that the delivery of a furniture services contract is not actually a commodity service. This chapter will highlight the emergence of these indicators as they were observed.

ASU had previously used PIPS and PIRMS on the following types of contracts and projects: a 16-year \$800M Dining Services contract, a 3-year \$0.57M SRC Recreation Equipment Services contract, a 10-year Intercollegiate Athletics (ICA) Multimedia Services contract, a \$77.5M IT Networking contract, and a \$40.97M design and construction project of the Packard Drive Parking Structure (Arizona State University | Performance Based Studies Research Group, 2011; Michael, 2008).

The timeline of events for overall execution of the research methodology was as follows (see Table 3.1):

Table 3.1

Schedule of Research Methodology Execution

No	Schedule Item or Event	Date
PHASE ONE – IDENTIFY CURRENT CONDITIONS		
1	Meeting with senior ASU administration	7/2008
2	Idea Exchange Session and Educational Meeting with service providers	11/10/2008
3	Survey service providers	11/20/2008
4	Survey university buyers	12/3/2008
5	Identify current furniture purchasing volume	2/13/2009
PHASE TWO – VENDOR SELECTION AND CONTRACT AWARD		
6	Issue Request for Proposal (RFP)	3/5/2009
7	Pre-Proposal conference	3/10/2009
8	Deadline for inquiries	3/30/2009
9	Proposals due	4/6/2009
10	Evaluation committee training	4/16/2009
11	Evaluation committee ratings due	4/20/2009
12	Identify shortlist of firms to interview	4/30/2009
13	Interviews	5/14, 5/20/2009
14	Pre-Award Kickoff Meeting	6/12/2009
15	Pre-Award Period	6/13 – 6/24/2009
16	Pre-Award Summary Meeting	6/25/2009
17	Contract Award	6/30/2009
PHASE THREE – RISK MANAGEMENT AND SYSTEM REFINEMENT		
18	Public posting of performance information	7/23/2009
19	Project size analysis	3/8/2010

Phase One: Project Scoping and Current Conditions

The primary objectives of phase one were to:

1. Meet with the industry to gauge interest in, and support for, a best value approach to furniture contract procurement and delivery

2. Identify the current conditions of the existing Tri-University Furniture Services environment

With permission from the University, the researcher coordinated and provided an optional best value information session to approximately 50 individuals from the furniture industry. Dialogue was also encouraged throughout the meeting. Much of the discussion centered on the potential evaluation criteria, but also focused on:

- Financial evaluation of proposals against the State of Arizona furniture contract.
- Level of university participation during the evaluation and post-award phases.
- Resolving differences in motivation between dealers and manufacturers on how to participate in the contract.

The discussion yielded valuable feedback needed to issue a complete and accurate Request for Proposals. Some of the key pieces of information gathered were:

- The post-award purchasing structure needed to include a component that allowed buyers to make match-existing product purchases.
- Not all potential proposers had a State of Arizona furniture contract, and therefore, an evaluation criterion that considered list-price percentage discounts from the State contract could not be used.

- The proposers wanted the ability to indicate if they were proposing on the budget or primary contract.
- ASU needed to provide historical purchasing levels for the different universities, and which contracts these purchases were made on.

The researcher wanted to survey the vendor community to identify their perception of the industry's current conditions, and also verify their support of a best value selection and contract management approach to the Tri-U agreement. The survey also contained an open-ended response question. Please see Chapter 5 for a detailed explanation of the results, and Appendix A for a copy of the survey. This survey was distributed after the information session. The results of the survey indicated that there may be indeed substantial factors to consider and address for this type of contract; this was the researcher's first indication that Tri-U furniture services contract should not awarded with a commodity mentality.

As previously discussed in Chapter 1, Arizona State University approached the researcher for assistance in improving their furniture services contract, and identified several problems. The researcher wanted to gather additional background information from buyers that have previously made furniture purchases. The senior ASU purchasing buyer provided a list of contacts for a survey conducted by the researcher. Please see Appendix B for a copy of this initial buyer survey. The researcher also documented the existing furniture procurement process,

which is summarized in Figure 3.1 below. The existing process for purchasing furniture was as follows:

- The user had some sort of need for furniture and may have chosen to visit the contracted dealer's showroom. The furniture could be for new construction, or it could be to match the existing in-place furniture.
- If the project was new (not match-existing), the buyer would either purchase off of the Primary Award contract, or the Budget Award contract (depending on their available funds and preferences).
- Once a potential furniture option was selected, the dealer provided the buyer with a price quote.
- If the quote was more than \$250,000, the buyer would need to either go out for public bid with the project, or purchase directly from the on-contract dealer. If the value was less than, or equal to \$250,000, the buyer was required to use either the Tri-U Primary or Budget contract.
- Once the user finalized their supplier selection, the furniture team designed the solution, compiled a final quote, and installed it.

The existing process did not have a formal structure that monitored performance of the dealers, or encouraged project preplanning and risk minimization.

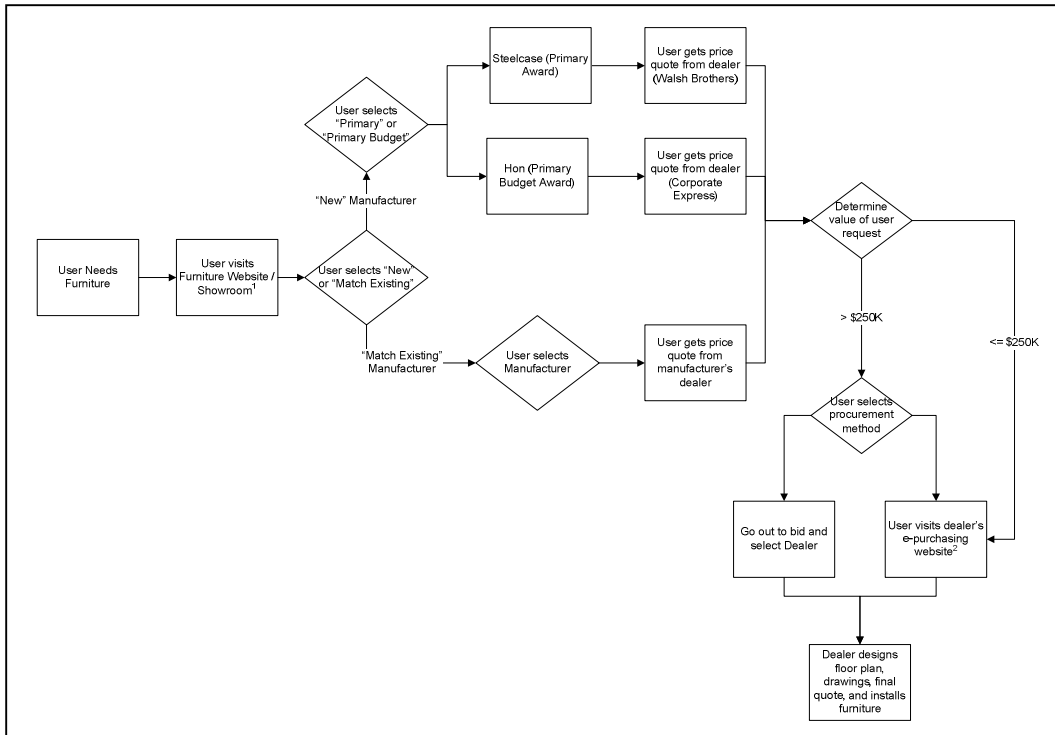


Figure 3.1 Previous Tri-University Furniture Purchasing Process

Phase Two: Vendor Selection and Contract Award

Using the information gathered from Phase One, the researcher and the senior buyer from the ASU's Purchasing Department compiled the Request for Proposals (RFP). This RFP was the University's first furniture RFP that incorporated best value procurement methodologies, and as such, there were several differences from a traditional furnishing services RFP. These differences are demonstrated in a relative fashion by comparing ASU's previous Tri-U Furniture Contract, issued October 2, 2003, to the current best-value Tri-U Furniture Contract, issued March 5, 2009. Please see Table 3.2 below.

Table 3.2

Evaluation Criteria from State of AZ, ASU Traditional, and Best Value RFPs

State of Arizona	ASU Traditional	Best Value
1. Organizational Capacity	1. Level and quality of service	1. Interview
2. Financial Capacity	2. Commitment to relationship, proposed strategic alliance	2. Risk Assessment and Value Added Plan
3. Past Performance		3. Service Proposal
4. Key Personnel	3. Demonstrated capability for e-procurement, ability of the firm to accept electronic methods of ordering	4. Financial Proposal
	4. Quality of Product	5. Past Performance Information
	5. Price and discount structure	
	6. Capability to accept University procurement card for payment	

Some of the State of Arizona and ASU Traditional RFPs' (collectively called "Traditional RFP") evaluation criteria appear similar to the Best Value RFP evaluation criteria. However, their definitions are markedly different. In general, the Traditional RFP does not specifically consider the proposers' ability to manage and minimize risk that would stop them from being successful on a project-by-project basis. The Traditional RFP does not contain requirements that the proposal be 'blind',

meaning that the evaluation committee knows who each proposer is. The impact is that the evaluators may use their bias to rate proposers (Kashiwagi, 2012b).

The absence of risk management in the Traditional RFP was a second indicator to the researcher that the client perceived the delivery of the furnishing services to be a commodity. If a buyer perceived that there is limited risk in a furniture services contract (price or product characteristics are the main selection factors), there is therefore no need consider the proposers' ability manage and minimize risk. The Best Value RFP is different because it was specifically designed to require proposers to identify their approach in managing and minimizing the risk they do not control. In an effort to eliminate any potential evaluator bias, the Best Value approach required that submittal documents were void of any information that could be used to identify who the proposer is.

ASU had the option to award the furniture contract through the State of Arizona's existing furniture service contract, but identified to the researcher that they would receive better pricing if the University issued their own RFP. The researcher collected information from the proposers on the average discount the University was receiving by issuing their own RFP. One of the participating members of the Tri-U Furniture Consortium (Northern Arizona University) also requested that the new RFP require that dealers do not assess trip charges for onsite visits and designer meetings.

Structure of the PIPS RFP and Evaluation Criteria

In addition to the problems identified in Chapter 1, the Universities wanted to simplify the procurement delivery structure of the furniture services contract. Under the previous RFP, a separate award was made every time a customer needed a special type of furniture product that they felt was not offered with the existing awarded vendors. From a procurement standpoint, it became very burdensome to manage so many contracts.

The University wanted to award up to three 'primary' contracts and one 'secondary' (or budget) contract. There would also be match-existing awards on an as-needed basis. The intent of each primary award was to offer standardized, though diverse, product lines to a very large client group. Each purchase (herein referred to as a 'project') would be defined as capital, match-existing, or non-capital. The project's classification determined which risk reporting tools the vendor utilized.

Table 3.3

Project Type Definitions

No	Project Type	Definition
1	Match-existing	Furniture from the existing manufacturer as the in-place furniture
2	Capital	Any project run through the Universities' Capital Programs office
3	Non-capital	All other projects not categorized by Match-existing or Capital

The best value furniture RFP's evaluation criteria was similar to previous PIPS pilot projects that ASU had completed. The PIPS process was developed by Dean Kashiwagi (Kashiwagi, 2012b). The best value furniture RFP contained five evaluation criteria:

- Past Performance Information (PPI)
- Risk Assessment and Value Added Plan (RAVA)
- Service Proposal
- Financial Proposal
- Interview

The RFP did not identify the specific points allocated to each criterion. The PPI, RAVA, Service Proposal and Financial Proposal were submittals. The evaluation committee rated each submittal (except price), the University shortlisted proposers, and conducted interviews with each shortlisted proposer.

Past Performance Information

The Past Performance Information was used to verify that proposers were able to demonstrate some level of previous performance history. The researcher's experience through previous implementations of PIPS projects is that requiring proposers to submit customer surveys discourages some low-performing companies from participating at all. Additionally, the submitted PPI scores from vendors that were awarded a contract would serve as baseline performance metrics.

The RFP required that the Proposers submit PPI information on certain 'critical components.' The Proposers then identified past clients that each component had previously performed work for and solicited surveys from these past clients; please see Appendix C for a copy of the survey that the Proposers sent to their previous clients. The critical components that vendors had to submit PPI information were:

- Manufacturer's Representative
- Dealer's Representative
- Lead Designer
- Lead Installer

During the educational pre-bid meeting on March 10, 2009, the potential proposers were told that they may turn in PPI information on any component that they felt was critical. However, this level of openness created much confusion and generated many questions on what the proposers had to actually turn in to meet the PPI requirements. As a result, the University issued an Addendum (Appendix D) that, amongst other items, clarified that each proposer must turn in PPI information for the aforementioned components. If the proposer had a different management structure, they were to identify this in their proposal.

Two of the 14 proposers turned in the PPI information incorrectly. One proposer modified the customer survey questions, and the other did not submit surveys or the customer responses in a Microsoft Excel file. However, these two proposers were disqualified (for other issues

unrelated to PPI) and therefore, the University did not make a decision on how to proceed with regard to their PPI deficiencies.

Project Capability and Financial Proposal Submittals

Proposers were required to submit a Risk Assessment and Value Added (RAVA) Plan and a Service Plan. As is standard in the PIPS process, each Project Capability submittal must not contain any identifying information, supplier product names, or graphics, and must be submitted on the Microsoft Word templates provided by the University as part of the RFP. The entire RAVA plan had a two page limit, the Transition Milestone Schedule had a one page limit, and the Service Proposal had a two page limit.

The first component of the RAVA provides the Proposer with an opportunity to identify any risks that they feel would impact their ability to successfully execute the contract. The nature of the risks submitted on the Tri-U contract was different from those of a project with a definitive scope and cost. Rather, the risks the proposers identified addressed their ability to meet the needs of the University from a process and operational standpoint. The proposers also provided solutions to minimize each risk they identified.

In the second component of the RAVA, the Proposer identified any Value Added options or ideas that would benefit the University. The Proposer was required to identify the options' impact on schedule, financial proposal, or University satisfaction. The Value Added plan, in

retrospect, should not have been used as part of this particular RFP. The Tri-U RFP was not for a specific project; therefore, addressing cost or schedule for an undetermined amount of volume was very difficult to quantify. Normally, the Value Added approach contains specific information from the proposers about how an option will increase or decrease cost and schedule (Kashiwagi, 2012b). However, it was difficult for the Proposers to provide Value Added options that were substantive enough for the University to evaluate because the RFP did not have project-specific information.

The final and third part of the RAVA was the Transition Milestone Schedule. The Proposers identified the key steps and dates that would occur to transition the Universities to the new contract. While it provided some information to differentiate the Proposers, the Milestone Schedule was difficult to evaluate. In order to identify if a proposer had a 'good' schedule, the evaluators needed to know what assumptions the proposers made in compiling their schedule. Additionally, because of the multiple awards, the vendors would need to work together to collectively transition the University to the new Tri-U contract. The Milestone Schedules obviously could not account for the other awarded proposers' schedules, so the overall value of a Schedule, at the Evaluation Phase, was very low. The researcher proposes that a milestone schedule has tremendous value, but only as a product of a thorough, coordinated preplanning phase that includes all critical participants.

The second submittal was the Service Proposal. In this document, Proposers identified how they would structure the contract so that it meets the needs and expectations of the Universities. Proposers explained what their service and scope would be, and what would happen as a result of their efforts. The Proposers also documented how they knew that their Service Proposal was achievable given the Universities' constraints.

The University examined financial information from the proposers in two separate stages in the Evaluation Phase. The Initial Financial Proposal was required from all submitting vendors, before any shortlisting had occurred, and was not rated by the committee. This initial proposal required vendors to turn in product line information, product percentage discount off of the list price, installation and delivery charge as a percentage of the product cost, and design fee as a percentage of the product cost. This financial submittal requirement was used on the previous Tri-U RFP, and is similar to standard industry practice (National office furniture: RFP and master documentation, 2010).

It is important to note that a process for actually evaluating the financials was not identified in the RFP, nor explained to the proposers at the educational meeting. The researcher regularly queried the University for three months prior to RFP release (February – April 2009) as to how they would evaluate the financials. The researcher initially proposed that the RFP should include a typical design that the vendors would price out. This recommendation was based on feedback received from individual

conversations with dealers, and the Idea Exchange Session (November 2008). However, the University felt that using typicals would not sufficiently provide information to evaluate product cost of the proposers. The University intended to somehow analyze percentage discounts of the manufacturer's list prices and identify the lowest cost supplier.

The researcher viewed the evaluation of product discount percentages as evidence that clients who buy office furniture may be using a commodity mentality. The furniture industry's practice of applying large discounts to list prices may be their response to buyers' expectation of discounted pricing. Recall that, by definition, if a buyer perceives a good to be a commodity, price must then be the main differentiating factor. In fact, this exact sentiment was revealed in a conversation with the researcher in that identified University, "departments will figure [product prices] and go with the least expensive supplier." Therefore, if products from different manufacturers are mainly distinguished by price, owners may use the discount-off-list pricing structure as a means to evaluate competing vendors. Essentially, the impact of implementing this approach is that it tells the vendor community, 'we are going to evaluate your costs based on how much of a discount you offer as compared to your competitors.' The researcher conjectures that owners would only use this approach to financial evaluation if they viewed a certain product, or service, as a commodity. The researcher further suggests that the high

level of product discounting percentages by the industry is catalyzed by buyers' commodity mentality.

Manufacturers offer different list prices for different product lines, which are used based on the type of client, market, or other characteristics of the buyer. Therefore, to make a fair evaluation using the percentage discount approach requires that each manufacturer's list has the exact same breadth of line from which the discounts are based on. However, this would be impossible to verify because each manufacturer has a different offering and approach in delivering goods.

The researcher identified that manufacturers could gain competitive advantage by offering larger percentage discounts, but not actually reducing the end cost for the buyer, and thereby negating any perceived "discount." Manufacturers could achieve this advantage by increasing their base list prices, which would allow them to receive the same revenue and offer larger discounts. Owners may then perceive they are receiving a "good price" because of high discount percentages. However, using percentage values as a basis of financial evaluation from competing firms or products should only be used when the evaluating entity can ensure that the fixed base number (the denominator) represents the exact same product from each proposer.

The University stated they use software which verifies that the manufacturers are using their most recent list prices in their proposal. While this software does ensure that the manufacturer is not using

different lists in responding to the Tri-U RFP, it would be cumbersome to check each proposer's list against the software. Regardless, using the software did not address the fundamental problem of using discounting percentages as fair and accurate evaluation mechanism. In response, the University agreed to use a financial evaluation tool that minimized the use of discounting percentages in the analysis, and instead focused on values that are generally not based on discounting: the Installation and Design Charges. Please see Chapter 4 for a detailed description of the evaluation algorithm used.

While this algorithm was a purer evaluation of the financial information (because it minimized the impact of product discounting percentages), it still did not account for the actual product cost. The evaluation committee requested that any final vendor selection must take into account product cost. The committee made this request after interviews (see the next subsection) were completed in May 2009, and in response, the researcher resurfaced the idea of using typical designs. The University requested a Financial Proposal Clarification from the shortlisted proposers in June 2009 that included typical designs (five months after the researcher had initially proposed this idea).

The Financial Proposal Clarification (Appendix E) included two generic typical designs: an Executive Workstation and a Professional Workstation. For each typical, the proposer was requested to provide solutions in the cost categories of "Lowest", "Mid-range", and "Highest",

along with a brief explanation of how they calculated the costs. If the vendor did not have differentiated cost options, they only had to provide information for the categories that applied to their internal pricing structure.

The researcher also used this opportunity to validate an earlier claim by the University that they receive better discounts than the State of Arizona furniture contract. If a proposer did not have a State contract, they were not required to submit the information. Information collected about the State contracts was used only for research purposes, and was not used in any final vendor selection determination. Figures 3.2 and 3.3 below are samples of the templates the proposers were required to submit.

Tri-University Contract				
Financial Category	Unit	Lowest Cost	Mid-range Cost	Highest Cost
Executive Workstation Cost	\$			
Installation Fee	\$			
Design Fee	\$			
Additional ASU Costs	\$			
Additional UA Costs	\$			
Additional NAU Costs	\$			
Other Costs	\$			
Total Cost	\$			

Explanation for cost calculation here
Explanation for cost calculation here

State Contract				
Financial Category	Unit	Lowest Cost	Mid-range Cost	Highest Cost
Executive Workstation Cost	\$			
Installation Fee	\$			
Design Fee	\$			
Additional ASU Costs	\$			
Additional UA Costs	\$			
Additional NAU Costs	\$			
Other Costs	\$			
Total Cost	\$			

Explanation for cost calculation here
Explanation for cost calculation here

Figure 3.2 Executive Workstation Cost Template

Tri-University Contract				
Financial Category	Unit	Lowest Cost	Mid-range Cost	Highest Cost
Professional Workstation Cost	\$			
Installation Fee	\$			
Design Fee	\$			
Additional ASU Costs	\$			
Additional UA Costs	\$			
Additional NAU Costs	\$			
Other Costs	\$			
Total Cost	\$			

Explanation for cost calculation here
Explanation for cost calculation here

State Contract				
Financial Category	Unit	Lowest Cost	Mid-range Cost	Highest Cost
Professional Workstation Cost	\$			
Installation Fee	\$			
Design Fee	\$			
Additional ASU Costs	\$			
Additional UA Costs	\$			
Additional NAU Costs	\$			
Other Costs	\$			
Total Cost	\$			

Explanation for cost calculation here
Explanation for cost calculation here

Figure 3.3 Professional Workstation Cost Template

One of the reasons that ASU used the PIPS best value process is because it shifts the focus to the proposers' ability to minimize risk to the contract, instead forcing evaluators to consider voluminous amounts of marketing information, specifications, and detailed technical information. The researcher educated the entire process upfront with the committee, and explained that once interviews are completed, the potential best value firms would be invited to the Pre-Award Phase. Once interviews were completed, some of the committee still felt uncomfortable that they would not have a chance to review specifications or product quality information. In fact, when the researcher questioned the committee about how they would use the technical information, one member responded, "I'll know it when I see it. I will just know if the product is good or not." As a result, the University requested that the proposers also submit a

complete specification and pricing guide, and a narrative that identifies how their product lines will meet the University's need for certain furniture categories (Classroom, Training Tables, and others described in Appendix D). The fervor by which the committee requested the detailed information was another indicator to the researcher that the Universities may have a commodity mentality towards the furnishing services contract: the product details or technical information was perceived to be more important than the suppliers' ability to minimize cost and schedule deviations, and increase buyer satisfaction (as a result of minimizing these deviations).

Interviews

After the evaluation committee rated each proposer's submittals (RAVA and Service Proposal), the University shortlisted a total of eight different companies: six for the Primary Award, and five for the Budget Award. The RFP identified that the following individuals would be interviewed from each shortlisted proposer:

- Manufacturer's Representative
- Dealer's Representative
- Lead Designer
- Lead Installer

The University conducted individual interviews, with a standard set of questions for each interviewee (please see Appendix E for the interview questions). If a manufacturer was listed by multiple dealers, they were instructed to identify any differences in their approach or structure in

servicing the Universities based on which dealer they would be partnering with. However, none of the manufacturers in this situation stated that they would change their process based on who the dealer was.

The reader may recall that the contract awarded would allow the dealers to perform work at Arizona's three largest public universities. As such, some vendors may have separate primary individuals for each critical role at each university (for example, a separate Dealer's Representative for each school's primary campus). The Universities wanted to interview each critical role, for each university as applicable. This would have resulted in 54 interviews of eight different companies, requiring a total of approximately 18 hours straight of interviewing.

The Evaluation Committee was adamant about using this approach, but the researcher felt that it incorrectly utilized the interviews in the PIPS process. The interviews are designed to help the owner quickly and efficiently identify the key personnel's ability to identify and minimize risk, and layout out a clear plan which shows that they can successfully execute the service. Interviewing 54 people would result in a tremendous amount of information that evaluators would somehow need to sort out to assign their interview rating. After much cajoling by the researcher, the University agreed to interview two critical individuals from each proposing entity (Manufacturer's Representative and Dealer's Representative), for a total of 16 interviews. The interviewees were instructed they should be

able familiar with each University, and know how the vendor's service structure may be different at each school.

At the conclusion of interviews, and in conjunction with the additional product category information referenced in the previous subsection, the evaluation committee assigned ratings and submitted them to the ASU Purchasing Officer.

Prioritization

The researcher updated the vendor scores with the interview ratings, and the University invited three firms to the Pre-Award Phase. Once the Pre-Award announcement was made, a protest was filed by one of the shortlisted vendors (who was not invited Pre-Award). The protest had two points of contention: the first is that on the date and time of proposal submission (April 6, 2009, 3:00 p.m. Mountain Standard Time), Phoenix, Arizona was actually on Pacific Standard Time. The protestor contended that five proposals were submitted late and should be rejected from further consideration. However, Phoenix is always on Mountain Standard Time, so the University denied the first point of protest. The second point of the protest was that another proposer did not submit a seventh copy of a proposal binder along with a CD of the Past Performance Information. However, the RFP allows the University to, at its sole discretion, ask the proposer for any missing information.

The protestor was obviously denied on both points of contention and the RFP evaluation process continued. It is important to note that the

protest did not levy any complaints about the best value process, financial evaluation method, or any other unique component of the Tri-U RFP.

Pre-Award Phase

The PIPS best value process is unique because it contains a period of time between identification of the potential best value vendor (selection) and contract award for detailed preplanning and risk management (Kashiwagi, 2012b). The time is unique because it allows the vendor unfettered access to the client to resolve, or at least plan for, any issues that could impact their ability to successfully deliver the contract. The application of PIPS to the Tri-University Furniture RFP is unique because there were two awarded contracts (Primary and Budget), with three dealers moving forward (two dealers under the Primary, and one dealer under both the Primary and Budget). In most PIPS projects, however, a single contract is awarded, and only one vendor moves forward into the Pre-Award Phase.

The vendors were required to compile a Pre-Award Document, which consisted of four main components:

- Scope of Services – High level overview of what’s included and what’s excluded from the contract.
- Risk Management Plan (RMP) – List of all potential risks that the dealer does not control, clients concerns, and other vendors’ risks with a plan for how they will minimize the impact of each risk or concern. The dealers developed a RMP that would serve

as their base template for use on future Large Projects (described below).

- Client Action Items List – Schedule of all client actions, who needs to complete them, and when they need to be completed by.
- Risk Reporting Structure – Finalization of Weekly Risk Reports and other performance reporting tools.

The vendor was also required to submit any legal and other contractual documentation.

In the Pre-Award Phase, the owner (attempts) to release control to the expert vendor. The dealer then has the authority to set a plan to accomplish the necessary tasks that results in a contract. If more time is needed to properly plan, the vendor is normally allowed this time. The Tri-University Contract Award had to be made by June 30, 2009; however, there were several delays during the Selection Phase that reduced time allotted for Pre-Award to 11 calendar days, from the planned 46 days. Even for a smaller PIPS project, this was a very short time. This was a significant risk for both the dealers and the Universities.

As discussed in the beginning of this chapter, the vendor community as whole was amicable to using a best value approach in establishing a furniture services contract. This same attitude was displayed from the potential best value dealers, and after the contract was

signed, the dealers continued to work with the researcher to finalize their performance reporting structure.

Phase Three: Risk Management Structure

Prior to releasing the RFP, the researcher had done a significant amount of design and planning of a potential performance reporting structure. As previously discussed, and shown in Figure 3.1, the existing furniture purchasing process was totally void of performance monitoring and risk minimization protocols. To solve this problem, the researcher worked with the best value dealers to develop two new tools, previously unseen in the Tri-U Contract. They are described in Table 3.4.

Table 3.4

Risk Management Tools

No	Risk Management Tool	Description	Submission Frequency
1	Project Record List (PRL)	List of Small Projects that tracks cost, schedule, client contract information, client satisfaction, and any cost or schedule risks	First Friday of each month
2	Weekly Risk Report (WRR)	Used on a single Large Project and tracks detailed project information, cost, schedule, risks, and a Risk Management Plan	Friday of each week

The updated purchasing process is described below, and is shown in Figure 3.4.

- As in the previous RFP, the furniture purchasing process begins with a buyer need. Regardless of the Project Type (see Table

3.3 near the beginning of this chapter), the Total Projected Cost is used to determine the Project Size.

- If the project is a Small Project, the Dealer first adds it to their Project Record List. They will then begin work on the project and document any risks that occur on their PRL. At the conclusion of the project, the Dealer is responsible for collecting a simple survey from the end client.
- If the project is a Large Project, the first, and most important step the Dealer takes is to modify their base RMP template (developed during the Pre-Award Phase), and ensure the client understands the dealer's Risk Management Plan. At the conclusion of this initial phase, the dealer holds a Summary Meeting with the client that recaps their RMP, the project schedule, and action items. As the reader may have noticed, this is in fact a smaller version of the Pre-Award Phase from the PIPS process. After the Summary meeting, the vendor moves forward as they normally would on a Small Project, and document risk and client concerns through the duration of the project. At the project conclusion, the dealer collects a more extensive, one-page client survey.
- All client satisfaction surveys are used in the vendor's Past Performance Information Database.

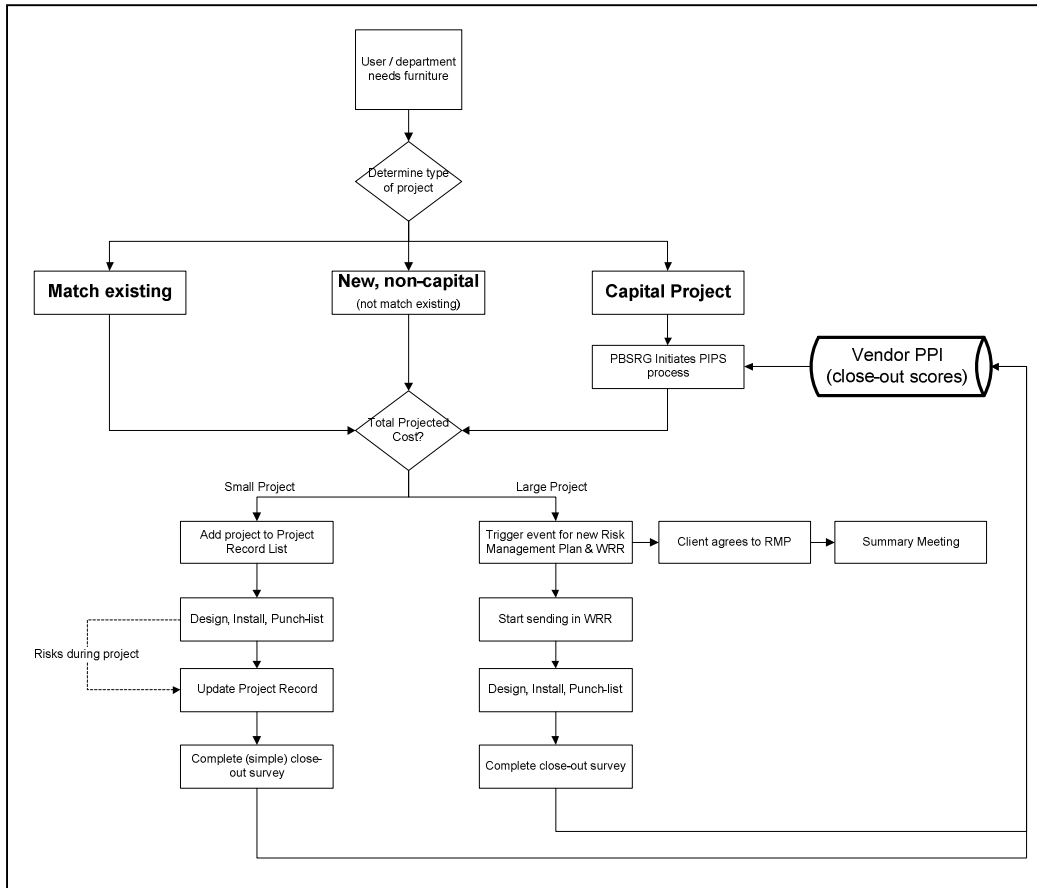


Figure 3.4 Best Value Furniture Services Purchasing Structure

The University identified that Capital Projects should be given more attention in terms of risk management planning, due their political nature, and potential coordination of other construction trades. Buyers from the Capital Programs group may opt to use the PIPS process to select a dealer (from the three Tri-U contracted dealers). If a capital project is procured through PIPS, the dealer must prepare a risk management plan and scope proposal (prior to project award). This applies to both small and large projects. A small PIPS capital project will follow the same steps outlined for regular, small projects above (a Weekly Risk Report is not

required). A large PIPS capital project will follow the same steps outlined above, except that the RMP will have already been created (as part of the requirements in PIPS).

One of the key areas that the contracted dealers wanted to address during the Pre-Award Phase is how buyers may acquire and use designs under the Tri-University Contract. The dealers collectively developed the following criteria to manage project designs:

1. A buyer may request a design and quote from a single vendor and then award to that same vendor.
2. A buyer may request designs and quotes from two, or all, awarded vendors under the Tri-U Contract.
3. A buyer may purchase a design from one vendor, and award the project to a different vendor

A buyer may not obtain a design and then compete that design among all or some of the other vendors without first paying for the design. If a vendor is provided a design developed by a different vendor, the dealer must notify the Purchasing Officer. The Officer will then verify that the design has been appropriately acquired by the end-user.

Best Value Information System

The performance information and risk management structure is shown in Figure 3.5. The structure is a system-wide mechanism that monitors each project, at each University, for each dealer. All project and risk data becomes part of the Best Value Information System, and serves

the University system through the use of risk reporting tools, risk minimization, and performance monitoring and tracking.

All dealer performance information is posted on a publically available website that may be used by clients to identify past performance of a supplier they are considering hiring. All of the contracted dealers are eligible to participate on Capital and new, non-capital projects. However, it is the selection mechanism that varies within each Project Type that determines how a dealer may actually be selected.

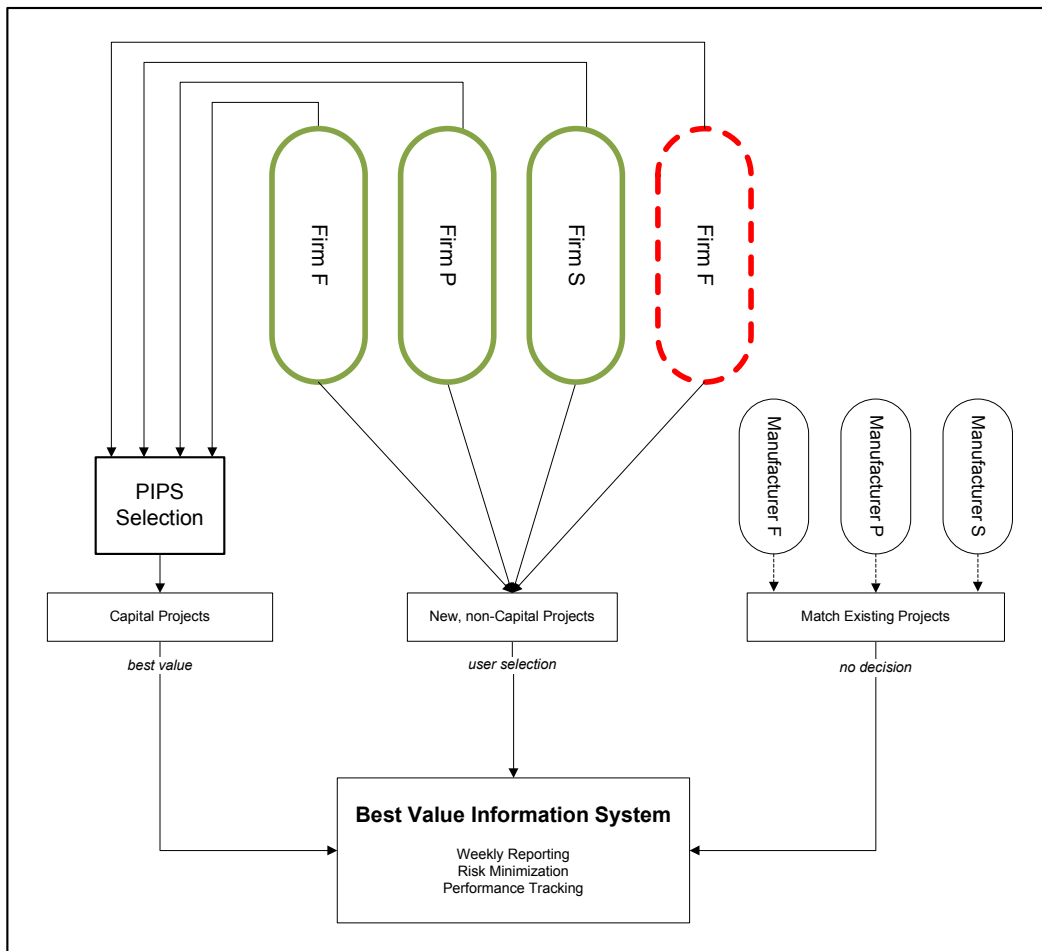


Figure 3.5 Best Value Information System

Summary

The researcher divided this research project into three phases: (i) identification of current conditions at the Universities; (ii) develop and issue a best value request for proposal with the assumption the furniture services contract is not a commodity service; and (iii), implement a performance measurement and risk management structure for the Tri-University furnishing services contract. As the initial 12 month research test progressed, the researcher observed several instances that the client may have a commodity mentality towards the selection and management of the furniture services contract:

- A survey of the vendor community that there are factors to consider besides price
- The traditional furniture RFP lacked evaluation criteria that measured the proposers' ability to identify and manage risk
- The University viewed percentage discounts an appropriate methodology to evaluate cost. Subsequently, the industry's rampant use of percentage discounts may be an indicator that clients, as a whole, perceive delivery of furniture services as a commodity, and treat them as such (Dubbs, 1991).
- The evaluation committee insisted that they have the opportunity to review product technical information before identify the potential best value vendors. Recall that ASU initially approached the researcher to implement a selection

process that identified expert vendors that could minimize risk before it occurs while maintaining high customer satisfaction.

Chapter 4

DATA COLLECTION

Introduction

The researcher collected various data throughout for the compilation of this thesis. The primary sources of data were:

1. Furniture Industry Perceptions of Best Value
2. University Buyer Satisfaction Survey
3. Selection Phase Results
4. Post-award Project Performance Information

In this chapter, the data is presented chronologically with respect to when it was collected in the test.

Furniture Industry Vendor Survey

As discussed in Chapter 3, a survey (see Appendix A) was sent to the furniture vendor community to capture their perception of current conditions, and to also gauge their support for a value-based approach to the selection and management of the Tri-U Furniture contract award. The surveys were distributed and collected via an online program called LimeSurvey. The survey responses were collected anonymously. Questions 2 – 11 requested a 1-10 rating, with 10 representing the “best” or “strong agreement.” The survey also contained an open ended response for general comments or feedback. The results are found in Table 4.1.

Table 4.1

Furniture Industry Perceptions of Best Value

No	Criteria	Unit	O	D	M
1	Average Number of Years in Business	Years	48	31	67
2	A "Best Value" approach will minimize a client's risk	(1-10)	6.5	6.5	6.4
3	A Best Value system is fair to the vendors	(1-10)	6.7	6.9	6.4
4	A Best Value system favors high performance vendors	(1-10)	7.3	7.3	7.3
5	Industry has performance problems in terms of customer satisfaction	(1-10)	5.4	5.9	4.9
6	Vendors have the capability to implement Best Value practices	(1-10)	8.2	8.6	7.8
7	Performance information should be used much more	(1-10)	7.1	7.8	6.3
8	Traditional award processes do not motivate higher performance	(1-10)	5.3	4.6	6.1
9	Industry is in need of a better contracting (vendor selection) procedure	(1-10)	7.0	6.8	7.2
10	Using best value procurement will improve the quality of vendors	(1-10)	6.0	5.5	6.4
11	Overall performance of the furniture services industry	(1-10)	6.6	5.8	7.5
12	Total number of surveys completed	#	25	13	12

Note: O = Overall score, D = Dealer, M = Manufacturer

The survey was distributed after an educational session on best value. The vendors were permitted to send the survey to individuals that did not attend the meeting; however, only 15 percent of the respondents did not attend the session. The first group of questions ("Background Information") collected some basic information on the respondents, and was used to identify if there were any trends in answers based on the respondents' backgrounds (which there was not). The next group of questions ("Best Value Perceptions") was used to estimate overall support of the new approach from the vendor community. If the vendors initially

showed high support for a best value system, but later objected, the survey results could be used by the University to support justification of their decision to use best value on the selection. Finally, the third group of questions (“Furniture Services Industry Perceptions”) was used for the collection of information on the perceived level of commoditization of the furniture industry.

University Buyer Satisfaction Survey

Approximately three weeks after distribution of the vendor survey, the researcher surveyed furniture buyers from each of the three Universities. The buyer contact information was provided by the main purchasing agent at each University. The survey responses were collected through a website. The survey form can be found in Appendix B. While the researcher had the respondents’ background information, the results were not correlated to a specific person; in essence, the buyer survey was also anonymous. The results from the buyer survey are found in Table 4.2 below.

Lines 1 – 14 are simple averages of the responses. Questions 1 and 2 from the client survey were asked to identify the current level of performance, and were also used to compare performance under the best value Tri-U furniture contract. Questions 3 – 11 are the same questions from the Past Performance Information surveys used in the selection phase, and collectively identify the overall performance of the vendor. Finally, Questions 12 – 14 provide information on overall past project

performance (since the Universities did not have a system in place to track this type of information). Questions 1 through 10 were 1-10 responses, with 10 representing the best (or strongly agree). The respondents were requested to estimate the percentage of projects applicable as defined questions 11 – 14.

Table 4.2

University Buyer Satisfaction Survey

No	Criteria	Unit	O	ASU	NAU	UA
1	Overall satisfaction with the furniture delivery service	(1-10)	7.2	7.7	6.1	7.8
2	Effort spent managing the dealer	(1-10)	5.0	5.2	5.7	4.3
3	Ability to manage the project cost (minimize change orders)	(1-10)	7.0	7.3	5.4	8.1
4	Ability to maintain project schedule (complete on-time or early)	(1-10)	6.9	6.7	6.0	7.8
5	Quality of workmanship	(1-10)	7.7	7.7	7.4	8.0
6	Professionalism and ability to manage	(1-10)	6.8	7.3	6.2	6.7
7	Close out process	(1-10)	6.9	7.1	6.7	7.0
8	Communication, explanation of risk, and documentation	(1-10)	6.7	6.7	6.6	6.7
9	Ability to follow the users' rules, regulations, and requirements	(1-10)	7.0	7.7	6.4	7.0
10	Overall customer satisfaction and comfort level in hiring again	(1-10)	7.1	7.4	6.1	7.8
11	Percent customers satisfied with dealer	%	77%	89%	50%	91%
12	Percent of projects completed on-time	%	76%	73%	63%	91%
13	Percent of the final product(s) matched your initial expectations	%	88%	94%	80%	91%
14	Percent of products were damaged upon delivery	%	9%	9%	14%	5%
15	Total number of different dealers surveyed	#	3	3	3	1
16	Total number of different customers surveyed	#	29	8	10	11
17	Total number of different surveys	#	31	10	10	11

Note: O = Overall rating

Table 4.3 below presents a summary comparison of the initial buyer survey, and the best value survey ratings.

Table 4.3

Summary of University Performance Differential

No	Performance Criterion	Unit	Overall	ASU	NAU	UA
1	Baseline Overall Performance	1-10	7.0	7.2	6.4	7.4
2	Best Value Overall Performance	1-10	9.3	9.3	9.2	9.2
3	Baseline Satisfaction	%	77%	89%	50%	91%
4	Best Value Satisfaction	%	99%	100%	100%	98%

Selection Phase Results

Data for the Selection Phase came from two sources: the initial evaluation of all responsive proposers, and the final evaluation model. The initial evaluation model consists of three primary components. One component is a financial analysis that consists of the average Install and Design Fees for each proposer. The Universities used the following algorithm to calculate the Fees:

1. Assume a total product base cost of \$50,000. This value was arbitrarily chosen by the Universities because it approximately represented the average size of a Capital project.
2. Determine if the proposer listed their “product discount”, “installation”, and “design” values as percentages of the “list” or “net” product base cost.

- a. If the values are based on “list” cost, the Universities would:
- i. Multiply the “installation percentage” by the “undiscounted product base cost” (which was always \$50,000). The resultant value is the “installation fee” (expressed as dollars).
 - ii. Multiply the “design percentage” by the “undiscounted product base cost” (which, again, was always \$50,000). This value is the “design fee” (expressed as dollars).
- b. However, if the values are based on “net” cost, the University would:
- i. Calculate the “discounted product base cost” by multiplying the “total product base cost” (\$50,000) by the “discount off list percentage”, and subtract this value from the “total product base cost”. This result is the “discounted product base cost.”
 - ii. Multiply the “installation percentage” by the “discounted product base cost.” This is the “installation fee” (in dollars).
 - iii. Multiply the “design percentage” by the “discounted product base cost”. This is the “design fee” (in dollars).

3. Sum the “installation fee” and the “design fee.” This value is the “Total Installation and Design Fee.”
4. If a proposer offered multiple product categories, steps one through three were repeated for each product category. The final number used in the evaluation model would be the average of the “Total Installation and Design Costs” for each product category (or, just the single “Total Installation and Design Costs” figure if the proposer did not offer multiple product categories.)

The University summed the “installation fee” and “design fee” for the evaluation model because one fee did not hold more importance than the other. If one of the values did have more importance, the University could have used each cost independently in the model, and used different weights that reflected the Universities’ preferences. The detailed initial financial analyses are found in Tables 4.4 and 4.5.

For example, consider the total installation and design fees for Firm F from the Primary Award group (\$1,750). Assuming a total project cost of \$50,000, the Installation Fee would be $\$50,000 * 2.7 \text{ percent} = \$1,350$. Likewise, the Design Fee would be $\$50,000 * 0.8 \text{ percent} = \400 . Thus, summing these two fees, $\$1,350 + \$400 = \$1,750$. If a firm listed their cost as Net, the University first calculated the discounted product cost, and set it as the base (instead of \$50,000). So, for example, Firm G’s, from the budget award, Total Fee is $\$50,000 - (\$50,000 * 59.7 \text{ percent}) = \$20,150$ and then $(\$20,150 * 15.0 \text{ percent}) + (\$20,150 * 0.0 \text{ percent}) =$

\$3,023. Note that some of the manufacturers listed multiple product lines, so the values in Tables 4.5 and 4.5 are averages, and thus, the Total Fees may not always equal the calculated values of the Average Design and Installation Fee percentages listed. The results are shown on line 1 the initial evaluation models (Tables 4.7 and 4.8).

Table 4.4

Initial Financial Evaluation – Primary Award

Proposer	Price List Method	Average Product Discount %	Average Installation Fee %	Average Design Fee %	Total Fees¹
A	List	61.0%	3.0%	2.0%	\$2,500
B	List	59.4%	4.5%	1.8%	\$3,125
F	List	62.5%	2.7%	0.8%	\$1,750
H	Net	64.4%	7.3%	1.0%	\$1,432
J	List	59.8%	5.0%	2.0%	\$3,500
P	List	64.1%	5.0%	2.0%	\$3,500
S	List	70.5%	5.0%	3.5%	\$4,250
Overall	N/A	63.3%	4.6%	1.4%	\$2,239

¹Sum of the average of all installation and design fees.

Table 4.5

Initial Financial Evaluation – Budget Award

Proposer	Price List Method	Average Product Discount %	Average Installation Fee %	Average Design Fee %	Total Fees¹
A	List	47.0%	0.0%	0.0%	\$0
E	List	55.0%	5.0%	0.0%	\$2,500
F	List	62.0%	2.5%	1.0%	\$1,750
G	Net	59.7%	15.0%	0.0%	\$3,023
J	List	59.7%	5.0%	2.0%	\$3,500
K	Net	55.7%	10.0%	0.0%	\$2,217
L	Net	62.0%	9.0%	0.0%	\$1,710
N	List	64.0%	4.5%	1.8%	\$3,125
R	List	59.0%	5.0%	0.0%	\$2,500
Overall	N/A	56.9%	6.1%	0.5%	\$2,251

¹*Sum of the average of all installation and design fees.*

A second component of the initial evaluation was the RAVA Plan and Service Proposal ratings (please see Chapter 3 for a description of these submittals). The researcher compiled a brief online educational video for the committee that covered the PIPS best value system, and the rating process (see Appendix F for a copy of the slides that were presented). All committee activities which required a rating were rated on a scale of 1-10, with 10 being the best and 1 being the worst. The evaluators were advised that their ratings should be relative to the other Proposers' submittals (not a ranking approach). As such, any Proposer that submitted for both awards was to be considered in relation to the other proposers within their respective award group. For the RAVA Plan, the committee was instructed to rate the Risk Assessment, Value Added, and Transition Milestone Plan (see Appendix F for a copy of the

evaluation form). The Service Proposal contained only a rating for the service proposal itself (see Appendix H for a copy of the evaluation form). The average committee evaluation scores are shown in lines 2 and 3 of Tables 4.7 and 4.8.

The researcher categorized all of the proposers' risks, which are shown in Table 4.6. These results are also in agreement with Goldsby and Rao's (2009) classification of risks (see Chapter 2), in that the actual aesthetic characteristics of a specific product is not a significant supply chain risk.

Table 4.6

Summary of All Proposers' Risk Categories

No	Risk Category	Percentage of Risks
1	Supply Chain	21.9%
2	Other Trades	19.2%
3	Site Access	12.3%
4	Unforeseen	12.3%
5	Purchasing / Budgets	11.0%
6	Other	6.8%
7	Actual Field Conditions	6.8%
8	Customer Satisfaction	6.8%
9	Product Change	2.7%

The third and final component of the initial evaluation model was the PPI scores. The following components were required to submit PPI: Manufacturer's Representative, Dealer's Representative, Lead Designer, and the Lead Installer. The PPI scores were averages of the customer survey submitted by the Proposers. The scores, shown on lines 4 – 7 in Tables 4.7 and 4.8, are an average of each question asked on the survey

from all surveys received. The evaluation model also considered the number of surveys that were submitted, which are shown on lines 8 – 11.

Please refer to Appendix C to review a copy of the PPI survey.

Table 4.7

Primary Award Evaluation, Raw Data

No	Criteria	Weight	Unit	A	B	F	H	J	P	S
1	Install and Design Fees	15	\$	\$2,500	\$3,125	\$1,750	\$1,432	\$3,500	\$3,500	\$4,250
2	RAVA Plan	25	1-10	6.0	6.0	7.1	6.6	6.3	6.5	7.6
3	Service Proposal	15	1-10	6.1	6.3	7.8	6.4	7.6	7.1	7.9
4	PPI – LI	2.25	1-10	10.0	9.7	9.8	9.9	5.0	10.0	10.0
5	PPI – LD	2.25	1-10	10.0	9.7	9.7	9.5	5.0	10.0	10.0
6	PPI – D	2.25	1-10	10.0	9.5	9.7	9.9	9.7	10.0	10.0
7	PPI – M	2.25	1-10	9.9	9.9	9.5	9.4	9.8	10.0	10.0
8	PPI - # LI	0.25	#	4.0	6.0	7.0	8.0	1.0	10.0	10.0
9	PPI - # LD	0.25	#	4.0	10.0	9.0	10.0	1.0	10.0	10.0
10	PPI - # D	0.25	#	10.0	10.0	10.0	10.0	10.0	10.0	10.0
11	PPI - # M	0.25	#	7.0	10.0	10.0	4.0	10.0	5.0	10.0
12	Financial Clarification	15	\$	\$7,191	\$7,670	\$5,879	\$6,756	N/A	\$7,945	\$6,519
13	Interview – D	17.5	1-10	5.2	6.9	8.6	4.1	N/A	6.8	8.0
14	Interview – M	17.5	1-10	5.1	6.0	8.5	4.8	N/A	6.4	7.0

Note: LI = Lead Installer, LD = Lead Designer, D = Dealer's Representative, and M = Manufacturer's Representative

Table 4.8

Budget Award Evaluation, Raw Data

No	Criteria	Weight	Unit	A	B	E	F	G	J	K	L	R
1	Install and Design Fees	15	\$	\$0	\$3,125	\$2,500	\$1,750	\$3,022	\$3,500	\$2,217	\$1,710	\$2,500
2	RAVA Plan	25	1-10	6.0	6.0	5.6	7.1	5.7	6.3	5.9	6.1	6.6
3	Service Proposal	15	1-10	6.1	6.3	6.0	7.8	5.3	7.6	7.3	7.3	7.3
4	PPI – LI	2.25	1-10	10.0	9.7	9.7	9.8	5.0	5.0	10.0	9.5	10.0
5	PPI – LD	2.25	1-10	10.0	9.7	9.9	9.7	5.0	5.0	10.0	9.7	10.0
6	PPI – D	2.25	1-10	10.0	9.5	9.9	9.7	9.8	9.7	10.0	9.7	10.0
7	PPI – M	2.25	1-10	9.9	9.9	9.9	9.5	5.0	9.8	10.0	9.8	10.0
8	PPI - # LI	0.25	#	4.0	6.0	2.0	7.0	1.0	1.0	10.0	7.0	10.0
9	PPI - # LD	0.25	#	4.0	10.0	6.0	9.0	1.0	1.0	10.0	7.0	10.0
10	PPI - # D	0.25	#	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0	10.0
11	PPI - # M	0.25	#	7.0	10.0	10.0	10.0	1.0	10.0	8.0	6.0	10.0
12	Financial Clarification	15	\$	\$5,470	N/A	N/A	\$5,997	N/A	N/A	\$5,856	\$7,274	\$6,519
13	Interview–D	17.5	1-10	4.5	N/A	N/A	8.6	N/A	N/A	7.0	4.9	7.5
14	Interview–M	17.5	1-10	4.9	N/A	N/A	8.9	N/A	N/A	6.6	5.1	5.6

Note: LI = Lead Installer, LD = Lead Designer, D = Dealer's Representative, and M = Manufacturer's Representative

Once all of the information was compiled, the University shortlisted six proposers from the Primary Award group, and five proposers from the Budget Award group. Once the shortlisting was complete, the selection process entered the second phase, which consisted of a more detailed financial evaluation and interviews. Recall that the initial financial evaluation did not account for the actual cost of product, nor was the financial evaluation process clearly explained to the proposers prior to submission. The University issued a clarification that requested information on cost for product cost (see Chapter 3 and Appendix D). The vendors were requested to submit pricing for an Executive Workstation and Professional Workstation based on typical designs provided in the clarification document. Each proposer was requested to submit costs for low-, mid-, and high-end furniture solutions (as applicable). Each proposer provided a low-end furniture system, however not all Proposers provided information for mid-, and high-end systems. Therefore, to have a comparable baseline cost, the University only considered the low-end systems in the financial evaluation. The proposers' also submitted information on their systems' cost differential from the State of Arizona furniture contract if they had one. The costs for the low-end proposals are shown in Tables 4.9 and 4.10.

Table 4.9

Financial Proposal Clarification (Low-End) – Primary Award

Proposer	Executive Workstation	Professional Workstation	Total Cost	% Difference from State Contract¹
A	\$4,195.96	\$2,994.89	\$7,190.85	-1.0%
B	\$4,400.11	\$3,270.18	\$7,670.29	N/A
F	\$3,453.08	\$2,426.35	\$5,879.43	-16.2%
H	\$3,989.99	\$2,765.63	\$6,755.62	N/A
P	\$4,749.68	\$3,195.57	\$7,945.25	-8.4%
S	\$3,820.79	\$2,697.89	\$6,518.68	-20.2%
Average	\$4,101.60	\$2,891.75	\$6,993.35	-11.5%

¹Average of Executive and Professional Workstation % differential

Table 4.10

Financial Proposal Clarification (Low-End) – Budget Award

Proposer	Executive Workstation	Professional Workstation	Total Cost	% Difference from State Contract¹
A	\$3,237.00	\$2,233.00	\$5,470.00	N/A
F	\$3,570.16	\$2,426.35	\$5,996.51	-15.4%
K	\$3,418.97	\$2,436.89	\$5,855.86	-1.0%
L	\$4,086.50	\$3,187.27	\$7,273.77	N/A
R	\$3,820.79	\$2,697.89	\$6,518.68	-20.2%
Average	\$3,626.68	\$2,596.28	\$6,222.96	-12.2%

¹Average of Executive and Professional Workstation % differential

The second part of the final evaluation phase was interviews. The University interviewed the Manufacturer's Representative and the Dealer's Representative for each proposer. Please see Appendix F for a list of the interview questions. In the situation where a Manufacturer's Representative was used by multiple Dealers, the interviewees were asked if any of their responses changed based on which dealership they were partnering with. The interviews required approximately two full days

of time from the evaluation committee. The committee was instructed to rate the interviews in the same manner as the RAVA Plan and Service Proposal: on a 1-10 scale and relative to the other interviewees. The average interview ratings are shown on lines 13 – 14 in Tables 4.7 and 4.8.

In short, Firm F performed particularly well as compared to the other proposers. Tables 4.11 and 4.12 below present different perspectives of the raw data to highlight the differentials of Firm F. These items are further discussed in Chapter 5.

Table 4.11

Primary Award Evaluation, Comparisons of Raw Data

No	Criteria	Firm F	Awarded Dealers (no Firm F)	All Proposers (no Firm F)
1	Install and Design Fees	\$1,750	\$3,875	\$3,051
2	RAVA Plan	7.1	7.1	6.5
3	Service Proposal	7.8	7.5	6.9
4	PPI – LI	9.8	10.0	9.1
5	PPI – LD	9.7	10.0	9.0
6	PPI – D	9.7	10.0	9.8
7	PPI – M	9.5	10.0	9.8
8	PPI - # LI	7.0	10.0	6.5
9	PPI - # LD	9.0	10.0	7.5
10	PPI - # D	10.0	10.0	10.0
11	PPI - # M	10.0	7.5	7.7
12	Financial Clarification	\$5,879	\$7,232	\$7,216
13	Interview – D	8.6	7.4	6.2
14	Interview – M	8.5	6.7	5.9

Note: LI = Lead Installer, LD = Lead Designer, D = Dealer’s Representative, and M = Manufacturer’s Representative

Table 4.12

Budget Award Evaluation, Comparisons of Raw Data

No	Criteria	Firm F	All Proposers (no Firm F)
1	Install and Design Fees	\$1,750	\$2,322
2	RAVA Plan	7.11	6.02
3	Service Proposal	7.78	6.67
4	PPI – LI	9.85	8.60
5	PPI – LD	9.74	8.67
6	PPI – D	9.73	9.82
7	PPI – M	9.48	9.28
8	PPI - # LI	7	5
9	PPI - # LD	9	6
10	PPI - # D	10	10
11	PPI - # M	10	8
12	Financial Clarification	\$5,997	\$6,280
13	Interview – D	8.56	5.99
14	Interview – M	8.94	5.55

Note: LI = Lead Installer, LD = Lead Designer, D = Dealer's Representative, and M = Manufacturer's Representative

After the interviews were completed, the University invited Firms F, P, and S to the Primary Pre-Award Phase, and Firm F to the Budget Pre-Award Phase. After successful completion of the Pre-Award Phase, these three firms were awarded contracts.

Project Performance Information

All post-award performance information comes from either the Project Record Lists (PRL) or the Weekly Risk Reports (WRR) (see Table 3.4 in Chapter 3 for a detailed description). These tools collect a large amount of project data, including award information, customer satisfaction, cost deviation, and schedule deviation; in fact one individual PRL report provides 51 different data points, and the WRR reports contains 120

different data points. Note that all data from the Post-Award is current as of January 2012. All cost and schedule deviations (or “risks”) are attributed to one of four major categories:

1. Client – the entity directly purchasing the furniture (i.e., the department) or the some other group part of the entity’s organization (i.e., university purchasing department)
2. Designer – the architect / engineering firm. Designers are usually only present on large capital construction projects. This is different from the normal design services that a dealer would provide (deviations in this area would be under the ‘Dealer’ category).
3. Dealer – the contracted Tri-U dealer or any of their supporting vendors and manufacturers.
4. Unforeseen – site or project events that are reasonably expected to not be identified prior to starting the project (i.e., catastrophic event).

Table 4.13 presents the total delivery volume by dealer. Line one is the total number of completed projects by the dealer and line two is the sum of the final project cost for these projects (expressed in millions of dollars). Line three is the total cost of all completed projects (line two) divided by the total number of projects completed (line one).

Table 4.13

Summary of Delivery Volume by Dealer

No	Criteria	Firm F	Firm P	Firm S	Overall
1	Total Number of Delivered Projects	684	76	355	1,115
2	Total Awarded Cost (\$M)	\$16.4	\$1.0	\$1.8	\$19.3
3	Average Awarded Cost	\$24,048	\$13,336	\$5,201	\$17,310

Table 4.14 is a summary of the schedule deviations on all completed projects, both large and small. The schedule changes are calculated by summing all of a particular schedule category's deviations (increases or decreases) and dividing by the total sum of the duration for all projects. The overall deviation rate is calculated by summing all of the schedule deviations and dividing by the total duration for all projects. For example, a 10 percent schedule deviation (or delay) on a 100 day project indicates that the project was delayed by 10 days (10 days delayed divided by 100 days in original project duration = 10 percent).

Table 4.14

Project Schedule Deviation Summary

Cost Deviation					
No	Source	Firm F	Firm P	Firm S	Overall
1	Client	3.4%	0.0%	7.1%	3.4%
2	Designer	0.0%	0.0%	0.0%	0.0%
3	Dealer	1.6%	3.5%	24.8%	5.0%
4	Unforeseen	0.0%	1.9%	0.0%	0.3%
5	Overall	4.9%	5.5%	31.9%	8.6%

Table 4.15 is a summary of the cost deviations on all completed projects, both large and small. Similar to the schedule deviation calculations, the values are calculated by summing all of a particular cost category's deviations (increases or decreases) and dividing by the total sum of the awarded cost for all projects. The overall deviation rate is calculated by summing all of the cost deviations and dividing by the total awarded cost for all projects.

Table 4.15

Project Cost Deviation Summary

Cost Deviation					
No	Source	Firm F	Firm P	Firm S	Overall
1	Client	0.068%	0.018%	-0.074%	0.058%
2	Designer	0.068%	0.000%	-0.080%	0.057%
3	Dealer	0.000%	0.000%	0.000%	0.000%
4	Unforeseen	0.000%	0.018%	0.006%	0.001%
5	Overall	0.000%	0.000%	0.000%	0.000%

Chapter 5

DATA ANALYSIS

Introduction

This chapter presents a synopsis of how the data was analyzed.

The primary sources of data were:

5. Furniture Industry Perceptions of Best Value
6. University Buyer Satisfaction Survey
7. Selection Phase Results
8. Project Performance Information

Furniture Industry Perceptions of Best Value

The overall average of responses to the furniture industry survey was 6.6 (out of 10). The responses to Question 6 (“Vendors have the capability to implement Best Value practices”) received the highest level of agreement at 8.2. Questions 5 (“Industry has performance problems in terms of customer satisfaction”) and 8 (“Traditional award processes do not motivate higher performance”) received the least amount of agreement at 5.4 and 5.3, respectively. These responses indicated that the industry may have perceived that the clients’ current procurement processes were acceptable (Question 5 and 8), but the vendor community also identified that it had the ability to succeed in a best value environment (Question 6). However, the overall performance of the furniture industry (Question 11) was rated at 6.6. The mean, \bar{y} , of the overall averages per question was 6.608, and the standard deviation, σ , of the overall averages per question

was 0.874. 1σ below \bar{y} was 5.734, and 1σ above \bar{y} was 7.482. Note that these same questions (5, 6, and 8) were outside of this 1σ range.

Furniture Industry Perceptions of Best Value Two Sample Pooled T-test

The researcher conducted a t-test of the Furniture Industry survey to identify if there was a significant difference in responses between dealers and manufacturers. Table 5.1 presents the two-tailed P-value for each question. The alpha benchmark $\alpha = 0.05$, d.f. = 23, t-Critical one-tail = 1.714, and, t-Critical two-tail = 2.069.

$$H_0: \mu_1 - \mu_2 = 0; H_1: \mu_1 - \mu_2 \neq 0$$

μ_1 = dealer's responses (per question)

μ_2 = manufacturer's responses (per question)

The p-value for each question was above the $\alpha = 0.05$ value, with the exception of question 11. Therefore, the null hypothesis could not be confidently rejected for questions 2 – 10. However, the null hypothesis was rejected for question 11: the individual dealer and manufacturer perceptions of overall industry performance were significantly different.

Table 5.1

T-Test of Furniture Industry Perceptions of Best Value

No	Criteria	Pooled Variance	t-Stat	P(T<=t) one-tail	P(T<=t) two-tail
1	A "Best Value" approach will minimize a client's risk	5.832	0.126	0.450	0.901
2	A Best Value system is fair to the vendors	8.602	0.431	0.335	0.670
3	A Best Value system favors high performance vendors	7.975	-0.023	0.491	0.982
4	Industry has performance problems in terms of customer satisfaction	5.732	1.050	0.152	0.305
5	Vendors have the capability to implement Best Value practices	4.406	1.030	0.157	0.314
6	Performance information should be used much more	4.825	1.633	0.058	0.116
7	Traditional award processes do not motivate higher performance	6.521	-1.436	0.082	0.164
8	Industry is in need of a better contracting (vendor selection) procedure	7.624	-0.290	0.387	0.774
9	Using best value procurement will improve the quality of vendors	7.919	-0.780	0.222	0.444
10	Overall performance of the furniture services industry	3.970	-2.170	0.020	0.041

Note: O = Overall score, D = Dealer, M = Manufacturer

A compilation of selected vendor survey comments, shown in Table 5.2, offered some insight to explain the differing perception levels of industry performance:

- As Kashiwagi (2012a) identified, the Owner has proliferated the use of a low-price award process to acquire services.

Consequently, the value of true expertise has been minimized.

The researcher has previously identified this behavior as a “commodity mentality.”

- The dealer was the primary contact for a vast majority of furniture projects within the Tri-University system. As such, they were the first-line interaction of the “low-price” mentality from owners. In response, the dealers commoditized their product (and services). The focus on price therefore reduced the expertise dealers can offer and decreases overall industry performance (from the perspective of a dealer) (Kashiwagi, 2012a).
- The dealers were the distributors of the manufacturer’s product and may have limited the amount of interfacing between the manufacturer and end-client. The researcher proposed that this abstraction from field interaction may have altered the manufacturer’s perspective of industry performance. Alternatively, manufacturers may have understood “industry performance” to mean something different from the dealer’s understanding of the term.

In summary, a majority of industry survey responses, on an individual question-level basis, did not show any significant differential between dealers and manufacturers. The reader may then conclude that the overall averages (Table 4.1) are generally representative of the sample as a whole.

Table 5.2

Selected Furniture Industry Survey Vendor Comments

Dealer Comments	Manufacturer Comments
<ul style="list-style-type: none"> • “They [manufacturers] will only give special pricing to their favorite dealers based on current contracts.” • “The relationship based process is not the issue with the furniture industry, the issue is the continued desire of many customers to keep pushing the cost lower and not valuing the services...” • “...all long term agreements need to have relationships to be sustainable.” • “...service was not delivered - we have turned office furniture into a commodity...” • “...there are dealers in town who will do or say anything to make a deal...” 	<ul style="list-style-type: none"> • “...overall principle of letting the experts lead is refreshing.” • “Dealers sometime block communication from the school” • “...allow the manufacturer to communicate directly with the school” • “The school must find a way to determine the real value the dealer provides.” • “Manufacturers do not have the capability to implement best value practices because they do not control the design, planning, ordering, install and evaluation processes.” • “...too much importance allocated to the dealer "process" and not the merits of individual maunufacturers [sic] products.”

University Buyer Satisfaction Survey

There are several points to note in the average response ratings to the Initial Buyer Survey (found in Chapter 4, Table 4.2). First, the performance-related responses (Questions 1 – 14) for NAU were lower for every question. The NAU satisfaction with the dealer was 40 percent lower than the combined ASU and UA average satisfaction rate; NAU’s percent of projects completed on-time was reported to be 19 percent less than the combined ASU and UA average; and 12.5 percent fewer of NAU’s final furniture products matched the initial expectations, as compared to the ASU and UA combined average. The overall average of

the performance criteria (Questions 3 – 10) was 7.2, 6.4, and 7.4 for ASU, NAU, and UA, respectively.

University Buyer Satisfaction Survey: ANOVA and t-test (Initial Survey)

The averages indicated that there may be differing levels of performance at each institution. The researcher then conducted a single-factor ANOVA (analysis of variance) of the performance-related responses (Questions 3 – 10 from the initial buyer survey) for ASU, NAU, and UA.

The $\alpha = 0.05$. The results are shown below in Table 5.3.

$$H_0: \mu_1 - \mu_2 - \mu_3 = 0; H_1: \mu_1 - \mu_2 - \mu_3 \neq 0$$

$$\mu_1 = \text{ASU's responses (all questions)}$$

$$\mu_2 = \text{NAU's responses (all questions)}$$

$$\mu_3 = \text{UA's responses (all questions)}$$

The null hypothesis was rejected, because the F-value (4.359) was greater than the F-critical value (3.035). This indicated that, from an overall perspective, there were significant levels of variation for overall performance at each University.

Table 5.3

ANOVA ASU, NAU, UA Initial Buyer Survey Responses

	Sum of Squares	df	Mean Square	F	F-critical
Between Groups	50.045	2	25.022	4.359	3.035
Within Groups	1320.152	230	5.740		
Total	1370.197	232			

The researcher conducted a follow-up t-test, by combining the ASU and UA performance responses, and comparing to the NAU responses.

The results are shown in Table 5.4. The $\alpha = 0.05$.

$$H_0: \mu_1 - \mu_2 = 0; H_1: \mu_1 - \mu_2 \neq 0$$

μ_1 = ASU's and UA's combined responses (all questions)

μ_2 = NAU's responses (all questions)

The null hypothesis was rejected, because the two-tail p-value (0.0040) was less than α benchmark of 0.05. The implication was that the level of overall performance at NAU was significantly different (lower) than the average ASU and UA performance level.

Table 5.4

T-test of ASU,UA and NAU, Initial Buyer Survey

	ASU,UA	NAU
Mean	7.329	6.353
Variance	3.866	9.661
Observations	158	75
Pooled Variance	5.722	
Hypothesized Mean Difference	0	
df	231	
t Stat	2.909	
P(T<=t) one-tail	0.002	
t Critical one-tail	1.651	
P(T<=t) two-tail	0.004	
t Critical two-tail	1.970	

NAU is a relatively remote campus, which serves a student population that is 62 percent smaller than the average ASU and UA population (see Table 1.1 in Chapter 1). The NAU student population is 39 percent the size of its host city (Flagstaff), compared to the 7 percent that ASU (Phoenix) and UA (Tucson) comprise. In other words, the potential for additional work outside of the University system is much more limited in a remote location such as Flagstaff. Therefore, the furniture industry's presence, and capabilities, may be limited in that region.

University Buyer Satisfaction Survey: ANOVA and t-test (Best Value)

The researcher then completed an ANOVA and a t-test using the same approach as the initial buyer survey analyses. The results are shown in Table 5.5 below. The $\alpha = 0.05$.

$$H_0: \mu_1 - \mu_2 - \mu_3 = 0; H_1: \mu_1 - \mu_2 - \mu_3 \neq 0$$

$$\mu_1 = \text{ASU's responses (all questions)}$$

μ_2 = NAU's responses (all questions)

μ_3 = UA's responses (all questions)

The F-value (0.300) was less than the F-critical (3.066), and therefore the null hypothesis could not be rejected. Under the value-based structure system, there did not seem to be a significant level of performance variation at each University.

Table 5.5

ANOVA of ASU, NAU, UA, Best Value Buyer Survey

	Sum of Squares	df	Mean Square	F	F-critical
Between Groups	0.604	2	0.302	0.300	3.066
Within Groups	129.878	129	1.007		
Total	130.482	131			

While not necessary, the researcher conducted a post-hoc t-test between the ASU, UA and NAU overall performance levels under the best value system. The results of this t-test are shown in Table 5.6 below. The $\alpha = 0.05$.

$$H_0: \mu_1 - \mu_2 = 0; H_1: \mu_1 - \mu_2 \neq 0$$

μ_1 = ASU's and UA's combined responses (all questions)

μ_2 = NAU's responses (all questions)

The two-tailed p-value was 0.898, which is greater than the $\alpha = 0.05$ benchmark. Therefore, the null hypothesis cannot be rejected (unlike the initial buyer survey's t-test of ASU, UA and NAU). This result suggests

that the performance differential between ASU, UA and NAU was not significant under the best value system.

Table 5.6

T-test of ASU,UA and NAU Buyer Responses, Best Value System

	ASU,UA	NAU
Mean	9.268	9.241
Variance	1.070	0.761
Observations	103	29
Pooled Variance	1.004	
Hypothesized Mean Difference	0	
df	130	
t Stat	0.128	
P(T<=t) one-tail	0.449	
t Critical one-tail	1.657	
P(T<=t) two-tail	0.898	
t Critical two-tail	1.978	

Finally, the researcher conducted three separate t-tests, comparing the initial buyer surveys results against the best value overall buyer performance ratings. These t-test results are shown below in Tables 5.7, 5.8, and 5.9. The $\alpha = 0.05$.

$$H_0: \mu_1 - \mu_2 = 0; H_1: \mu_1 - \mu_2 \neq 0$$

μ_1 = ASU's and UA's combined responses (all questions)

μ_2 = NAU's responses (all questions)

The two-tail p-values were 4.78251E-15, 3.38446E-06, and 1.07341E-06, and for ASU, NAU, and UA respectively. Consequently, the null hypotheses for each University's t-test were rejected, indicating that

there was significant performance differential between the existing environment (before best value) and the new environment.

Table 5.7

T-Test of ASU Buyer Responses

	Initial	Best Value
Mean	7.228	9.339
Variance	2.383	1.060
Observations	79	55
Pooled Variance	1.842	
Hypothesized Mean Difference	0	
df	132	
t Stat	-8.857	
P(T<=t) one-tail	2.39E-15	
t Critical one-tail	1.656	
P(T<=t) two-tail	4.78E-15	
t Critical two-tail	1.978	

Table 5.8

T-Test of NAU Buyer Responses

	Initial	Best Value
Mean	6.353	9.241
Variance	9.661	0.761
Observations	75	29
Pooled Variance	7.218	
Hypothesized Mean Difference	0	
df	102	
t Stat	-4.916	
P(T<=t) one-tail	1.69E-06	
t Critical one-tail	2.363	
P(T<=t) two-tail	3.38E-06	
t Critical two-tail	2.625	

Table 5.9

T-Test of UA Buyer Responses

	Initial	Best Value
Mean	7.169	9.188
Variance	6.385	1.092
Observations	59	48
Pooled Variance	4.015	
Hypothesized Mean Difference	0	
df	105	
t Stat	-5.181	
P(T<=t) one-tail	5.37E-07	
t Critical one-tail	1.659	
P(T<=t) two-tail	1.07E-06	
t Critical two-tail	1.983	

University Buyer Satisfaction Survey: Initial Survey vs. Best Value

The researcher also conducted a t-test with all data points from existing environment versus the best value system. The results are shown in Table 5.10. The $\alpha = 0.05$.

$$H_0: \mu_1 - \mu_2 = 0; H_1: \mu_1 - \mu_2 \neq 0$$

μ_1 = Buyer's survey responses of existing system (all questions)

μ_2 = Buyer's survey responses in best value(all questions)

The two-tailed p-value is 1.84E-21, which was far below the $\alpha = 0.05$. Therefore, the null hypothesis was rejected, and indicated that there was a significant difference in terms of overall performance between the existing environment and best value environment. Overall performance ratings increased 24.3 percent from the initial buyer survey, to the best value system.

Table 5.10

T-Test of Initial and Best Value Buyer Responses

	Initial	Best Value
Mean	7.015	9.262
Variance	5.906	0.996
Observations	233	132
Pooled Variance	4.134	
Hypothesized Mean Difference	0	
df	363	
t Stat	-10.146	
P(T<=t) one-tail	9.20E-22	
t Critical one-tail	1.649	
P(T<=t) two-tail	1.84E-21	
t Critical two-tail	1.967	

Selection Phase Results

There were two main types of data used in the Evaluation Model: evaluation committee ratings, and raw data. The rated information consisted of the Interview, RAVA Plan, and Service Plan. The raw data consisted of the Cost Proposal and the PPI information. Once the evaluation committee rated the plans and interviews, the Purchasing Officer determined an overall score by averaging each committee member's scores for a particular evaluation criterion.

The University used a linear relationship evaluation model which divided each proposer's score by the best score for each factor. The proposer's score for a factor was calculated by multiplying their ratio (to the best score) by the weight for that particular category. Each proposer's individual points (for each factor) were then summed to determine each proposer's total points. Tables 5.15 and 5.16 show the point differential

between the best score for a particular evaluation factor and the proposer's individual score for that factor.

The average product discount, installation fee, and design fee, along with the standard deviations, are presented in Table 5.11 below. The Primary Award group overall offered 4.9 percent more in product discount than the Budget Award, but this did not necessarily guarantee a lower cost since the base costs (manufacturer's list price) could be increased to compensate for the higher discount percentages (see Chapter 4 for a thorough discussion of the potential issues in considering product discount percentages as a valid tool to evaluate costs among competitors). The relatively low standard deviation of the product discount may indicate the high level of product discounting is standard practice within the industry.

Table 5.11

Initial Financial Evaluation Summary

No	Criteria	Primary Award	Budget Award	Difference
1	Product Discount – Average	63.1%	58.2%	4.9%
2	Installation Fee – Average	4.6%	6.2%	-1.6%
3	Design Fee – Average	1.9%	0.5%	1.4%
4	Product Discount – σ	3.8%	5.1%	-1.3%
5	Installation Fee – σ	1.5%	4.5%	-3.0%
6	Design Fee – σ	0.9%	0.8%	0.1%

Once all of the information was compiled, the University shortlisted Proposers that moved forward in the evaluation process. Table 5.12 shows the total scores for each firm after the initial evaluation was

complete. While there was a 4.2 point difference between Firms S and P (which is large compared to the average 1.5 point difference between all other firms), the University intended to make three awards under the Primary group. Therefore, the University preferred to shortlist at least five Proposers.

After the University notified the firms, the committee raised additional concerns about the evaluation approach for, and weight assigned to, cost. The RFP did not contain a detailed explanation of how cost was to be evaluated, neither was the weight on cost specifically identified. The researcher conducted an analysis that removed cost as a weight – this is shown in the “Primary (Adjusted)” column in Table 5.12 below. In the analysis, Firm B moved up one rank, and was then ranked higher than Firm A. However, this analysis was completed after Firm A had already been notified of their shortlisting. Therefore, to minimize political risk and ensure complete defensibility in case of a protest, the University elected to also shortlist Firm B. The University was comfortable excluding Firm J from a shortlist because they did not submit PPI for their Lead Designer and Lead Installer.

Note that Firm A’s Initial Financial Evaluation Total Fees (Table 4.5 from Chapter 4) for the Budget Award was \$0. Recall also that the linear evaluation model sets the baseline factor to be the “best” score for each factor; for cost, the best score is assigned to the lowest price. Dividing any firm’s cost by a baseline of \$0 would produce an indeterminate result.

The researcher overcame this issue by arbitrarily setting Firm A's cost to \$0.000000001 in the evaluation model.

Firm A's Total Fees value also severely skewed the model; in fact, no other firms received any (measurable) points for cost. The researcher carried out the same analysis in the Budget Award – the updated ranks and scores are shown in the “Budget (Adjusted)” column of Table 5.12 below. Removing cost as a weight moved Firm A to the seventh position, out of nine proposers, and they would not have been considered for shortlisting for the budget award. With, or without, the 15 percent cost weight, Firms F, K, L, and R remained in contention for shortlisting. Of course, because cost did carry a 15 percent weight determined by the University, Firm A, as the top ranked firm, had to be shortlisted. The differential between Firms L and K was 0.2 points, while the difference between Firms K and J was 0.9 points; therefore, Firm J was not shortlisted. The evaluation model with no weight on cost was only used as a tool to ensure fairness – a 15 percent weight on cost was used on all official evaluation models.

Six firms were interviewed for the Primary Award, and five firms were interviewed for the Budget Award. During the interview, the three firms, who would later be awarded contracts, independently identified that the most significant risk to the successful delivery of furniture services was not being involved soon enough during the construction planning process of a large capital project.

Table 5.12

Proposers' Total Score from Initial Evaluation

No	Primary	Primary (Adjusted)	Budget	Budget (Adjusted)
1	Firm F (60.0)	Firm S (50.0)	Firm A (57.5)	Firm F (49.6)
2	Firm H (58.4)	Firm F (47.8)	Firm F (49.6)	Firm R (47.2)
3	Firm S (55.1)	Firm P (44.7)	Firm R (47.2)	Firm L (45.1)
4	Firm P (50.9)	Firm H (43.4)	Firm L (45.1)	Firm K (44.9)
5	Firm A (49.5)	Firm J (42.3)	Firm K (44.9)	Firm J (44.0)
6	Firm J (48.5)	Firm B (41.3)	Firm J (44.0)	Firm B (42.8)
7	Firm B (48.2)	Firm A (40.9)	Firm B (42.8)	Firm A (42.5)
8	--	--	Firm E (40.7)	Firm E (40.7)
9	--	--	Firm G (36.1)	Firm G (36.1)

The numerical values are each proposer's total score. Each individual column is sorted with the highest score listed first

As discussed in Chapter 4, Firm F was rated particularly high in both award categories. For the Primary Award, their overall score was 9 percent higher than the other awarded dealers, and 17 percent higher than all other proposers. Firm F's high scores were primarily determined by their Cost Proposal (Install and Design Fees and Financial Clarification) and Interview ratings, and to a lesser degree, their RAVA Plan rating. Firm F's Install and Design fees are 43 percent less than the other proposers, and their interview rating is 21 percent higher than the other interviewed proposers. In the Budget Award, Firm F's overall score is 17 percent higher than all of the other proposers' scores. The main differentials were their Interview Scores, which were 52 percent higher than the other proposers, and their RAVA plan rating, which was 18 percent higher than the other proposers. Firm F had an overall cost proposal (initial and

clarification costs) that was 37 percent less than average of the other awarded dealers in the Primary Award group.

Table 5.13

Primary Award Evaluation, Point Differential from Firm F

No	Criteria	Firm F Points	Awarded Dealers (no Firm F)	All Proposers (no Firm F)
1	Install and Design Fees	12.27	-6.68	-4.31
2	RAVA Plan	23.36	-0.18	-2.01
3	Service Proposal	14.79	-0.53	-1.65
4	PPI – LI	2.22	0.03	-0.17
5	PPI – LD	2.19	0.06	-0.15
6	PPI – D	2.19	0.06	0.03
7	PPI – M	2.13	0.12	0.08
8	PPI - # LI	0.18	0.08	-0.01
9	PPI - # LD	0.23	0.03	-0.04
10	PPI - # D	0.25	0.00	0.00
11	PPI - # M	0.25	-0.06	-0.06
12	Financial Clarification	15.00	-2.69	-2.71
13	Interview – D	17.50	-2.37	-4.84
14	Interview – M	17.50	-3.73	-5.48

Table 5.14

Budget Award Evaluation, Comparisons of Raw Data

No	Criteria	Firm F	All Proposers (no Firm F)
1	Install and Design Fees	0.00	1.87
2	RAVA Plan	25.00	-3.85
3	Service Proposal	15.00	-2.14
4	PPI – LI	2.22	-0.28
5	PPI – LD	2.19	-0.24
6	PPI – D	2.19	0.02
7	PPI – M	2.13	-0.05
8	PPI - # LI	0.18	-0.05
9	PPI - # LD	0.23	-0.07
10	PPI - # D	0.25	-0.01
11	PPI - # M	0.25	-0.06
12	Financial Clarification	13.68	-0.46
13	Interview – D	17.50	-5.25
14	Interview – M	17.50	-6.64

Table 5.15

Primary Award Evaluation, Δ from Best Score

No	Criteria	Best Score	A	B	F	H	J	P	S
1	Install and Design Fees	15	-6.4	-8.1	-2.7	0.0	-8.9	-8.9	-9.9
2	RAVA Plan	25	-5.3	-5.4	-1.6	-3.4	-4.2	-3.6	0.0
3	Service Proposal	15	-3.4	-3.0	-0.2	-2.7	-0.6	-1.5	0.0
4	PPI – LI	2.25	0.0	-0.1	0.0	0.0	-1.1	0.0	0.0
5	PPI – LD	2.25	0.0	-0.1	-0.1	-0.1	-1.1	0.0	0.0
6	PPI – D	2.25	0.0	-0.1	-0.1	0.0	-0.1	0.0	0.0
7	PPI – M	2.25	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0
8	PPI - # LI	0.25	-0.2	-0.1	-0.1	-0.1	-0.2	0.0	0.0
9	PPI - # LD	0.25	-0.2	0.0	0.0	0.0	-0.2	0.0	0.0
10	PPI - # D	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	PPI - # M	0.25	-0.1	0.0	0.0	-0.2	0.0	-0.1	0.0
12	Financial Clarification	15	-2.7	-3.5	0.0	-1.9	N/A	-3.9	-1.5
13	Interview – D	17.5	-6.9	-3.4	0.0	-9.2	N/A	-3.6	-1.1
14	Interview – M	17.5	-7.0	-5.2	0.0	-7.7	N/A	-4.3	-3.2

Note: LI = Lead Installer, LD = Lead Designer, D = Dealer's Representative, and M = Manufacturer's Representative

Table 5.16

Budget Award Evaluation, Δ from Best Score

No	Criteria	Best Score	A	B	E	F	G	J	K	L	R
1	Install and Design Fees	15	0.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0
2	RAVA Plan	25	-3.9	-4.0	-5.5	0.0	-5.1	-2.7	-4.2	-3.4	-2.0
3	Service Proposal	15	-3.2	-2.8	-3.4	0.0	-4.7	-0.4	-0.9	-0.9	-0.9
4	PPI – LI	2.25	0.0	-0.1	-0.1	0.0	-1.1	-1.1	0.0	-0.1	0.0
5	PPI – LD	2.25	0.0	-0.1	0.0	-0.1	-1.1	-1.1	0.0	-0.1	0.0
6	PPI – D	2.25	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0
7	PPI – M	2.25	0.0	0.0	0.0	-0.1	-1.1	-0.1	0.0	-0.1	0.0
8	PPI - # LI	0.25	-0.2	-0.1	-0.2	-0.1	-0.2	-0.2	0.0	-0.1	0.0
9	PPI - # LD	0.25	-0.2	0.0	-0.1	0.0	-0.2	-0.2	0.0	-0.1	0.0
10	PPI - # D	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
11	PPI - # M	0.25	-0.1	0.0	0.0	0.0	-0.2	0.0	-0.1	-0.1	0.0
12	Financial Clarification	15	0.0	N/A	N/A	-1.3	N/A	N/A	-1.0	-3.7	-2.4
13	Interview – D	17.5	-8.3	N/A	N/A	0.0	N/A	N/A	-3.2	-7.4	-2.1
14	Interview – M	17.5	-8.0	N/A	N/A	0.0	N/A	N/A	-4.7	-7.4	-6.5

Note: LI = Lead Installer, LD = Lead Designer, D = Dealer's Representative, and M = Manufacturer's Representative

Project Performance Information

The final source of data was the project performance information, which consisted of customer satisfaction responses from project closeout surveys, Weekly Risk Reports (WRR), and Project Record Lists (PRL). The value-based system tracks all projects within the Tri-University system; thus, the cost and schedule deviation data is based on the whole population of furniture projects. The customer satisfaction results were discussed previously in this chapter in the University Buyer Satisfaction Survey results. The researcher used three data characteristics to describe project performance: Purchasing Volume, Schedule Deviations, and Cost Deviations.

The Universities, as a whole, have purchased significantly more from Firm F. Firm F has completed 37 percent more projects than Firms P and S combined, and 83 percent more in terms of total cost. Table 5.17 presents each proposer delivery volume, in terms of quantity and total cost, as a percentage of the total number of projects.

Table 5.17

Summary of Relative Delivery Volume by Dealer

No	Criteria	Firm F	Firm P	Firm S
1	Total Number of Delivered Projects	61%	7%	32%
2	Total Awarded Cost (\$M)	85%	5%	9%

The next component of the project performance data was the Schedule Deviation (see Table 5.18). Firm F had the lowest overall schedule deviation at 1.6 percent, which was 8.4 percent less than the 10.0 percent average delay rate. Firm S' dealer deviation rate is 23.2 percent higher than Firm F's. Clearly, there is significant performance differential in on-time delivery between the dealers. Of all dealer-generated delays, 67.1 percent are related to manufacturer issues, such as late or damaged shipments. The remaining delays, 32.9 percent, are caused by an incorrect order placed by the dealer (wrong color or incorrect finish ordered).

The researcher also counted the number of projects that were delayed for any reason. 87 percent of Firm F's projects were completed on-time, which was 27 percent higher than Firms P and S' average of 64 percent.

Table 5.18

Schedule Deviation Differential (from Firm F)

No	Cost Deviation Source	Firm F (Raw Values)	Firm P	Firm S
1	Client	3.4%	-3.4%	3.8%
2	Designer	0.0%	0.0%	0.0%
3	Dealer	1.6%	2.0%	23.2%
4	Unforeseen	0.0%	1.9%	0.0%
5	Overall	4.9%	0.5%	27.0%

The final component of project performance is related to cost changes. The overall dealer cost deviation rate was 0.0008 percent. This

was expected as the price lists are fixed and published. The deviations identified were caused by two projects where the dealer incorrectly placed an order.

Chapter 6

RESULTS

Introduction

The fundamental purpose of this thesis was to document a methodology that organizations can use to become more efficient, particularly in the delivery of commodity contracts. Specifically, the two objectives of this thesis were to develop a tool that Facility Managers can use to more efficiently procure commodity services, and to document the implementation of a best value business leadership and risk management structure for a service that is typically perceived as a commodity. The measures of meeting the first objective were identified by:

1. Results and discussion of the initial buyer survey
2. Discussion and analysis of two methods to compare financial proposals
3. Estimated savings of Tri-U Furniture Contract
4. Adaptation of the PIPS selection criteria to the furniture delivery service

The measures of the second objective were:

1. Results and discussion of the vendor survey
2. Integration of risk mitigation tools into a buyer's supply chain.
3. Comparative analysis of the buyer survey before, and after, the best value implementation

4. Discussion and results of buyer purchasing preferences

More Efficient Procurement Model for Facility Managers

As discussed in Chapter 1, purchasing staff from Arizona State University identified to the researcher that the delivery of furniture services was not optimal. This section will discuss the application of a value-based approach to commodity service provider selection, and how Facility Managers can use the fringe benefits of the process to increase the value of their profession to a client organization.

Results and discussion of the initial buyer survey.

After developing a scope of the research work, the researcher surveyed buyers from each of the three Universities. The results from the survey were lower as compared to other PIPS projects the researcher has participated on. In particular, performance at NAU was significantly lower than ASU and UA. This conclusion was identified by the results of a single-factor ANOVA and a two-tailed t-test of the overall performance for each university. These results confirm the ASU purchasing staff's assertion that the delivery of furniture services was not optimal.

Discussion and analysis of two methods to compare financial proposals.

The initial financial evaluation was not defined in the RFP, and therefore proposers could not tailor their submittals to provide a higher level of value to the University. The University considered the average design and installation fees for a typical project with a list cost of \$50,000. If a

proposer submitted their price sheets in terms of net cost, the University first calculated the discounted project cost (using the proposer's average percent discount value), and then calculated the design and installation fees. While this approach provided the University with a relative comparison of design and installation fees for each proposer, the algorithm was susceptible to base product cost inflation by the manufacturers (for net-based price lists). The percentage discount off of list was not necessarily representative of actual cost savings for the Universities, because manufacturers could have offered steeper discounts by increasing their base list prices. Additionally, the initial financial evaluation algorithm did not contain any techniques to identify the suppliers' relative product cost.

After the proposers were shortlisted and interviewed, the University requested a financial clarification. This clarification requested that proposers provide the product, design, and installation costs for two typical designs that would appear in many University furniture projects. The proposers' responses included all costs that the Universities would incur on a typical project, and also allowed for a relative comparison between suppliers. The disadvantage was that the typicals were just that: a representative sample of an average University project, but exclusive of unique configurations or other atypical designs. However, even with this limitation, the researcher proposes that this approach is simpler to

understand for both parties (buyer and supplier), and gives a better, though not perfect, representation of each proposer's cost.

Estimated savings of Tri-U Furniture Contract.

The contracted dealers identified that their product discount percentages were, on average, 14.9 percent less than their State of Arizona contract. From July 2009 – January 2012, the Universities purchased \$19.3M of furniture and related services. Thus, the discounts provided to the University under the Tri-U Contract represent an estimated savings of \$2.9M.

The researcher did not have data on the cost savings of the previous Tri-U contract (compared to the State contract). Therefore, a relative measure of the additional value from the best value RFP could not be identified. As in identified in the RAVA plans and Interviews, not involving furniture soon enough are the dealers' greatest risk. The Tri-U best value environment is structured such that the buyers are encouraged to proactively coordinate with the dealers, which minimizes the dealers' (and Universities') risk. Thus, the system is more efficient and more profitable for the dealers, which reduces overall cost (Kashiwagi J., Sullivan, & Kashiwagi D., 2009; Sullivan & Guo, 2009).

The researcher proposes that a baseline comparison of discount levels is the optimal financial model for the traditional product-level discounting structure. This approach minimizes any potential baseline

cost inflation by the manufacturers, and also gives the owner a tool to evaluate the relative value they are receiving.

Adaptation of the PIPS selection criteria to the furniture delivery service.

ASU had used PIPS for the selection and delivery of several other services prior to using the Tri-U furniture contract. One of main differences of the PIPS RFP, as compared to the previous Tri-U Furniture RFP and the State of Arizona Furniture RFP, was that the proposers were encouraged to respond in terms of the risk that may impact their ability to successfully deliver the project (see Table 3.2 from Chapter 3). As a result, the proposals were significantly shorter than what was typically provided in response to the traditional RFP. An ASU purchasing staff member identified to the researcher that, “Under PIPS, we received much more concise proposals, instead of a roomful of specifications and marketing information that we would normally receive.”

Specifically in the application of PIPS to the furniture RFP, the researcher recommends two modifications to the selection criteria. First, the financial proposal should take into account the relative value that the Owner is receiving. If a relative comparison is not possible from all proposers, a financial evaluation that requires proposers to provide cost information on typical designs is an acceptable alternative.

Second, the value added portion of the Risk Assessment / Value Added (RAVA) plan should either be excluded, or clarified in the RFP. By

definition, value added options allow proposers to suggest additional scope and services that are above and beyond what was specified by the client. Hence, the ideas must have a cost impact; if they did not, the proposer would be expected to include it as part of their service to the owner. Instead, the value added options section made it easier for dealers to submit “marketing information,” which has little to do with minimizing project risk. If the proposers can quantify value added services in terms of cost, even without a specific project at hand, the VA could then be a component of evaluation.

Impact of a Value-based Leadership and Risk Management Structure

This section summarizes the results and impacts of the best value Tri-University furniture contract, and presents evidence that, while a product may be perceived as a “commodity”, Facility Managers should not make this assumption of the entire supply chain.

Results and discussion of the vendor survey.

The researcher surveyed the potential proposers, and identified that while the industry is satisfied with the current environment of relationship-based delivery of services (as evidenced by the traditional furniture RFPs, and comments received on the vendor survey), vendors also have the capability to implement best value practices. The researcher conducted a t-test that confirmed that overall, dealers and manufacturers do not show a significant difference in their perception of industry’s characteristics.

However, there is a significant difference in their perception of industry performance: the dealers perceived that industry performance was much lower than what the manufacturers interpreted. The researcher was unable to gather further data to analyze this perceived differential in performance. However, the researcher suggests that dealers are the clients' first and only point of contact for all furniture-related interactions. Part of these interactions surely includes the resolution of problems and responding to customer complaints. Manufacturers are, perhaps, largely isolated from these day-to-day interactions, and as such, their perceptions of industry performance are focused on industry-wide, supply chain issues.

Integration of Risk Mitigation Tools into a Buyer's Supply Chain.

As illustrated in Figures 3.4 and 3.5, risk mitigation and performance tracking are critical components of the best value furniture delivery structure. Regardless of the project type (Match Existing, non-Capital, or Capital), the dealers are required to document risk and measure performance. For smaller projects, the vendors document the start, initial completion, and actual completion dates, as well as initial and final costs, on the Project Record List (PRL). Any deviations between the initial baseline (date or cost), and the final or actual result, must be documented. For larger projects, in addition to the PRL requirements, dealers must develop a risk management plan (RMP) with the buyer, and a milestone

schedule for the project, and document these items on the Weekly Risk Report (WRR). The development of the RMP encourages the vendor to preplan the project, and specifically focus on activities that may stop the project from being successful. Please see Chapter 3 for further information about the PRL and WRR.

It is the researcher's supposition that the integration of the tools into the best value Tri-U system assists vendors to think of furniture projects in terms of cost and schedule deviation, as well as documented customer satisfaction. This is collectively known as, "performance measurement." For dealers, the PRL and WRR document the sources of deviation; for clients, the RMP and WRR provide a snapshot of project performance and the dealer's plan to minimize risk; and for the University purchasing staff, the tools provide a high level overview of project risk, dealer performance, and university performance. The data from these tools are also the basis of analysis in the following four subsections.

Comparative analysis of the buyer survey.

The initial buyer survey identified that overall performance was rated at 7 out of 10, and overall satisfaction at NAU was 40 percent lower than the overall combined average of ASU and UA. NAU reported that 19 percent fewer projects were completed on-time, as compared to ASU and UA. The performance differential was confirmed through an ANOVA of the overall performance ratings from each university, and a t-test confirmed

that a source of significant differential was between NAU's average performance, and the ASU and UA average performance.

NAU should is unique university in terms of geographic location and student population. NAU's student population is 62 percent less than that of ASU and UA, and is 39 percent the size of its host city. The remoteness of NAU may therefore provide insight to explain this performance differential. Performance may be impacted if suppliers are unable to fully support a supply chain network to the NAU campus. As such, consideration of the proposers' abilities to support NAU and their plan to minimize the risk of nonperformance are critical factors that the Tri-U buyers should consider. Clearly, in a situation such as this, the efficiency of the supply chain is just as important as, if not more so than, the cost of product.

Nearly three years after execution of the best value Tri-U Furniture Contract, the researcher conducted a follow-up ANOVA of the customer satisfaction ratings for each University. The analysis identified that there was no significant performance differential between the universities, and a post-hoc t-test of NAU performance, compared the ASU and UA performance, identified no significant differential. The researcher also conducted a t-test for each university's initial buyer survey responses and the project completion closeout surveys. Each of the three t-tests

confirmed that there was a significant performance increase between the initial survey and closeout survey (under the best value system).

These results suggest two important conclusions of implementing a value-based approach on commodity suppliers. The first is that the best value system stabilizes an environment where performance had previously been erratic. This is evidenced by the results of the initial ANOVA (Table 5.3 from Chapter 5), which showed performance differential between each University, compared to the results of an ANOVA of the best value customer responses (Table 5.5), which showed no significant differential between the universities. A second important conclusion is that a best value risk management system can increase overall performance in an environment where risk management practices were not traditionally used. A t-test confirmed that there is a significant overall performance differential between the initial buyer survey, and the best value system. In fact, overall performance ratings increased by 24.3 percent under the best value structure.

If the delivery of furniture services is a commodity, client organizations would use price as the primary differentiating factor for supplier selection. Therefore, the buyer would see little value in evaluating non-price factors (ability to minimize risk or past performance information). However, the increased level of overall performance ratings from the Universities' buyers indicates that implementing a structured risk

management system can bring tremendous value to the client organization. It also shows that the perception of price being the most important factor in service provider evaluation (the “commodity mentality”) is not optimal.

Discussion and Results of Buyer Purchasing Preferences.

The researcher analyzed the level of purchasing levels, and identified that Firm F accounted for 61 percent of the total number of furniture projects, and 85 percent of awarded cost of all furniture projects. Buyers are clearly displaying a preference for Firm F, based on the purchasing volume. The researcher acknowledges that Firm F is also the lowest proposer by an average of 37 percent for the initial financial proposal and financial clarification. Therefore, the reader might surmise that their low cost is the driving factor behind customer preference for Firm F. However, the researcher proposes that there are performance factors that may also be affecting buyer purchasing behavior.

Firm F’s schedule deviation rate is 8.4 percent less than the average delay rate, and 27 percent more of Firm’s F are completed on-time, as compared to Firms P and S. Recall that Firm F has maintained these relatively higher levels of performance over the span of 684 projects. Therefore, the researcher proposes that the buyers’ preference for Firm F is based on a combination of the lower overall cost, lower schedule deviation rate, and higher on-time completion rate.

The hypotheses of this thesis were as follows:

- The first hypothesis was that while a service may generally be perceived as a commodity, there are actually differing levels of service performance between suppliers. Performance is defined in terms of cost and schedule deviations.
- The second hypothesis was that implementing a best value business and leadership structure at the final buyer's position in the supply chain will increase upstream performance, and thereby result in increased performance at the buyer's site.
- The third hypothesis was that by implementing a structured preplanning, risk identification, and risk management system will stabilize overall system performance in the buyer's organization.

Limitations

The scope of this thesis was limited by the following conditions:

1. The research was conducted at Arizona's three largest public universities.
2. 52 projects were excluded from analysis due to lack of cost and schedule baseline information. Also excluded were projects where Capital Programs staff selected their own furniture

dealers that were outside of the dollar limit range of the Tri-U contract. However, discussions with the dealers and University purchasing staff indicate that all projects have been procured with the confines of the Tri-U contract.

3. The State of Arizona funding for public universities has declined for the life of the Tri-U contract ("Sharp tuition hikes," 2010). As such, purchasing volume is not necessarily representative of future buyer behavior.

Chapter 7

CONCLUSION

Summary

Purchasing departments and facility management groups across many different organizations are charged with the task of acquiring quality services for the lowest cost. The services being delivered can have an impact on many different facets of the company. One such area is the procurement of commodities that are utilized by the whole company. By definition, the only distinguishing characteristic of competing commodity goods is their cost (Rayburn, 2010; Reimann, Schilke, & Thomas, 2010; Rushkoff, 2005). As a result, organizations forego the increased efficiencies of measuring supplier performance, preplanning and coordinating with all critical parties, and selecting suppliers on the basis of their ability to identify and minimize the risk they do not control. Facility managers and buyers who are experiencing customer dissatisfaction, minimal supplier accountability, misalignment of expectations, or project risk, especially in the areas of commodities, is likely the result of a misperception that price is the most important factor in selection; the researcher has termed this behavior as exhibiting a “commodity mentality.”

This approach tends to be more common in large organizations due to the localization of accountability in bureaucracies. Departments within

bureaucracies can operate like silos who give minimal consideration of their value-adding functions with respect to other entities (Armajani, 2010; Dell, 2005; Porter, 1998). Individuals within bureaucracies are assigned specific tasks, and in an effort to increase accountability, there is usually a very well-defined hierarchal structure of the manager-employee relationship. All organizations have a certain level of bureaucracy, and the degree of adherence to a bureaucratic structure can be correlated to an organization's overall performance (Gratzer, 1998; Schneider & Kiser, 1994; Toye 2006). Large bureaucracies are slower to change and cannot always communicate effectively (Haveman, 1993; Schneider & Kiser, 1994).

The researcher conducted a literature review to understand the risk management practices of Facility Managers, within the context of bureaucracies. Risk, within the scope of this research, is any event or behavior that has an impact on cost, schedule, or client satisfaction (Kashiwagi & Byfield, 2002). In general, there are three tenets of successful risk mitigation: measurement, preplanning, and transference of the control and accountability to an expert. A measurement system must be in place to actually identify the type and impact of risk being encountered. Preplanning utilizes the core expertise of the Facility Manager to identify where and when risk will occur, as well as the estimated impact of the risk. The written documentation of the expert's

perception of, and resolution to, risk is then used to resolve issues.

Facility Managers should proactively seek to align the delivery of services with experts – this requires measurement to identify the performance of suppliers. The methods to manage risk are interdependent of each other.

A commodity service is one where there is limited differentiation of the service being provided, with exception to price. Markets for these types of services are characterized by intense price-based competition and lower profit levels (Reimann, Schilke, & Thomas, 2010). A “commodity chain” is a specialized type of supply chain, in that the final product is a commodity (Korzeniewicz & Gereffi, 1994). Porter (1998) proposes that organizations can use the concept of a value chain to increase the competitive advantage they bring to their buyers. Firms that use this approach can understand the added value a product receives as it moves through the manufacturing process.

The researcher proposed that a valued-based approach that considers the suppliers’ ability to minimize risk and document performance would increase the overall performance of the system. Specifically, the researcher proposed, and confirmed, the following hypotheses:

1. There are different levels of supplier performance for services that are typically perceived as commodity. The research identified that one supplier delivered 27 percent more of their projects on-time compared to the other two suppliers. Additionally, this same

supplier had a schedule deviation rate that was 8.4 percent less than the others.

2. Using a best value contract management structure will increase performance at the buyer's site, as well as upstream performance in the supply chain. The customer performance ratings increased by 24.3 percent under the best value environment (compared to the initial performance ratings). While the researcher was not privy to the upstream supply chain performance information, deductive logic suggests that upstream performance must have also improved to achieve the increased levels of onsite performance. In order for the furniture dealers to provide a higher level of service, especially in terms of on-time delivery performance, the dealers' Tri-U Furniture Contract supply chain must have become more efficient.

Additionally, an interview ASU's Executive Director of Purchasing identified that, "the manufacturers are now coming in sooner during the design process and showing us their latest innovations. The Tri-U Contract is going well."

3. A structured preplanning, risk identification, and risk management process will help to stabilize overall performance of the system. Stabilization means that significant performance differentials are minimized throughout the various points of interaction between the suppliers and buyer organization. An ANOVA of the initial

performance ratings indicated that there was significant performance differential between the Universities. A second ANOVA of performance ratings under the best value structure indicated that there was no significant performance differential. Performance stabilized in the best value environment.

Research Benefits

The research contained herein documents a more efficient methodology to increase the performance in areas where price is traditionally considered to be the primary differentiating factor between suppliers. The researcher used a best value process (PIPS) that minimized the amount of effort and need for technical expertise of the selection committee. The process evaluated proposers on their ability to succinctly identify their plan to minimize risk that would have otherwise prohibited the successful execution of the Tri-U Furniture contract. The researcher also proposed a more efficient and accurate process to evaluate the suppliers' financial proposals. The method focused more on the actual costs buyers would see on a typical furniture project, instead of considering product discount percentages, which have little correlation to actual direct costs to the buyer.

The research also documents the impact of implementing a performance measurement system within a very large bureaucratic university system. The structure is self-documenting by the furniture

suppliers, and therefore requires minimal efforts from the buyer organization. Additionally, the measurements show a clear performance differential between suppliers, proving that there is tremendous value in considering performance factors of “commodity” suppliers.

Recommendations for Future Research

While the Universities received increased levels of performance and reduced costs, further research in specific areas would increase the overall understanding of risk management and performance information within commodity supplier contracts. First, additional exploratory work is needed to understand the level of application of a best value structure in other “commodity” services (outside of furniture). The research presented in this thesis indicates that a best value approach is successful in the furniture industry, but it does not unequivocally guarantee its success in other areas.

Additional research is also needed to confirm increased upstream supply chain performance when an end client implements a risk and performance measurement structure. The research would need document the acclimation of ‘best value’ principles throughout the supply chain.

Finally, further testing of a value-based approach for commodity contracts at different types of universities and buyer organizations would help to confirm the validity and applicability of the research in different environments. A subset of this research would be to document the cost

savings organizations receive relative to some sort of baseline (for example, a statewide commodities contract).

Conclusion

The goals of the research was to document a more efficient approach that Facility Managers can to select commodity-services providers, and develop a performance measurement and formal risk management structure of commodity contracts within a large bureaucratic organization. The best value procurement methodology minimized the selection committee's effort and allowed the proposers to respond in terms of their risk management expertise, past performance, and ability to preplan. The research also analyzed typical furniture financial proposals, and found that evaluating product percentage discounts is not the most efficient approach to evaluation costs. Instead, an optimal approach would be to consider the relative discounting of the proposers' financial offer to a widely available baseline level.

This research also developed a performance measurement and risk management system for commodity contracts. The system allowed the abstraction of cost deviation, schedule deviation, and customer satisfaction from the technical details of the commodities being delivered. The research did not address the whether a particular good is a 'commodity', but instead focused on the supply chain that delivered the good. The system allows Facility Managers to monitor the performance of

the commodity suppliers (in terms of risk and customer satisfaction), while shifting the selection details or personal preferences to the end-client. As a result, overall customer satisfaction increased by 24 percent, while simultaneously stabilizing performance across all Universities.

Additionally, the system identified that one supplier had 27 percent more projects completed on-time, as compared to the other suppliers. This same supplier accounted for 85 percent of all Tri-U projects in terms of cost. In short, the results show that there is significant performance differential between suppliers and that price alone is an insufficient criterion to select commodity suppliers.

REFERENCES

- 2010 demographic profile*. (2010). Retrieved February 7, 2012, from <http://www.census.gov>
- About PBSRG*. Retrieved January, 15, 2012, from <http://pbsrg.com/about/>
- Administrative services managers*. (2009). Retrieved May 24, 2011, from <http://www.bls.gov/oco/ocos002.htm>
- Alexander, K. (1992). Facilities risk management. *Facilities*, 10(4), 14-14.
- Amaratunga, D., & Baldry, D. (2002). Performance measurement in facilities management and its relationships with management theory and motivation. *Facilities*, 20(10), 327.
- Arizona state university | performance based studies research group*. Retrieved December 12, 2011, from <http://pbsrg.com/best-value-model/pips/users/arizona-state-university/>
- Armajani, B. (2010). Poking holes in silos. *Government Finance Review*, 26(6), 79-80.
- Barber, E. (2008; 2008). How to measure the "value" in value chains. *International Journal of Physical Distribution & Logistics Management*, 38(9), 685-685-698.
- Barton, L., & Hardigree, D. (1995; 1995). Risk and crisis management in facilities: Emerging paradigms in assessing critical incidents. *Facilities*, 13(9,10), 11-11.
- Basu, G., Ben-Hamida, M., Butner, K., Cope, E., Deleris, L., Dong, J., . . . Torpy, J. (2008). *Supply chain risk management: A delicate balancing act*. (White Paper). Somers, NY: IBM Business Consulting Services.
- Baumol, W. J., & Blinder, A. S. (2009). *Microeconomics: Principles and policy* (Eleventh ed.). Mason, OH: South-Western Cengage Learning.
- Behn, B. K., & Riley, R. A., Jr. (1999). Using nonfinancial information to predict financial performance: The case of the U.S. airline industry. *Journal of Accounting, Auditing & Finance*, 14(1), 29-56.

- Bekefi, T., & Epstein, M. (2007; 2006). Risk - getting the whole picture. *CMA Magazine*, 80(8), 23-23-26.
- Bhatnagar, A. (2010). *Textbook of supply chain management*. (2 ed.). Lucknow, India: Word-Press.
- Bititci, U. (2006). Performance measurement in the value chain: Manufacturing v. tourism. *International Journal of Productivity and Performance Management*, 55(5), 371-389.
doi:10.1108/17410400610671417
- Blount, C. (2008). Physical and financial supply chains meet. *Commercial Lending Review*, (08868204), 13-16,46.
- Boehm, B. W. (1991). Software risk management: Principles and practices. *IEEE Software*, 8(1), 32-41. doi:10.1109/52.62930
- Brackertz, N., & Kenley, R. (2002). A service delivery approach to measuring facility performance in local government. *Facilities*, 20(3/4), 127.
- Bureaucracy - definition and more from the free merriam-webster dictionary*. (n.d.). Retrieved 6/3/2011, 2011, from <http://www.merriam-webster.com/dictionary/bureaucracy>
- Commodity - definition and more from the free merriam-webster dictionary*. (n.d.). Retrieved October 5, 2011, from <http://www.merriam-webster.com/dictionary/commodity>
- Commodity Exchanges, 7 U.S.C. § 1 *et seq.* (2004). Retrieved October 25, 2011, from http://uscode.house.gov/download/pls/Title_7.txt
- Communication - definition and more from the free merriam-webster dictionary* (n.d.) Retrieved October 17, 2011, from <http://www.merriam-webster.com/dictionary/communication>
- Cotts, D. G. (2010). *The facility management handbook*. (3 ed.). New York: AMA.
- Cuthbertson, R., & Piotrowicz, W. (2008; 2008). Supply chain best practices - identification and categorisation of measures and benefits. *International Journal of Productivity and Performance Management*, 57(5), 389-389-404.

- Dell, R. K. (2005). Breaking organizational silos: Removing barriers to exceptional performance. *American Water Works Association Journal*, 97(6), 34-37.
- den Otter, A., & Emmitt, S. (2007; 2007). Exploring effectiveness of team communication. *Engineering, Construction and Architectural Management*, 14(5), 408-408-419.
- Dicken, P., Kelly, P. F., Olds, K., & Wai-Chung Yeung, H. (2001). Chains and networks, territories and scales: Towards a relational framework for analysing the global economy. *Global Networks*, 1(2), 89-112. doi:10.1111/1471-0374.00007
- Dissident threat and red tape 'hindering police'* Retrieved 6/1/2011, 2011, from <http://www.bbc.co.uk/news/13551361>
- Drucker, P. F. (2002). *The effective executive*. New York, NY: HarperCollins Publishers.
- Dubbs, D. (1991). Turning point: Can we survive? *Facilities Design & Management*, 10(2), 52-52.
- Efficient* (n.d.). Retrieved December 7, 2011, from <http://dictionary.reference.com/browse/efficient>
- EN15221 - EuroFM*. (2011). Retrieved December 12, 2011, from <http://www.eurofm.org/knowledge/en15221/>
- Fakhri, G., Menacere, K., & Pegum, R. (2011). Organizational specificities that affect the use of corporate performance measurements process in the banking sector. *Journal of Performance Management*, 23(3), 5-5-22.
- FMLink outsourcing survey*. (2002). Retrieved May 31, 2011, from <http://www.fmlink.com/Surveys/outsourcing.htm>
- Gentile, J. (2004). Reverse auctions set low-bid traps. *Air Conditioning, Heating & Refrigeration News*, 222(17), 28-28,30.
- Goldsby, T. J., & Rao, S. (2009). Supply chain risks: A review and typology. *The International Journal of Logistics Management*, 20(1), 97-97. doi:10.1108/09574090910954864
- Government Performance and Results Act of 1993 § 2 U.S.C. § 306 (1993).

- Gransberg, D. D., & Ellicott, M. A. (1996). Best value contracting: Breaking the low-bid paradigm. *AACE International Transactions*, (15287106), VEC51-VEC56.
- Gratzer, D. (1998). Competition the best way to increase health-care efficiency. *Financial Post (Daily Ed.)*, , 15.
- Gruber, A. (2005). *Program assessments factor into bush plan to trim deficit*. Retrieved 6/3/2011, 2011, from <http://www.govexec.com/dailyfed/0205/020705a1.htm>
- Hatry, H. (2006). *Performance measurement: Getting results* (2nd ed. ed.). Washington, D.C.: The Urban Institute Press.
- Haveman, H. A. (1993). Organizational size and change: Diversification in the savings and loan industry after deregulation. *Administrative Science Quarterly*, 38(1), pp. 20-50.
- Kashiwagi, D. (2002). The movement of the federal government from "low-bid" award to "best value". *ASC Proceedings of the 38th Annual Conference*, Virginia Polytechnic Institute and State University - Blacksburg, Virginia. 273-274-280.
- Kashiwagi, D., & Byfield, R. E. (2002; 2002). Selecting the best contractor to get performance: On time, on budget, meeting quality expectations. *Journal of Facilities Management*, 1(2), 103-103-116.
- Kashiwagi, D., & Savicky, J. (2003). The cost of 'best value' construction. *Journal of Facilities Management*, 2(3), 285-295.
- Kashiwagi, J., Sullivan, K., & Kashiwagi, D. T. (2009). Risk management system implemented at the US army medical command. *Journal of Facilities Management*, 7(3), 224-224.
doi:10.1108/14725960910971496
- Kashiwagi, D., Kashiwagi, J., & Sullivan, K. (2010; 2010). The replacement of client decision making with a deductive logic structure. *IIE Annual Conference.Proceedings*, , 1-1-6.
- Kashiwagi, D. (2012). *Best value standard*. (pp. 3.7, 4.1-4.8, 5.29, 7.1-7.18). Mesa: Kashiwagi Solution Model (KSM).
- Kashiwagi, D. (2012). In Kashiwagi J., Kashiwagi I. (Eds.), *Information measurement theory: A revolutionary approach to risk management*. Mesa, Arizona: Kashiwagi Solution Model (KSM).

- Katunzi, T. M. (2011). Obstacles to process integration along the supply chain: Manufacturing firms perspective. *International Journal of Business and Management*, 6(5), 105-113.
- Katz, J. P., Pagell, M. D., & Bloodgood, J. M. (2003). Strategies of supply communities. *Supply Chain Management*, 8(3/4), 291-302.
- Korzeniewicz, M., & Gereffi, G. (1994). *Commodity chains and global capitalism*. Westport, Conn: Greenwood Press.
- Kraman, S. S. S., & Hamm, G. G. (1999; 1999). Risk management: Extreme honesty may be the best policy. *Annals of Internal Medicine*, 131(12), 963-963-967.
- Kuty, G. H. (2004). Can the low-bid mentality be beat? *Security Management*, 48(1), 126-126,124+.
- Maechling, T., & Bredeson, J. (2005). Discovering value in outsourcing facilities management. *Biopharm International*, 18(5), 66-70,72.
- Many states fail to measure performance of transportation dollars.* (2011). Retrieved May 25, 2011, from <http://www.prnewswire.com/news-releases/many-states-fail-to-measure-performance-of-transportation-dollars-121613463.html>
- Michael, J. K. (2008). *Best value implementation within the services industry*
- Milligan, B. (1999). Despite attempts to break them, functional silos live on. *Purchasing*, 127(7), 24-26.
- National office furniture: RFP and master documentation.* (2010). Retrieved January 1, 2012, from <http://www.nationalipa.org/PDF-solicitdocs/Office%20Furniture,%20Filing%20Systems%20and%20Related%20Products%20and%20Support%20Services/national/RFP.pdf>
- Nepal, B. P., Yadav, O. P., & Solanki, R. (2011). Improving the NPD process by applying lean principles: A case study. *Engineering Management Journal*, 23(3), 65-81.
- Nicovich, S. G., Dibrell, C. C., & Davis, P. S. (2007). Integration of value chain position and porters (1980) competitive strategies into the market orientation conversation: An examination of upstream and downstream activities. *The Journal of Business and Economic Studies*, 13(2), 91-108

- Pasztor, A. (1989, Jun 6). Attempts to streamline pentagon procurement soften amid resistance of a jealous bureaucracy *Wall Street Journal*, pp. 1-1.
- Payant, R., & Lewis, B. (2007). *Facility manager's maintenance handbook*. (2 ed.). The McGraw Hill Companies, Inc.: New York, NY.
- Porter, M. E. (1998). *Competitive advantage, creating and sustaining superior performance : With a new introduction*. New York: Free Pr.
- PUR 401–08: Furnishings, flooring, and window coverings*. (2007). Retrieved August, 28, 2010, from <http://www.asu.edu/aad/manuals/pur/pur401-08.html>
- Quesada, H., & Gazo, R. (2007). Methodology for determining key internal business processes based on critical success factors. *Business Process Management Journal*, 13(1), 5-5. doi:10.1108/14637150710721104
- Raina, R. (2010). Timely, continuous & credible communication & perceived organizational effectiveness. *Indian Journal of Industrial Relations*, 46(2), 345.
- Rayburn, D. (2010). Commoditization is not a dirty word. *Streaming Media Magazine*, (15598039), 88-88.
- Reimann, M., Schilke, O., & Thomas, J. S. (2010). Toward an understanding of industry commoditization: Its nature and role in evolving marketing competition. *International Journal of Research in Marketing*, 27(2), 188-197. doi:10.1016/j.ijresmar.2009.10.001
- Romeo, J. (2011). The fine art of goal-setting: Setting written goals gives organizations an advantage. *Alaska Business Monthly*, 27(2), 92.
- Rushkoff, D. (2005). *Commodified vs. commoditized*. Retrieved January 18, 2011, from <http://www.rushkoff.com/blog/2005/9/4/commodified-vs-commoditized.html>
- Salonen, A. (2010). Reducing supplier risk: How finance and procurement can work together to manage working capital, enforce controls, and formulate corporate strategy. *Strategic Finance (Montvale, N.J.)*, 91(12), 41.

- Schneider, J., & Kiser, E. (1994). Bureaucracy and efficiency: An analysis of taxation in early modern prussia. *American Sociological Review*, 59(2), 187-204.
- Schoen, M. S. (2008). Good enough for government work? the government performance results act of 1993 and its impact on federal agencies. *Seton Hall Legislative Journal*, 32(2), 455.
- Schwartz, H. (2010). *IFMA and Today's facility manager team up to create snapshot of staffing trends in facility management*. Retrieved September 20, 2011, from <http://www.todaysfacilitymanager.com/facilityblog/2010/05/ifma-and-today%E2%80%99s-facility-manager-team-up-to-create-snapshot-of-staffing-trends-in-facility-management.html>
- Semon, T. T. (2004). Bureaucracy is stifling, turns surveys into commodities. *Marketing News*, 38(2), 6-6.
- Service industry*. (n.d.). Retrieved October 20, 2011, from <http://www.britannica.com/EBchecked/topic/535980/service-industry>
- Sharp tuition hikes sought at asu, ua, nau. (2010, February 19). *Newsday*. Retrieved from <http://www.newsday.com/news/nation/sharp-tuition-hikes-sought-at-asu-ua-nau-1.1771160>
- Snyder, R. A., & Morris, J. H. (1984). Organizational communication and performance. *Journal of Applied Psychology*, 69(3), 461-465. doi:10.1037/0021-9010.69.3.461
- Stone, K. 2009 *government pay schedule*. Retrieved May 24, 2011, from <http://govcentral.monster.com/benefits/articles/2374>
- Sullivan, K. T., & Guo, Y. (2009). Contractor cash flow and profitability analysis between best value and low bid. *Cost Engineering*, 51(9), 16-20.
- The supply chain management processes*. Retrieved May 27, 2011, from <http://scm-institute.org/Our-Relationship-Based-Business-Model.htm>
- Swanson, D. R. (1966; 1966). On improving communication among scientists. *The Bulletin of the Atomic Scientist*, 22(2), 8-8-12.

- Tay, L. (2006). Strategic facilities management of suntec singapore international convention and exhibition centre: A case study. *Facilities*, 24(3/4), 120-131.
- Toye, J. (2006). *Modern bureaucracy*. (Research Paper No. 2006/52). Helsinki, Finland: UNU-WIDER.
- Trent, R. J. (2010; 2010). Creating the ideal supplier scorecard. *Supply Chain Management Review*, 14(2), 24-24.
- Tucker, M., & Pitt, M. (2009). Customer performance measurement in facilities management: A strategic approach. *International Journal of Productivity and Performance Management*, 58(5), 407-407-422. doi:10.1108/17410400910965698
- U.S. workers can expect skimpy raises in 2009*. (2008). Retrieved May 25, 2011, from <http://www.msnbc.msn.com/id/26507696/#.TpzkodIUqso>
- USAID. (2010). *Emerging trends in supply chain management: Outsourcing public health logistics in developing countries*. ().
- What is FM?* (n.d.). Retrieved October 17, 2011, from <http://www.ifma.org/resources/what-is-fm.htm>
- Writing, A. *What are the functions of a purchasing department in an organization?* Retrieved February 25, 2012, from <http://smallbusiness.chron.com/functions-purchasing-department-organization-158.html>

APPENDIX A
FURNITURE INDUSTRY SURVEY

To: **John Doe**
ABC Vendor

Phone: **(123) 456-7890** **(123) 456-7899**

The PBSRG, at Arizona State University, is collecting performance information and perceptions about the Furniture Services industry. Please rate each of the criteria on a scale of 1 to 10, with 10 **representing completely agree** in a particular area and 1 **representing completely disagree**. If you do not have sufficient knowledge of performance in a particular area, please leave it blank. Note that this is a university study and your responses will remain **anonymous** and used in aggregate form

A. Background Information

NO	CRITERIA	UNIT	Rating
1	Are you a Dealer of Manufacturer?	Select	Dealer / Manufacturer
2	Did you personally attend the Idea Exchange Session on 11/10/08 at ASU?	Select	Y / N
3	How many years has your company been in business?	#	

B. Best Value Perceptions

NO	CRITERIA	UNIT	Rating
4	A "Best Value" approach will minimize a client's risk in terms of design, installation, and follow-up	(1-10)	
5	A Best Value system is fair to the vendors	(1-10)	
6	A Best Value system favors high performance vendors	(1-10)	

C. Furniture Services Industry Perceptions

NO	CRITERIA	UNIT	Rating
7	The furniture services industry has performance problems in terms of customer satisfaction	(1-10)	
8	Vendors (dealers or manufacturers) have the capability to implement Best Value practices	(1-10)	

9	Performance information should be used much more in the furniture services industry	(1-10)	
10	Traditional marketing- and relationships-based contract award processes do not motivate higher performance	(1-10)	
11	The furniture services industry is in need of a better contracting (vendor selection) procedure	(1-10)	
12	Using best value procurement will improve the quality of vendors in the furniture services industry	(1-10)	
13	Overall performance of the furniture services industry (10 = very high performance, 1 = very low performance)	(1-10)	

APPENDIX B
INITIAL BUYER SURVEY

To: **John Doe** Email: **John.Doe@asu.edu**
ASU – HR Department

Phone: **623-965-1230** **480-203-4371**

The PBSRG, at Arizona State University, is collecting information about the current performance of furniture services delivered under the Tri-U Furniture Contract. Rate each of the criteria on a scale of 1 to 10, with **10 representing the best** (i.e. extremely satisfied) in a particular area and **1 representing the worst**. Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge of past performance in a particular area, please leave it blank.

Evaluation of: [dealer name]

A. General Evaluation of the Delivery Process

NO	CRITERIA	UNIT	Rating
1	Overall satisfaction with the furniture delivery service	(1-10)	
2	Rate how much effort was spent managing the dealer (10 represents a large amount of effort, 1 represent the least amount of effort)	(1-10)	

B. Dealer Evaluation

NO	CRITERIA	UNIT	Rating
3	Ability to manage the project cost (minimize change orders)	(1-10)	
4	Ability to maintain project schedule (complete on-time or early)	(1-10)	
5	Quality of workmanship	(1-10)	
6	Professionalism and ability to manage (also includes responses and prompt payment to suppliers and subcontractors)	(1-10)	
7	Close out process (no punch list upon turnover, warranties, operating manuals, submitted promptly)	(1-10)	
8	Communication, explanation of risk, and documentation (weekly reporting during	(1-10)	

	installation)		
9	Ability to follow the users' rules, regulations, and requirements (housekeeping, safety, etc...)	(1-10)	
10	Overall customer satisfaction and comfort level in hiring again	(1-10)	
11	Are you satisfied with the dealer?	Circle	Y / N

C. Projects Evaluation

NO	CRITERIA	UNIT	Rating
12	What percent of projects were completed on-time?	%	
13	What percent of the final product(s) match your initial expectations?	%	
14	What percent of products were damaged upon delivery (past fiscal year)?	%	

APPENDIX C
PAST PERFORMANCE INFORMATION SURVEY

Furniture Project Performance Questionnaire

Code <<Code>>

To: <<Evaluator Name>> Phone: <<Contact Phone>>

Fax: <<Contact Fax>>

Subject: Past <<Name of Company>>
(Name of Company Being Surveyed)
<<Name of Any Individuals>>
(Name of Individuals Being Surveyed)

The PBSRG is a research group at Arizona State University that collects past performance information on vendors and key personnel to assist clients in awarding projects based on value. The firm/individual listed above has listed you as a reference for a past project they have completed. We would greatly appreciate it if you would take a few moments to complete this survey. Please rate each of the criteria on a scale of 1 to 10, with 10 representing that you were very satisfied and 1 representing that you were very unsatisfied. Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge in a particular area, please leave it blank.

Client <<Client Work Was Performed>> Date <<Date>>
 Project <<Project Name>>

NO	CRITERIA	UNIT	RATING
1	Ability to maintain the project cost (minimize change orders)	(1-10)	
2	Ability to maintain project schedule (complete on-time or early)	(1-10)	
3	Quality of service	(1-10)	
4	Professionalism and ability to manage	(1-10)	
5	Close out process	(1-10)	
6	Communication, explanation of risk, and documentation	(1-10)	
7	Ability to follow the users rules, regulations, and requirements	(1-10)	
8	Overall performance and comfort level in hiring again	(1-10)	
9	How well did the final product(s) match your initial expectations?	(1-10)	
10	Are you satisfied with the company / individual(s)?	Circle	Y / N
11	Installation is complete and final payment has been made?	Circle	Y / N

APPENDIX D

TRI-U FURNITURE CONTRACT, RFP NO. 080909



March 5, 2009

REQUEST FOR PROPOSAL

TRI-UNIVERSITY FURNITURE CONTRACT

RFP NO. 080909

DUE: 3:00 P.M., M.S.T., 4/06/09

Time and Date of Pre-Proposal Conference, 9:30 A.M., M.S.T., 03/10/09

Deadline for Inquiries 5:00 P.M., M.S.T., 03/30/09

Time and Date Set for Closing, 3:00 P.M., M.S.T., 04/06/09

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
SECTION I – REQUEST FOR PROPOSAL	160
SECTION II - PURPOSE OF THE RFP	161
SECTION III – PRE-PROPOSAL CONFERENCE	165
SECTION IV – INSTRUCTIONS TO PROPOSERS.....	166
SECTION V – PROGRAM AND SERVICE EXPECTATIONS.....	177
SECTION VI - Green Purchasing Requirements/Specifications.....	181
SECTION VII - evaluation AND PROCESS OVERVIEW	182
SECTION VIII – FINANCIAL PROPOSAL	187
SECTION IX – FORM OF PROPOSAL/SPECIAL INSTRUCTIONS...	189
SECTION X – PROPOSER INQUIRY FORM.....	191
SECTION XI – TERMS & CONDITIONS	192
SECTION XII – MANDATORY CERTIFICATIONS & SUBSTITUTE W-9	206
ATTACHMENT 1 – RISK ASSESSMENT AND VALUE ADDED PLAN.....	225
ATTACHMENT 2 – PAST PERFORMANCE INFORMATION.....	227
ATTACHMENT 3 – PROPOSAL FORM	245
ATTACHMENT 4 – PRE-PLANNING & qc PERIOD	246
ATTACHMENT 5 – VENDOR SUBMITTAL FORMS.....	251

SECTION I – REQUEST FOR PROPOSAL

RFP NO. 080909

Arizona State University is requesting sealed proposals from qualified firms or individuals for Tri-University Furniture Contract.

Proposals are to be addressed and delivered to the receptionist area, first floor, University Services Building, Purchasing and Business Services, Arizona State University, 1551 S Rural Road, (located on the east side of Rural Road between Apache Road & Broadway Road) Tempe, Arizona 85281 on or before 3:00 P.M., M.S.T., 04/06/09 at which time a representative of Purchasing and Business Services will announce publicly the names of those firms or individuals submitting proposals. No other public disclosure will be made until after award of the contract.

Arizona State University's Overnight Delivery (FedEx, Airborne, and UPS. etc.) address is:

Purchasing and Business Services
University Services Building

Arizona State University
1551 S. Rural Rd
Tempe, AZ 85281

Arizona State University's U.S. Postal Service Mail address is:

Purchasing and Business Services
Arizona State University
P.O. Box 875212
Tempe, AZ 85287-5212

ARIZONA STATE UNIVERSITY

Liz Chandler
Liz Chandler, C.P.M.
Purchasing Manager
EC

SECTION II - PURPOSE OF THE RFP

1. INTENT

The intent of this Request for Proposal (RFP) is to award term furniture agreement(s) to meet the majority of the office and classroom furniture needs of the three Arizona Universities. Our intent is not just to purchase furniture; we want to buy improved usability of interior space through the proper selection and installation of furnishings. We are looking for suppliers who can demonstrate the ability to provide value to the Universities by managing the furniture procurement process from start to finish; providing commercial grade furniture while remaining cognizant of the fact that we are a state funded entity; and having the ability to foresee and minimize the risks that are common to this type of procurement.

Procurements for new construction and/or major remodeling with a net value of \$250,000.00 or greater may, at the option of the individual participating University, be bid and purchased separately from this contract.

The current agreements are for systems furniture, case goods - both wood & metal, filing and shelving, tables, and seating. Contract service requirements include design service, sales support, receiving, installation, and warranty repair. The Universities are continuing the expansion of the product offering for this proposal to include not only the items listed above, but also other products within the successful manufacturer's product line. The intent of this contractual agreement for the Primary product awards is to allow the campus customer to select systems furniture and/or products of a similar design from one manufacturer's product line; furniture that will provide for a variety of usage, function and price considerations with like finishes, product design and style. We are also encouraging proposers to include supplemental product lines, i.e., ergonomic products, fixed seating, computer support furniture. These additions would not be mandatory use but would be available to allow end-users to fulfill the scope of a project using one supplier.

All projects will require diverse product solutions. The service focus of the contract will require that proposers provide a well-staffed, experienced project management team. We want to ensure that we have strategic partnerships with the successful proposers that will allow us to service the departmental purchases with a minimum of resources and also provide the procurement support needed for the capital building projects.

- **PRIMARY PRODUCT/SERVICE AWARDS**

Three Primary Awards will be made to the Suppliers offering products from one manufacturer that will provide for the needs of a diverse group of campus customers by providing service requirements and quality products with similar design features, fabrics and paint finishes. The top three suppliers will be able to compete for any new projects. The service requirements will include full support of the product from initial customer contact, through design, order entry, delivery, installation, and warranty considerations.

- **BUDGET PRODUCT/SERVICE AWARD**

This award exists to offer end-users a low-cost furniture option. Similar to the Primary Awards, this award will be made to a Supplier offering product from one manufacturer that will provide a broad group of product offering. The service requirements will include full support of the product from initial customer contact, through design, order entry, delivery, installation, and warranty considerations. .

- **SECONDARY AWARDS**

Secondary Awards will be made only for those products where there may be a need to match existing furniture installations. The Universities currently have a significant investment in Steelcase, Herman Miller & Knoll furniture. Secondary agreements will not be awarded for products covered by a Primary Product award. All Secondary Award suppliers will implement the Best Value practices.

The Universities desire to place orders with all of the successful proposer(s) under this solicitation via any electronic methods of ordering offered by the successful proposer(s), and to make payment for these orders with a Visa Card.

2. BACKGROUND INFORMATION

The three Arizona universities – Arizona State University, Northern Arizona University and University of Arizona – have utilized the Tri-University Furniture Contract since 1995. While each university handles procurements from the contract differently, our combined purpose is to provide cost-effective, high quality product in a timely manner to the university community.

Due to the economy and state budget issues, we are unable to predict the volume of business to be realized by this contract over the term. We can provide some recent historical data. Our fiscal year runs from July 1 to June 30.

ASU				
	FY 2008	YTD FY 2009	TOTAL	%
Primary	\$10,500,000	\$2,200,000	\$12,700,000	89%
Budget	\$600,000	\$75,000	\$675,000	5%
Secondary	\$800,000	\$150,000	\$950,000	7%
TOTAL	\$11,900,000	\$2,425,000		

UA				
	FY 2008	YTD FY 2009	TOTAL	%
Primary	\$4,266,280	\$1,438,861	\$5,705,141	93%
Budget	\$124,331	\$53,405	\$177,736	3%
Secondary	\$68,989	\$214,560	\$283,549	5%
TOTAL	\$4,459,600	\$1,706,826		

NAU				
	FY 2008	YTD FY 2009	TOTAL	%
Primary	\$2,000,000	\$1,000,000	\$3,000,000	99%
Budget	\$27,500	\$0	\$27,500	1%
Secondary	\$11,760	\$0	\$11,760	0%
TOTAL	\$2,039,260	\$1,000,000		

3. TERM OF CONTRACT

The base term for any agreement(s) resulting from this Request for Proposal shall be for three (3) years, commencing on July 1, 2009, or from date of actual award, whichever is later. However, the Universities may, upon mutual agreement by both parties to the agreement, elect to extend such agreement for two (2) additional one (1) year term periods for a potential maximum term of five (5) years ending June 30, 2014. The scope of the agreement shall include the following campuses: the University of Arizona, in Tucson; the University of Arizona South in Sierra Vista; Northern Arizona University in Flagstaff and [Distance](#) Learning sites t throughout Arizona; Arizona State University at the Tempe, Polytechnic, Downtown and West campuses. Pima Community College District has also been an historical user of this contract.

SECTION III – PRE-PROPOSAL CONFERENCE

No pre-proposal conference will be held.

A pre-proposal conference will be held at 9:30 A.M., M.S.T.,
March 10, 2009 in ASU Tempe Campus, Schwada Classroom &
Office Building, Room 150.

The purpose of this conference will be to clarify the contents of this Request for Proposal in order to prevent any misunderstanding of the University's intention and desires, and/or to give prospective suppliers an opportunity to review the site of the work. Any doubt as to the requirements of this Request for Proposal, or any apparent omission or discrepancy should be presented to the University representative at this conference. The University representative will then determine the appropriate action. If necessary, the University representative will issue a written amendment to the Request for Proposal. Oral statements or instructions shall not constitute an amendment to this Request for Proposal.

You do not have to send a representative to this pre-proposal conference. However, if you decide to not send a representative, then we may not know of your intent to participate in this solicitation, and so may not send you any written amendments to this Request for Proposal. Further, we will assume that your failure to attend the pre-proposal conference is an indication that you expect us to review your proposal as if you had taken advantage of the pre-proposal conference.

SECTION IV – INSTRUCTIONS TO PROPOSERS

1. You must address and deliver your proposal to the receptionist area, first floor, University Services Building, Purchasing and Business Services, Arizona State University, 1551 S Rural Road, Tempe, Arizona 85281, on or before the time and date set for closing. The University Services Building is located on the east side of Rural Road between Apache Road & Broadway Road. Our delivery address is Purchasing and Business Services, University Services Building, Arizona State University, 1551 S Rural Road, Tempe, Arizona 85281. Proposals should be in a sealed envelope marked:

Name of Proposer
Title of Proposal
RFP Number
Date and Time Proposal is Due

No telephone, electronic or facsimile proposals will be considered. Proposals received after the time and date for closing will be returned to the proposer unopened.

2. **DIRECTIONS TO USB VISITOR PARKING.** Purchasing and Business Services is in the University Services Building (USB) 1551 S. Rural Road, Tempe AZ, 85281 (located on the east side of Rural between Broadway Ave and Apache Boulevard). Visitors may park in the USB Lot 45, located directly behind the building, using the Pay by Space machine, which has a cost of \$2.00 per two hour or any portion thereof. The meter will be located near the main entry to USB, to allow visitors to park their vehicles and easily access the machine on their way into the building.

All visitors to USB are to obtain a visitor's badge from the USB Reception Desk to wear while in the building, please check in at the USB Reception Desk. The receptionist will call to have you escorted to your meeting.

3. Proposals should be submitted as a document set, containing one clearly marked original and seven (7) additional copies.
4. Proposer should use recycled paper and double-sided copying for the production of all printed and photocopied proposal documents. However, client performance surveys should be singled-sided.

Furthermore, the documents should be clearly marked to indicate that they are printed on recycled content (minimum 30% post-consumer waste paper).

5. You may withdraw your proposal at any time prior to the time and date set for closing.
6. No department, school, or office at the University has the authority to solicit or receive official proposals other than Purchasing and Business Services. All solicitation is performed under the direct supervision of the Director of Purchasing and Business Services and in complete accordance with University policies and procedures.
7. The University reserves the right to conduct discussions with proposers, and to accept revisions of proposals, and to negotiate price changes. During this discussion period, the University will not disclose any information derived from proposals submitted, or from discussions with other proposers. Once an award is made, the solicitation file, and the proposals contained therein, are in the public record and will be disclosed upon request.
8. Proposers submitting proposals which meet the selection criteria and which are deemed to be the most advantageous to the University may be requested to give an oral presentation to a selection committee. Purchasing and Business Services will do the scheduling of these oral presentations.
9. The award shall be made to the responsible proposer whose proposal is determined to be the most advantageous to the University based on the evaluation factors set forth in this Request for Proposal. Price, although a consideration, will not be the sole determining factor.
10. If you are submitting any information you consider to be proprietary, you must place it in a separate envelope and mark it "Proprietary Information". If the Director of Purchasing and Business Services concurs, this information will not be considered public information. The Director of Purchasing and Business Services is the final authority as to the extent of material, which is considered proprietary or confidential. Pricing information cannot be considered proprietary.

11. **The University is committed to the development of Small Business and Small Disadvantaged Business (SB & SDB) suppliers. If subcontracting is necessary, the successful proposer will make every effort to use SB & SDB in the performance of any contract resulting from this Request for Proposal. A report may be required at each annual anniversary date and at the completion of the contract indicating the extent of SB & SDB participation. A description of the proposer's expected efforts to solicit SB & SDB participation should be enclosed with your proposal.**
12. Your proposal should be submitted in the format shown in Section IX. Proposals in any other format will be considered informal and may be rejected. Conditional proposals will not be considered. An individual authorized to extend a formal proposal must sign all proposals. Proposals that are not signed may be rejected.
13. Financial Statements:

Option A. Proposers who have audited financial statements provide the following:

Audited financial statements for the two (2) most recent available years. If the financial statements are intended to be confidential, please submit one (1) copy in a separate sealed envelope and mark as follows:

Firm's Name
Confidential – Financial Statements

Option B. Proposers who might not have audited financial statements provide the following:

It is preferred that audited financial statements for the two (2) most recent available years be submitted. However, if not available, provide a copy of firm's two (2) most recent tax returns or compiled financial statements by an independent CPA. If the financial statements or tax returns are intended to be confidential, please submit one (1) copy in a separate sealed envelope and mark as follows:

Firm's Name
Confidential – Financial Statements

14. The University reserves the right to reject any or all proposals or any part thereof, or to accept any proposal, or any part thereof, or to withhold the award and to waive or decline to waive irregularities in any proposal when it determines that it is in its best interest to do so. The University also reserves the right to hold all proposals for a period of 60 days after the opening date and the right to accept a proposal not withdrawn before the scheduled proposal opening date.
15. **EXCEPTIONS:** The successful proposer is expected to enter into a standard form of agreement approved by the Arizona Board of Regents. The Arizona State University contract terms and conditions are included in this Request for Proposal in Section XI. These terms and conditions are intended to be incorporated into the agreement between the University and the successful proposer. **Proposals that are contingent upon any changes to these mandatory contract terms and conditions may be deemed nonresponsive and may be rejected.**
16. Unless specifically stated to the contrary, any manufacturer's names, trade names, brand names or catalog numbers used in the specifications of this Request for Proposal are for the purpose of describing and/or establishing the quality, design and performance required. Any such reference is not intended to limit or restrict an offer by any proposer and is included in order to advise the potential proposer of the requirements for the University. Any offer, which proposes like quality, design or performance, will be considered.
17. May: Indicates something that is not mandatory but permissible/ desirable.

Shall, Must, Will: Indicates mandatory requirement. Failure to meet these mandatory requirements will result in rejection of your proposal as non-responsive.

Should: Indicates something that is recommended but not mandatory. If the proposer fails to provide recommended information, the University may, at its sole option, ask the proposer to provide the information or evaluate the proposal without the information.

18. Any person, firm, corporation or association submitting a proposal shall be deemed to have read and understood all the terms, conditions and requirements in the specifications/scope of work.
19. All responses and accompanying documentation will become the property of the University at the time the proposals are opened.
20. The University of Arizona, Northern Arizona University, and Arizona State University are all state universities governed by the Arizona Board of Regents. **Unless reasonable objection is made in writing as part of your response to this solicitation, the Board or either of the other two Universities may purchase goods and/or services from any agreement resulting from this solicitation.**
21. The University has entered into Cooperative Purchasing Agreements with The Maricopa County Community College District and with Maricopa County, in accordance with A.R.S. Sections 11-952 and 41-2632. Under these Cooperative Purchasing Agreements, and with the concurrence of the successful proposer, the Community College District and/or Maricopa County may access an Agreement resulting from a solicitation done by the University. If you do not want to grant such access to the Maricopa County Community College District and or Maricopa County, **please so state** in your proposal. In the absence of a statement to the contrary, the University will assume that you do wish to grant access to any Agreement that may result from this Request for Proposal.
22. Arizona State University is also a member of the Strategic Alliance for Volume Expenditures (\$AVE) cooperative purchasing group. \$AVE includes the State of Arizona, many Phoenix metropolitan area municipalities, and many K-12 unified school districts. Under the \$AVE Cooperative Purchasing Agreement, and with the concurrence of the successful contractor under this solicitation, a member of \$AVE may access an Agreement resulting from a solicitation done by the University. If you **do not** want to grant such access to a member of \$AVE, **please so state** in your proposal. In the absence of a statement to the contrary, the University will assume that you do wish to grant access to any Agreement that may result from this Request for Proposal.
23. All formal inquiries or requests for significant or material clarification or interpretation, or notification to the University of errors or

omissions relating to this Request for Proposal must be directed, in writing or by facsimile, to:

Liz Chandler
Purchasing and Business Services
University Services Building
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

Tel: 480-965-0578
Fax: 480-965-0586
e-mail: liz.chandler@asu.edu

Requests must be submitted on a copy of the Proposer Inquiry Form included in Section X of this Request for Proposal. All formal inquiries must be submitted at least seven (7) calendar days before the time and date set for closing this Request for Proposal. Failure to submit inquiries by this deadline may result in the inquiry not being answered.

Note that the University will answer informal questions orally. The University makes no warranty of any kind as to the correctness of any oral answers and uses this process solely to provide minor clarifications rapidly. Oral statements or instructions shall not constitute an amendment to this Request for Proposal. Proposers shall not rely on any verbal responses from the University. If you have formal questions about any part of this Request for Proposal, which could result in a material issue or a formal amendment to this Request for Proposal, submit your questions on a Proposer Inquiry Form from Section X of this Request for Proposal.

24. The University shall not reimburse any proposer the cost of responding to a Request for Proposal.
25. In accordance with an executive order titled "Air Pollution Emergency Proclamation" modified by the Governor of Arizona on July 16, 1996, the University formally requests that all products used in the performance of any contract that results from this solicitation be of low- or no-content of reactive organic compounds, to the maximum extent possible.
26. Arizona requires that we purchase ENERGY STAR® products or those certified by the Federal Energy Management Program as

energy efficient in all categories available. If this solicitation is for a product in a category for which ENERGY STAR® or certified products are available, please submit evidence of the ENERGY STAR® status or certification for the products you are bidding. Please note that if you fail to submit this information but a competitor does, we will select your competitor's product as meeting specifications and deem your product as not meeting specifications. See A.R.S. §34-451.

27. The University requires that all desktop computers, notebooks, and monitors purchased must meet, at a minimum, all Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria designated as "required" (bronze registration) or higher as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products. Additional consideration will be provided for electronic products that have achieved EPEAT silver or gold registration. The registration criteria and a list of all registered equipment are at <http://www.epeat.net> on the Web.
28. To the extent applicable to any agreement resulting from this solicitation, the proposer shall comply with the Standards for Privacy of Individually Identifiable Information under the Health Insurance Portability and Accountability Act of 1996 contained in 45 CFR Parts 160 and 164 (the "HIPAA Privacy Standards") as of the effective date of the HIPAA Privacy Standards on April 14, 2003 or as later determined. Proposer will use all security and privacy safeguards necessary to protect Protected Health Information (PHI), as defined by HIPPA, and shall immediately report to University all improper use or disclosure of PHI of which it becomes aware. Proposer agrees to ensure that its agents and subcontractors agree to and abide by these requirements. Proposer agrees to indemnify the State of Arizona, the Arizona Board of Regents, Arizona State University and their regents, employees and agents against all harm or damage caused or contributed to by Proposer's breach of its obligations under this paragraph.
29. The University believes that it can best maintain its reputation for treating suppliers in a fair, honest, and consistent manner by conducting solicitations in good faith and by granting competitors an equal opportunity to win an award. If you feel that we have fallen short of these goals, you may submit a protest pursuant to the Arizona Board of Regents procurement procedures, section 3-

809, in particular section 3-809C. This paragraph does not include all of the provisions of the Regents procedures, but it does tell you what you have to do to initiate a protest. First, you have to be an "interested party." An "interested party" is an actual or prospective proposer whose direct economic interest may be affected by the issuance of a solicitation, the award of a contract, or by the failure to award a contract. Whether an actual prospective bidder or offeror has a *direct* economic interest will depend upon the circumstances in each case. At a minimum, the interest must be substantial and must be tangibly affected by the administrative action or proposed action concerned in the case. For instance, a bidder or proposer who is fourth in line for award does not have a sufficient economic interest to protest the proposed award of a contract to the low bidder. Second, you must submit the protest in a timely manner. In procurements inviting bids, protests based upon alleged errors, irregularities or, improprieties in a solicitation that are apparent before the bid opening shall be filed before the bid opening. In procurements requesting proposals, protests based upon alleged errors, irregularities or improprieties in a solicitation that are apparent before the closing date for receipt of initial proposals shall be filed before the closing date for receipt of initial proposals. Protests concerning improprieties that do not exist in the initial solicitation, but that are subsequently incorporated into the solicitation, shall be filed by the next closing date for receipt of proposals following the incorporation. In cases other than those just covered, protests shall be filed no later than ten days after a contract is awarded in connection with the procurement action. Failure to timely protest shall be deemed a waiver of all rights. Third, and finally, your protest shall be in writing and shall include the following information: (1) The name, address, telephone number, and fax number of the protestor; (2) The signature of the protestor or its representative; (3) Identification of the solicitation or contract number; (4) A detailed statement of the legal and factual grounds of the protest including copies of relevant documents; and (5) The form of relief requested.

Protests should be directed to:

John F. Riley, C.P.M.
Director of Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe AZ 85287-5212
Fax: (480) 965-2234

Please note that as the University takes protests very seriously, we expect you to do so as well. Frivolous protests will not result in gain for your firm.

30. Other Opportunities with Arizona State University **not** related to this solicitation.

The ASU Alumni Advantage

Connect your business with an affluent, educated audience through a business partnership with the ASU Alumni Association. The Association is the touchstone for ASU's 300,000 alumni and provides valuable connections between them and a wide variety of businesses. By doing business with ASU, the largest university in the United States, your company can stand above the competition.

ASU alumni represent a responsive target market for your product or service.

- Alumni live worldwide.
- 70 percent of alumni reside in Arizona.
- More than 160,000 alumni live in Maricopa County.
- 11 percent of alumni reside in California.
- 75% of ASU alumni are under the age of 45.
- More than 64% of ASU alums graduated since 1984.
- More than one-third hold post-graduate degrees.
- More than 70 percent of ASU alumni are actively employed.
- 30 percent of alumni earn between \$60,000 and \$90,000 annually.
- 25 percent of ASU alumni earn more than \$90,000 annually.

Specific partnership opportunities exist in a variety of areas.

- Advertise in the quarterly ASU Magazine, mailed to more than 260,000 homes around the world. ASU Magazine is the largest circulation magazine in the Southwest. Our [rate card](#) is available for download. <http://www.asu.edu/alumni/>
- Sponsor one of the Association's many programs and events and receive recognition and access to targeted audiences. Events include: Founder's Day in March, Senior Send off in April, Homecoming in the Fall, Travel shows, Career Fairs and many more! Costs from \$500 to \$2500.
- Create a unique partnership with us to suit your needs.
- Establish benefits for ASU alumni by offering targeted discounts and services.

- Advertise on this Web site or on our 55 Chapter/Club websites or in our electronic newsletters, sent out to more than 80,000 people monthly. Cost is \$1000 per mo per each advertising venue.

Your business partnership contact is [Rhonda McClintock](#). Contact her today to start doing business with the Sun Devil nation. (480) 965-5051.

Sun Devil Sports Marketing

Sun Devil Sports Marketing is the exclusive marketing and corporate sponsorship partner for Arizona State University Athletics and manages all corporate marketing opportunities surrounding Sun Devil Athletics, including on-premise signage, TV, radio, print, internet, premium hospitality, event marketing and promotions. If you are interested in partnering with ASU Athletics, please contact Steve Hank at 480-727-0104 or at steven.hank@asu.edu.

Arizona PBS Delivers...

Eight, Arizona PBS, delivers award-winning, educational, cultural and current events programming to approximately 1.5 million viewers each week. Become an Eight sponsor.

- **Eight delivers – reach.** Comparable to other TV channels, well beyond cable channels and way beyond the top local radio stations and print media. Eight / KAET reaches 85 percent of the people of Arizona.
- **Eight delivers – quality audience.** Business leaders, decision makers, high income households, educated citizens & boomers and spenders with disposable income.
- **Eight delivers – marketing benefits:**
 - Build brand awareness by linking your business with high-quality programs
 - Generate community goodwill through support of public television
 - Promote your offerings to a broad audience at an affordable price
 - Market your brand in an environment free of commercial clutter
- **Eight delivers – multiple media platforms:**

- TV – Channel 8 and DTV 8.1, 8.2 & 8.3
- Eight Magazine – 50,000 households each month
- Web views – www.azpbs.org (100,000 unique visitors a month)
- E-Marketing – 40,000 email addresses ... and more.

Contact: Morrie Puzzi, Corporate Support Manager at 602-496-8550 or mpuzzi@asu.edu.

SECTION V – PROGRAM AND SERVICE EXPECTATIONS

- 5.1. The work consists in general, of supplying office and classroom furniture as required by the three Arizona Universities and other public institutions. The Supplier will be required to provide services associated with the supplying of furniture. These services include installation, design, training, and the provision of samples of contracted items.
- 5.2. The agreement will be performed under contract between the Arizona Board of Regents and the successful Supplier(s) and will be administered by Arizona State University.
- 5.3. The Universities have made a commitment to procurement of sustainable furnishings and those that contribute to LEED™ certification. Supplier shall state their commitment to sustainability and how they can assist the Universities in their quest for certification and green buildings.
- 5.4. Supplier shall maintain in current status all federal, state, and local licenses and permits that may be required for the business conducted by the Supplier and applicable for the work to be required under this agreement.
- 5.5. ARIZONA STATE UNIVERSITY

ASU will be utilizing the Tri-University Furniture contract to cover both departmental purchases and capital building projects. We are requiring that the Supplier provide support for the departmental purchases via electronic access. We expect that departments will be able to select, purchase and track their own orders. ASU has adopted a Visa Card from JP Morgan Chase Bank as its Purchasing Card. The University is also very interested in adopting electronic methods of ordering from Suppliers and in making associated payments with its Purchasing Card.
- 5.6. NORTHERN ARIZONA UNIVERSITY

Successful supplier(s) shall assist NAU departments with the selection of contract products based on their requirements. If design service is required, the Supplier's representative will be requested by Purchasing Services to meet with the department. This is usually required only for systems furniture and related products and may include CAD drawings and a submitted quote to include installed pricing with a CAPS list.

5.7. UNIVERSITY OF ARIZONA

The University of Arizona has seen tremendous growth over the past five years. Many new buildings came online and while the growth will slow down somewhat in the foreseeable future, we expect additional capital projects to be funded during this new contract period. The majority of furniture purchased at the University of Arizona is office seating, systems furniture & case goods. The Primary Award supplier's representative will be required at the request of Purchasing to work with each end user to develop a furniture specification sheet and price quotes. This quote will contain model and catalog numbers, paint colors, laminate types, fabric selections, drawer configurations, price, etc. A copy shall be forwarded to the Purchasing Office. If a product is required that is not available on this RFP, the Purchasing Department will solicit information and pricing through alternate Vendors. Any such purchases of \$50,000.00 or more and outside the contract will require a competitive sealed bid; any purchases under \$50,000.00 and outside the contract may be bid or purchased at the discretion of the Purchasing Department. As Arizona Buyways (our E-Commerce solution) continues to grow, we are looking to work with furniture companies that have the proven ability to allow for online order placement as well as payment with our P-Card (Visa).

- 5.8. Current Primary Award contract holder is Steelcase. Current Primary Budget Award contract holder is Hon. Proposals must include pricing for equivalent quality and breadth-of-line products.
- 5.9. Proposals must include a statement from the manufacturer(s) that indicates that the manufacturer will stand behind any agreement awarded as a result of this RFP. That, in the event the supplier who wins the award is unable to meet the requirements of the agreement, for any reason, then the manufacturer shall ensure continuity of service, either themselves, or through another supplier.

- 5.10. Each of the participating Universities may undertake or award other agreements for additional FF&E or related work and the Supplier awarded a Universities furniture agreement shall fully cooperate with such other selected contractor(s) and Universities employees and carefully fit their own work with such other additional work. The Supplier shall not commit or permit any act, which will interfere with the performance of work by other contractor(s) or Universities employees.
- 5.11. All pricing shall be F.O.B. destination freight prepaid to the Universities' locations (i.e., Tucson, Tempe, Phoenix, Chandler, Flagstaff, Yuma and Sierra Vista) etc. There shall be NO trip charges, travel, per diem, delivery or any other additional fees assessed to any participating University or other entity under a resulting agreement. Supplier shall make service trips as requested by the Universities with no additional trip charges, per diem, delivery or any other additional fees associated with delivery.
- 5.12. Supplier shall furnish the Universities a usage report semi-annually delineating the acquisition activity governed by the agreement. This usage report shall be issued to each of the Universities. The format of this report shall be approved by the Universities and shall disclose the quantity and the dollar value of each agreement product or material by the individual Universities institution.
- 5.13. Supplier shall obtain all parking permits and/or decals required while performing work on universities premises and must adhere to specific University requirements for access and . A cost may be incurred by the Supplier to obtain said permits.
- 5.14. Supplier shall make a diligent attempt to cause applicable packaging to be recycled. Supplier is encouraged, as a convenience, to contact the university's recycling center to verify if university will accept any recyclable discards.
- 5.15. Proposer's response must include provision for no-charge design services for product and material proposed to be completed at the end users location using available technology.

- 5.16. It is essential that the Proposer provide an adequate staff of experienced sales and design personnel that are capable of and devoted to the successful accomplishment of the complete customer services to be provided under the Universities furniture agreement including departmental purchases and capital projects. Once such personnel are assigned to work under the agreement, sales and design personnel shall not be removed or replaced without prior written approval of the Universities. Conversely, the Universities may request of the Supplier that sales and/or design personnel be replaced in their respective assignments if they continually fail to provide the level of customer services necessary in support of the furniture agreement.
- 5.17. Each individual University shall have the option to determine whether design services will be performed by the Proposer, by an independent third-party design company, or in-house.
- 5.18. Each of the three University locations (Arizona State University in Tempe, Northern Arizona University in Flagstaff, and The University of Arizona in Tucson) require that each successful Supplier provide representative samples of the furniture product awarded on the agreement. Such product samples are to be provided to each of the three designated locations at no cost to the Universities, to include delivery, installation, uninstall, removal, return and any relocation(s) if required. ASU and NAU have a product showroom on site, U of A will require a supplier managed showroom in close proximity to the University.
- 5.19. The Universities desire to place orders with the successful proposer(s) under this solicitation via any electronic methods of ordering offered by the successful proposer(s), and to make payment for these orders with a Visa Card.
- 5.20. The Universities require that the successful proposer implement some type of electronic commerce system. Vendor will be required to work with each campus to secure campus requirements and time frame for establishing on-line tools for e-business including, but not limited to: contract information, catalogs, ordering, tracking, expediting.

SECTION VI - Green Purchasing Requirements/Specifications

In order to reduce the adverse environmental impact of our purchasing decisions we are committed to buy goods and services from manufacturers and suppliers who share our environmental concern and commitment. Green purchasing is the method wherein environmental and social considerations are taken with equal weight to the price, availability and performance criteria that we use to make purchasing decisions.

Proposer/Bidder shall use environmentally preferable products, materials and companies where economically feasible. Environmentally preferable products have a less or reduced effect on human health and the environment when compared to other products and companies that serve the same purpose. If two products are equal in performance characteristics and the pricing is within 5%, the university will favor the more environmentally preferable product and company.

If you are citing environmentally preferred product claims, you must provide proper certification or detailed information on environmental benefits, durability and recyclable properties.

The University and the supplier may negotiate during the contract term to permit the substitution or addition of Environmentally Preferable Products (EPPs) when such products are readily available at a competitive cost and satisfy the university's performance needs.

Unless otherwise specified, bidders/proposers and contractors should use recycled paper and double-sided coping for the production of all printed and photocopied documents. Furthermore, the documents shall be clearly marked to indicate that they are printed on recycled content (minimum 30% post-consumer waste) paper.

Proposer/Bidder shall provide packaging/packing materials that meet at least one of, and preferably, all of the following criteria:

- Made from 100% post-consumer recycled materials;
- Be recyclable;
- Reusable;
- Non-toxic;
- Bio-degradable.

This information will be used as part of the evaluation criteria for Supplier/Proposer Sustainability efforts for the RFP process.

SECTION VII - evaluation AND PROCESS OVERVIEW

BEST VALUE PROCESS OVERVIEW

The Universities are applying a best value process to the supplier selection and implementation for the delivery of this service. The best value process consists of three primary stages: 1) Selection, 2) Pre-planning and Quality Control, and 3) Management by Risk Minimization and Performance Measurement.

The Selection phase of the best value process focuses on a Proposing team's ability to differentiate itself based upon the ability to identify, prioritize, and minimize risks, add differential value to the Universities and show a high level of past performance on behalf of other clients. The Universities are allowing Proposing teams to compete based on value and their ability to maximize the Universities' satisfaction. Consequently, the submitted proposals should be brief, show differentiation, and allow the Universities to make a data-based decision on which is the best value supplier for the Universities.

It is imperative that each Proposing team realize that what is written in the proposals and discussed in the interview will become part of the successful Proposing team's final contract.

The second phase of the best value system is a Pre-planning and Quality Control period that takes place prior to each award of the contract. Three suppliers for the Primary Award group, one supplier for the Budget Award group, and any Secondary Award suppliers will move forward to the Pre-Award period. In the Pre-Planning and Quality Control stage the identified potential best value suppliers will provide the Universities with (See Attachment 4 for more details):

1. A detailed scope of services and plan(s) to provide those services.
2. A Quality Control Plan that will include:
 - a. Risk identification and minimization plans for all risks identified, including client generated risks, concerns, and issues. The supplier will be expected to itemize what risks it controls and does not control. For those risks the supplier does not control, the supplier must propose a plan on how those risks will be minimized.

- b. List of University action items and requirements. The list must include item/task/ expectation, date required, and the actual person in the University organization that is responsible for fulfilling the need.
- c. A detailed schedule for transition (if necessary) and all implementation.
- d. Implementation plan for the Tri-University Risk Minimization and Performance Measurement report that will be used during the life of the contract to track and document risks and performance metrics.

After the Pre-planning and Quality Control period has fulfilled the needs and satisfaction of the University and the Supplier, the Supplier will be contracted.

The third phase of the best value system is the Management by Risk Minimization and Performance Metrics for the life of the contract. The successful proposing supplier (for each award) will be expected to report regularly (for the life of the contract) on the performance and risk level of the service. The successful proposing supplier must establish a system that can track and document the risk and performance of the project for the Universities' use in monitoring the contract.

SELECTION AND EVALUATION CRITERIA:

The awards will be made to the responsible Suppliers whose proposal is determined to be the most advantageous to the Universities, based on the following criteria (in order of importance):

1. Interview
2. Risk Assessment and Value Added Plan
3. Service Proposal
4. Financial Proposal
5. Past Performance Information of the Supplier

Risk-Assessment and Value Added (RAVA) Plan

Each proposing team will submit a three (3)-page Risk Assessment and Value Added plan for the project services being provided. A guide on how to prepare a RAVA Plan can be found in Attachment 1. The RAVA Plan must:

- Identify and describe any potential risks, specifically risks the Supplier does not control.
- Identify how the Supplier will minimize the risks
- Identify any items/ideas that will be used to add value to the Universities and/or the Service
- Identify a Transition Milestone Plan

Each RAVA Plan must be three pages or less. The Risk Assessment and Value Added section must be no longer than two (2) pages and the Transition Milestone Plan must be no longer than one (1) page. The RAVA Plan must not have any names in it (supplier, product, past project names, company letterhead, etc). A format with additional information is provided in Attachment 1.

Service Proposal

Proposers are required to submit a two (2) page Service Proposal describing how they plan to service the needs of the three Universities, with both departmental and capital projects. General requirements of the Universities are shown in Section V.

The Service Plan should include (in non-technical terms):

- An outline of what the proposer is going to do
- What will transpire as a result of above actions
- Show why/how Proposer knows the service is doable within the Universities' constraints and needs

Once again, this criterion will be rated blind. Therefore, the Service Plan must have no names or any other information that will indicate the identity of the Proposer on/in it (no Proposer name, Proposer personnel, product, past project names, company letterhead, etc).

Financial Proposal

Financial proposal information must be submitted according to the instruction in Section VIII - Financial Proposal.

Past Performance Information of the Supplier

Past Performance Information is required for each proposing Supplier. Each Proposing team entity is responsible for preparing a list of past and/or current clients and sending performance surveys to the past/current clients. Surveys from a Supplier's past clients will be returned to the Supplier, which will be submitted as part of the Supplier's proposal. Information on how to prepare the list of past clients and how to send out the surveys can be found in Attachment 2. Past/current performance information will be collected on the proposing firm from:

- Manufacturer's Representative
- Dealer's Representative
- Lead Designer
- Lead Installer

Submittal Proposal Form- REQUIRED

Attach the Submittal Proposal Form (Attachment 3) to the front of the Proposing team's RAVA Plan. This form will be used to maintain the anonymity of the Proposing teams' RAVA plans.

SHORTLISTING OCCURS BASED ON THE ABOVE CRITERIA

The above criteria - RAVA, Service Proposal, Financial Proposal and Past Performance Information - will be used to shortlist the number of Proposers to between three and five. Once shortlisted, those Proposing teams will be interviewed.

Interview

After the above criteria are evaluated, the Universities will shortlist to three to five Proposing teams. From the shortlisted Proposing teams, the Universities may interview the Manufacturer's Representative, Dealer's Representative, Lead Designer and Lead Installer for each proposing team. The individual(s) interviewed must be the actual personnel the University will be working with on the account. The Universities will not allow a personnel switch unless it is the best interest of the Universities.

BEST VALUE SUPPLIER SELECTION OCCURS

Preplanning and Quality Control

Once the Universities have identified the three potential best value Suppliers based upon the above criteria, the identified supplier will proceed into a Pre-Planning and Quality Control period prior to the award of the contract. The requirements of the Pre-planning and Quality Control period are in Attachment 4.

SECTION IX – FORM OF PROPOSAL/SPECIAL INSTRUCTIONS

To facilitate direct comparisons, your proposal shall be submitted in the following format, listed in order, and index tabbed to match. If proposer fails to provide any of the following information, with the exception of the mandatory proposal certification, the University may, at its' sole option, ask the proposer to provide the missing information or evaluate the proposal without the missing information.

The first sheet of vendor's proposal should be the "Proposer Submittal Checklist", located in the "VENDOR SUBMITTAL FORMS" section at the end of this RFP.

1. Mandatory certifications and Substitute W-9 as per Section XII.
2. Risk Assessment and Value Added Plan (RAVA Plan) no longer than two (2) pages, plus one (1) page allowed for the Transition Milestone Plan for a total of three (3) pages, as follows. The Risk Assessment and Value Added Plan will become part of the successful Proposer's final contract.
 - a. Each firm must submit a RAVA Plan as described in Attachment 1 and using the format shown therein. The RAVA must **NOT** contain any personal names (letterhead, firm name, past projects, project personnel, or any information that can indicate who has written the plan). If a RAVA Plan has any personal or proprietary names, it will be identified as non-responsive. This is required to minimize evaluator bias.
 - b. The RAVA Plan contains three sections: 1) Risk Assessment, 2) Value Added Differentiation, and 3) Transition Milestone Plan. The Risk Assessment and Value Added Differentiation sections must not exceed a combined length of two (2) pages. The Transition Milestone Plan must not exceed one (1) page in length.
 - i. The Risk Assessment section should address any risks that the Proposers see impacting a successful delivery of all expectations as described in Section V of this RFP. It is the assumption of the Universities that all Proposers have the capability to effectively deliver services and meet all the expectations in Section V. The Universities wish to examine

the relative ability of each firm to understand and convey the key risks to this service and how each risk should be minimized. Each Proposer should focus on risk that it does not control, that is to say, the Universities expect each Proposer to have the capability to manage the risks that they do control and the Risk Assessment plan should be used to manage risk that is not controlled by the Proposer. The Risk Assessment plan gives the opportunity for the Proposers to differentiate their capabilities based on their ability to understand, see, and minimize risk to the University and the risk to a successful outcome of this contract

- ii. The Value Added section should highlight any areas of differentiation that the Proposer considers separates them from the other Proposers. Each Proposer should consider the question: "What value do I bring that differentiates me from my competitors." Marketing material is considered worthless by the University and will only have a negative impact on a Proposer's score. The Value Added Differentiation section should be used by each Proposer to show how it will add value, what the size or level of impact that value will have, and how the level of added value will be measured during the course of the service. Each value added option must have an impact on dollars, time, meals, and/or the satisfaction of the University.
- iii. The Transition Milestone Plan should identify key action steps and milestone dates for transition to the new contract.

- 3. Service Proposal
- 4. Financial Proposal
- 5. Past Performance Information
- 6. Financial Statements per Section IV.13
- 7. Exceptions to Terms and Conditions

SECTION X – PROPOSER INQUIRY FORM

Pre-Proposal Questions, General Clarifications, etc.

PROJECT NAME: Tri-University Furniture Contract

PROPOSAL NUMBER: 080909

INQUIRY DEADLINE: 5:00 P.M., M.S.T., March 30, 2009

QUESTIONS ON: ORIGINAL PROPOSAL or ADDM NO.

SECTION NUMBER:

WRITER:

FAX NO. PHONE NO.

COMPANY:

COMPANY E-MAIL ADDRESS:

DATE:

QUESTIONS:

SECTION XI – TERMS & CONDITIONS

1. **PAYMENT.** Payment shall be subject to the provisions of Title 35 of Arizona Revised Statutes relating to time and manner of submission of claims. The University's obligation is payable only and solely from funds appropriated for the purpose of this Agreement. The payment terms for this Agreement are Net 30 days. An invoice shall be submitted directly to the University's Payables and Reimbursements Department, unless otherwise directed. Any delays in payment are usually attributable to one of the following: failure of the supplier to submit an invoice to Payables and Reimbursements, dissatisfaction of the requesting department with the order delivered by the supplier, and a variance of the dollar amounts on the purchase order, the receiver, and the invoice. The interest rate on overdue payments is eighteen (18) percent APR. Such interest will begin accruing on the thirty-first (31st) day after the latest date of: the date of a valid purchase order, the date a correct supplier invoice is received at Payables and Reimbursements, and the date of delivery of an order that is satisfactory to the requesting department. Any claims for interest must be substantiated by copies of documents that show the date of the valid purchase order, the date a correct invoice was delivered to Payables and Reimbursements, and the date an order was delivered to the requesting department. The University may adjust the interest period, or deny the interest claim, based upon their documentation that there was no valid purchase order, that an incorrect invoice was submitted, that the order delivered was not satisfactory, or that the dates of any event were other than as claimed.
2. **REMEDIES AND APPLICABLE LAW.** This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona. The University and Proposer shall have all remedies afforded each by said law.
3. **FORCE MAJEURE.** Neither party shall be held responsible for any losses resulting if the fulfillment of any terms or provisions of this Agreement are delayed or prevented by any cause not within the control of the party whose performance is interfered with, and which by the exercise of reasonable diligence, said party is unable to prevent.
4. **ANTI-KICKBACK.** In compliance with FAR 52.203-7, the University has in place and follows procedures designed to prevent

and detect violations of the Anti-Kickback Act of 1986 in its operations and direct business relationships.

5. **GRATUITIES.** The University may, by written notice to the Proposer, cancel this Agreement if it is found by the University that gratuities, in the form of entertainment, gifts or otherwise, were offered or given by the Proposer, or any agent or representative of the Proposer, to any officer or employee of the State of Arizona with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract. In the event this Agreement is canceled by University pursuant to this provision, the University shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Proposer in providing such gratuities.
6. **MODIFICATIONS.** This Agreement can be modified or rescinded only by a writing signed by both parties or their duly authorized agents.
7. **ASSIGNMENT-DELEGATION.** No right or interest in this Agreement shall be assigned, or any obligation delegated, by Proposer without the written permission of the University. Any attempted assignment or delegation by Proposer shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.
8. **INTERPRETATION-PAROL EVIDENCE.** This writing is intended by the parties as a final expression of their Agreement and is intended also as a complete and exclusive statement of the terms of their Agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term used in this Agreement. Acceptance or acquiescence in a course of performance rendered under this Agreement shall not be relevant to determine the meaning of this Agreement even though the accepting or acquiescing party has knowledge of the nature of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this Agreement, the definition contained in the Code is to control.
9. **EQUAL OPPORTUNITY CLAUSE.** The Provisions of Section 202 of Executive Order 11246.41, C.F.R. §60-1.4.41, C.F.R. §60-250.4

and 41, and C.F.R. §60-741.4 are incorporated herein by reference and shall be applicable to this Agreement unless this Agreement is exempted under the rules, regulations or orders of the Secretary of Labor.

10. **TERMINATION FOR DEFAULT.** In the event that the Proposer shall fail to maintain or keep in force any of the terms and conditions of this Agreement, the University may notify the Proposer in writing of such failure and demand that the same be remedied within 10 days. Should the Proposer fail to remedy the same within said period, the University shall then have the right to terminate this Agreement.
11. **NO WAIVER.** No waiver by University of any breach of the provisions of this Agreement by the Proposer shall in any way be construed to be a waiver of any future breach or bar the University's right to insist on strict performance of the provisions of the Agreement.
12. **TERMINATION.** The University may by written notice, stating the extent and effective date terminate this order for convenience in whole or in part, at any time. University shall pay the Proposer as full compensation for performance until such termination: (1) the unit or pro rata order price for the delivered and accepted portion; and (2) a reasonable amount, not otherwise recoverable from other sources by the Proposer as approved by the University, with respect to the undelivered or unacceptable portion of this order, provided compensation hereunder shall in no event exceed the total order price.
13. **CANCELLATION OF STATE CONTRACT.** In accordance with A.R.S. §38-511, this Agreement may be canceled without penalty or further obligation if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of the University is, at anytime while the Agreement or any extension of the Agreement is in effect, an employee of any other party to the Agreement in any capacity or a consultant to any other party of the Agreement with respect to the subject matter of the Agreement.
14. **LABOR DISPUTES.** Proposer shall give prompt notice to the University of any actual or potential labor dispute which delays or may delay performance under this Agreement.

15. **CONTRACT CLAIMS AND CONTROVERSIES.** All contract claims and controversies arising under this Agreement shall be resolved pursuant to the Arizona Board of Regents procurement procedures, section 3-809, in particular section 3-809C.
16. **CANCELLATION FOR LACK OF FUNDING.** This Agreement may be canceled without any further obligation on the part of the Arizona Board of Regents and Arizona State University in the event that sufficient appropriated funding is unavailable to assure full performance of its terms. The Proposer shall be notified in writing of such non-appropriation at the earliest opportunity.
17. **ASSIGNMENT OF ANTI-TRUST OVERCHARGE CLAIMS.** The parties recognize that in actual economic practice overcharges resulting from anti-trust violations are in fact borne by the ultimate purchaser; therefore, the Proposer hereby assigns to the Arizona Board of Regents for and on behalf of the University any and all claims for such overcharges.
18. **INSPECTION AND AUDIT.** All books, accounts, reports, files and other records relating to this Agreement shall be subject at all reasonable times to inspection and audit by the Arizona Board of Regents, Arizona State University or the Auditor General of the State of Arizona, or their agents for five (5) years after completion of this Agreement. Such records shall be produced at Arizona State University, or such other location as designated by Arizona State University, upon reasonable notice to the Proposer.
19. **INSOLVENCY.** The University shall have the right to terminate this Agreement at any time in the event Proposer files a petition in bankruptcy, or is adjudicated bankrupt; or if a petition in bankruptcy is filed against Proposer and not discharged within thirty (30) days; or if Proposer becomes insolvent or makes an assignment for the benefit of its creditors or an arrangement pursuant to any bankruptcy law; or if a receiver is appointed for Proposer or its business.
20. **ADVERTISING.** Proposer agrees that it will not use Arizona State University or any of its names or trademarks in any Proposer advertising.
21. **INDEMNIFICATION.** The parties to this contract agree that the State of Arizona, its departments, agencies, boards and commissions shall be indemnified and held harmless by the

Proposer for the vicarious liability of the State as a result of entering into this contract. However, the parties further agree that the State of Arizona, its departments, agencies, boards and commissions shall be responsible for its own negligence. Each party to this contract is responsible for its own negligence.

- 22. PARKING.** The Proposer shall obtain all parking permits and/or decals required while performing work on University premises. The Proposer should contact the Parking and Transit Department, Administration Division at 480-965-6406.
- 23. OFFSHORE PERFORMANCE OF WORK PROHIBITED.** Due to security and identity protection concerns, direct services under this contract shall be performed within the borders of the United States. Any services that are described in the specifications or scope of work that directly serve Arizona State University and may involve access to secure or sensitive data or personal client data or development or modification of software for the University shall be performed within the borders of the United States. Unless specifically stated otherwise in the specifications, this definition does not apply to indirect or "overhead" services, redundant back-up services or services that are incidental to the performance of the contract. This provision applies to work performed by Subcontractors at all tiers.
- 24. NON-DISCRIMINATION.** The successful contractor or supplier shall comply with all applicable state and federal statutes and regulations governing Equal Employment Opportunity, Non – Discrimination, and Immigration.
- 25. UNIVERSITY WEAPONS POLICY.** The University prohibits the use, possession, display or storage of any weapon, explosive device or fireworks on all land and buildings owned, leased, or under the control of the University or its affiliated or related entities, in all University residential facilities (whether managed by the University or another entity), in all University vehicles, and at all University or University affiliate sponsored events and activities. Notification by Proposer to all persons or entities who are employees, officers, subcontractors, consultants, agents, guests, invitees or licensees of Proposer (“Proposer Parties”) of this policy is a condition and requirement of this Contract. Proposer further agrees to enforce this contractual requirement against all Proposer Parties. The University’s policy may be accessed through the

following webpage: <http://www.asu.edu/aad/manuals/dps/dps201-05.html>.

26. **SUSTAINABILITY REQUIRMENTS. Arizona State University is dedicated to acquiring products and services that meet Sustainability requirements.** Indicate any business practices or technology that meets the following criteria.

For the purpose of judging Sustainability the following description applies: A process of current or developing business practices and technologies that restore and enhance the environment by supplying products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.

27. **PAYMENT CARD INDUSTRY DATA SECURITY STANDARD.** For e-commerce business and/or credit card transactions, Proposer agrees to be bound by the requirements and terms of the Rules of all applicable Card Associations, as amended from time to time, and be solely responsible for security and maintaining confidentiality of Card transactions processed by means of electronic commerce up to the point of receipt of such transactions by Bank.

Proposer is required to be in compliance with the requisites of the SAS 70 and/or Payment Card Industry Data Security Standard and provide written attestation of compliance annually.

28. **BYRD ANTI-LOBBYING AMENDMENT (31 U.S.C. 1352).** Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining and Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

- 29. DEBARMENT AND SUSPENSION.** Recipients shall fully comply with the requirements stipulated in Subpart C of 45 CFR 620, entitled "Responsibilities of Participants Regarding Transactions". The recipient is responsible for ensuring that any lower tier covered transaction, as described in Subpart B of 45 CFR 620, entitled "Covered Transactions", includes a term or condition requiring compliance with Subpart C. The recipient also is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transaction. The recipient acknowledges that failing to disclose the information required under 45 CFR 620.335 may result in the termination of the award, or pursuance of other available remedies, including suspension and debarment. Recipients may access the Excluded Parties List System at <http://epls.arnet.gov>.
- 30. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT.** Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.
- 31. E-COMMERCE.** Arizona State University has adopted a Visa Card from JP Morgan Chase Bank as its Purchasing Card. The University is very interested in adopting electronic methods of ordering from suppliers and in making associated payments with its Purchasing Card. If your firm has an electronic method of ordering, please describe it. These electronic methods of ordering could range from your firm distributing a paper catalog and accepting fax orders, to your firm has a Web site in which users can configure and order products. Please also advise if your firm can accept payment with a Visa Card.
- 32. PROPOSER TO PACKAGE GOODS.** Proposer will package goods in accordance with good commercial practice. Each shipping container shall be clearly and permanently marked with the following: (a) Proposer's name and address; (b) University department's name, address and purchase order number; (c) Container number and total number of containers, e.g. box 1 of 4 boxes and (d) the number of the container bearing the packing slip. Proposer shall bear cost of packaging unless specifically otherwise provided.

33. **SHIPMENT UNDER RESERVATION PROHIBITED.** Proposer is not authorized to ship the goods under reservation and no tender of a bill of lading will operate as a tender of the goods.
34. **TITLE AND RISK OF LOSS.** The title and risk of loss of the goods shall not pass to the University until the University actually receives the goods at the point or points of delivery.
35. **RIGHT OF INSPECTION.** The University shall have the right to inspect the goods at delivery before accepting them.
36. **NO REPLACEMENT OF DEFECTIVE TENDER.** Every tender of goods must fully comply with all provisions of this Agreement as to time of delivery, quantity, quality, and the like. If a tender is made which does not fully conform, this shall constitute a breach and Proposer shall not have the right to substitute a conforming tender.
37. **WARRANTIES.** In addition to any implied warranties, Proposer warrants that the goods furnished will conform to the specifications, drawings, and descriptions listed herein, and to the sample or samples, if any, furnished by the Proposer. In the event of a conflict between the specifications, drawings, and descriptions, the specifications shall govern.
38. **COPYRIGHT OWNERSHIP.** Proposer's work under this agreement is "work for hire" for purposes of the copyright laws of the United States and any foreign countries, and title to any subject copyright will vest with the University.

If for any reason the Work would not be considered a work made for hire under applicable law, Proposer sells, assigns, and transfers to University all rights and title to the copyright in the Work, related registrations and copyright applications, and any related renewals and extensions. This grant of rights and assignment extends to all works based upon, derived from, or incorporating the Work, to all income, royalties, damages, claims and payments payable now or later, to all causes of action, either in law or in equity for past, present, or future infringement based on the copyrights, and to all corresponding rights throughout the world.

If the Work is one to which the provisions of 17 U.S.C. 106A apply, the Author waives and appoints University to assert on the Proposer's behalf the Proposer's moral rights or any equivalent

rights regarding the form or extent of any alteration to the Work (including removal or destruction) or the making of any derivative works based on the Work, including photographs, drawings or other visual reproductions or the Work, in any medium, for university purposes.

Proposer agrees to execute all papers and to perform other proper acts as University may deem necessary to secure these rights for University or its designee.

39. INSURANCE REQUIREMENTS. Without limiting any liabilities or any other obligation of the Proposer, the Proposer shall purchase and maintain (and cause its subcontractors to purchase and maintain), in a company or companies lawfully authorized to do business in the State of Arizona, and rated at least A- VII in the current A.M. Best's, the minimum insurance coverage below:

A. **Commercial General Liability**, with minimum limits of \$1,000,000 per occurrence, and an unimpaired products and completed operations aggregate limit and general aggregate minimum limit of \$2,000,000. Coverage shall be at least as broad as the Insurance Service Office, Inc. Form CG00010196, issued on an Occurrence basis, and endorsed to add the State of Arizona, its departments, agencies, boards and commissions as an Additional Insured with reference to this contract. The policy shall include coverage for:

Bodily Injury;
Broad Form Property Damage (including completed operations); **(THIS AMOUNT IS PART OF THE \$1,000,000)**
Independent Contractors Coverage;
Personal Injury;
Blanket Contractual Liability;
Products and Completed Operations, and this coverage shall extend for one year past acceptance, cancellation or termination of the services or work defined in this contract;
and
Fire Legal Liability.

B. **Business Automobile Liability**, with minimum limits of \$1,000,000 per occurrence combined single limit, with Insurance Service Office Inc. Declarations to include Symbol One (Any Auto) applicable to claims arising from

bodily injury, death or property damage arising out of the ownership, maintenance or use of any auto. The policy shall be endorsed to add the State of Arizona, its departments, agencies, boards and commissions as an Additional Insured with reference to this contract.

C. **Workers Compensation and Employers Liability** insurance as required by the State of Arizona Workers Compensation statutes, as follows:

Workers Compensation (Coverage A):	Statutory	Arizona
	benefits	
Employers Liability (Coverage B):	\$500,000	each
	accident	
	\$500,000each	
	employee/disease	
	\$1,000,000	policy
	limit/disease	

Policy shall include endorsement for All State coverage for state of hire.

D. **Professional Liability Insurance** with minimum limits of \$1,000,000 (Each Claim and/or Each Wrongful Act and/or Each Loss) and an unimpaired aggregate limit of \$1,000,000 with respect to this contract. Retroactive Liability Date (if applicable to Claims-Made coverage) shall be the same as the effective date of this contract. The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Work of this contract and, at the discretion of the State of Arizona, its departments, agencies, boards and commissions, shall include one of the following types of Professional Liability policies **(if applicable to the scope of work)**:

- Directors and Officers
- Errors and Omissions
- Medical Malpractice
- Druggists Professional
- Architects/Engineers Professional
- Lawyers Professional
- Teachers Professional
- Accountants Professional
- Social Workers Professional

Other (Specify profession from Scope of Work)

The State of Arizona, its departments, agencies, boards and commissions shall be named as an Additional Insured as their interests may appear.

The policy shall contain an Extended Claim Reporting Provision of not less than one year following termination of the policy.

- E. The State of Arizona, its departments, agencies, boards and commissions reserves the right to request and receive certified copies of all policies and endorsements within ten calendar days of contract signature.
- F. Certificates of Insurance acceptable to the State of Arizona, its departments, agencies, boards and commissions shall be issued and delivered prior to the commencement of the work defined in this contract, and shall identify this contract and include certified copies of endorsements naming the State of Arizona, its departments, agencies, boards and commissions as Additional Insured for liability coverages. The certificates, insurance policies and endorsements required by this paragraph shall contain a provision that coverages afforded will not be cancelled until at least thirty (30) days prior written notice has been given to the State of Arizona, its departments, agencies, boards and commissions. All coverages, conditions, limits and endorsements shall remain in full force and effect as required in this contract.
- G. Failure on the part of the Proposer to meet these requirements shall constitute a material breach of contract, upon which the State of Arizona, its departments, agencies, boards and commissions may immediately terminate this agreement or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, and all monies so paid by the State of Arizona, its departments, agencies, boards and commissions shall be repaid by the Proposer upon demand, or the State of Arizona, its departments, agencies, boards and commissions may offset the cost of the premiums against any monies due to the Proposer. Costs for coverages broader than those required or for limits in excess of those required shall not be

charged to the State of Arizona, its departments, agencies, boards and commissions. Proposer and its insurer(s) providing the required coverages shall waive their rights of recovery against the State of Arizona, its departments, agencies, boards, commissions, employees and officers.

- 40. SALES AND USE TAX.** The Proposer agrees to comply with and to require all of his subcontractors to comply with all the provisions of applicable state sales excise tax law and compensation use tax law and all amendments to same. The Proposer further agrees to indemnify and save harmless the University, of and from any and all claims and demands made against it by virtue of the failure of the Proposer or any subcontractor to comply with the provisions of any or all said laws and amendments. The University is not exempt from state sales excise tax and compensation use tax, except for equipment purchased for research or development under the provisions of A.R.S. §42-5159 (B) (14). Any equipment ordered as tax exempt shall be invoiced separately from taxable systems, even if purchased on the same purchase order from the University.
- 41. PERSONNEL.** Employees of the Proposer assigned to the project and identified by name in the proposal shall remain dedicated to this project. Personnel changes shall be permitted only with prior notification and approval of the University.
- 42. LIQUIDATED DAMAGES.** The University and the Proposer agree that in the event that the Proposer fails to perform under this Agreement, the University will be damaged. The extent of the damage is very difficult to calculate. Therefore, the Proposer agrees to pay the University liquidated damages if the agreed upon delivery and installation dates are not met. These liquidated damages shall be ____% of the total Agreement price per day after the agreed on completion date, not to exceed a total of ____% of the total Agreement price.
- 43. INSTALLMENT PAYMENT AGREEMENT.** The University is precluded from entering into an installment payment agreement unless such agreement can be canceled for non-allocation of funds at the end of any fiscal year, at no penalty to the University. If funds are not allocated for this Agreement for periodic payment in any future annual fiscal period, following the University's formal request for funds, the University is not obligated to pay the net remainder of agreed to consecutive periodic payments remaining unpaid beyond the end of the then current fiscal year. The

University agrees to notify the Proposer of such non-allocation at the earliest possible time. No penalty shall accrue to the University in the event this provision shall be exercised. This provision shall not be construed so as to permit the University to terminate this Agreement in order to acquire similar equipment from another party.

44. **PRICE ADJUSTMENT.** Price changes will normally only be considered at the end of one Agreement period and the beginning of another. Price change requests shall be supported by evidence of increased costs to the Proposer. The University will not approve price increases that will merely increase the gross profitability of the Proposer at the expense of the University. Price change requests shall be a factor in the Agreement extension review process. The University shall determine whether the requested price increase or an alternate option is in the best interest of the University.
45. **FURNISH AND INSTALL.** The items in this proposal will be provided on a Proposer furnish and install basis. The successful Proposer shall have complete responsibility for the items or system until it is in place and working. Any special installation preparation and requirements must be submitted to the University. All transportation and coordination arrangements will be the responsibility of the successful Proposer. Delivery of equipment will be coordinated so that items will be delivered direct to the installation site. This will minimize risk of damage and avoid double handling.
46. **THE ARIZONA STATE UNIVERSITY CONFIDENTIAL FINANCIAL INFORMATION AGREEMENT IS REQUIRED.** This agreement is necessary to comply with the requirements of the Gramm Leach Bliley Act" dealing with the confidentiality of customer information and the Safeguarding Rule.
47. **The University and Contractor recognize that student educational records are protected by the federal Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. 1232g).** FERPA permits disclosure of student record information to "other school officials" who have a legitimate educational interest in the information. The federal Family Compliance Office has recognized that institutions can designate other entities, including vendors and consultants, as "other school officials". Designated representatives of Contractor will be designated as "other school officials" for purposes of this Agreement. No designated

representative of the Contractor shall disclose information it receives under this agreement to any third party, except with the consent of the student or as required by law. Any disclosures made by the Contractor should comply with the University's definition of legitimate educational purpose. If any designated representative discloses or misuses any educational record, the University will take appropriate action against the designated representative that is similar to action ASU would take against one of its employees who disclosed or misused the educational records of its students.

**SECTION XII – MANDATORY CERTIFICATIONS & SUBSTITUTE W-9
CONFLICT OF INTEREST CERTIFICATION**

(date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

The undersigned certifies that to the best of his/her knowledge: **(check only one)**

- There is no officer or employee of Arizona State University who has, or whose relative has, a substantial interest in any contract resulting from this request.
- The names of any and all public officers or employees of Arizona State University who have, or whose relative has, a substantial interest in any contract resulting from this request, and the nature of the substantial interest, are included below or as an attachment to this certification.

(firm)

(address)

(signature required)

(Phone)

(print name)

(fax)

(print title)

(Federal Taxpayer ID Number)

(Purchasing 01-31-2007. Previous editions are obsolete and cannot be used.)

FEDERAL DEBARRED LIST CERTIFICATION

Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters (Dec 2001)

(date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

In accordance with the Federal Acquisition Regulation, 52.209-5:

- (a) (1) The Offeror certifies, to the best of its knowledge and belief, that—
- (i) The Offeror and/or any of its Principals—
 - (A) (check one) **Are** () or **are not** () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency; (The debarred list (List of Parties Excluded from Federal Procurement and Nonprocurement Programs) is at <http://epls.arnet.gov> on the Web.)
 - (B) (check one) **Have** () or **have not** (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
 - (C) (check one) **Are** () or **are not** () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.
 - (ii) The Offeror (check one) **has** () or **has not** (), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
- (2) “Principals,” for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general

manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(firm)

(address)

(signature required)

(Phone)

(print name)

(fax)

(print title)

(Federal Taxpayer ID Number)

(Purchasing 01-31-2007)

ANTI-LOBBYING CERTIFICATION

Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (Sept 2005)

(date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

In accordance with the Federal Acquisition Regulation, 52.203-11:

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989—

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of this contract;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, Title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(Signature page follows)

(firm)

(address)

(signature required)

(Phone)

(print name)

(fax)

(print title)

(Federal Taxpayer ID Number)

(Purchasing 01-31-2007)

SUDAN OR IRAN BUSINESS OPERATIONS CERTIFICATION

(date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

The undersigned certifies that pursuant to Arizona Revised Statutes § 35-391 and 35-393, the below entity does not have a scrutinized business operation in either Sudan or Iran.

(firm)

(address)

(signature required)

(Phone)

(print name)

(fax)

(print title)
Number)

(Federal Taxpayer ID

(Purchasing 02-18-2009)

LEGAL WORKER CERTIFICATION

(date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

As required by Arizona Revised Statutes §41-4401 the University is prohibited after September 30, 2008 from awarding a contract to any contractor who fails, or whose subcontractors fail, to comply with Arizona Revised Statutes § 23-214-A. The undersigned entity warrants that it complies fully with all federal immigration laws and regulations that relate to its employees, that it shall verify, through the employment verification pilot program as jointly administered by the U.S. Department of Homeland Security and the Social Security Administration or any of its successor programs, the employment eligibility of each employee hired after December 31, 2007, and that it shall require its subcontractors and sub-subcontractors to provide the same warranties to the below entity. The undersigned acknowledges that a breach of this warranty by the below entity or by any subcontractor or sub-subcontractor under any Contract resulting from this solicitation shall be deemed a material breach of the Contract, and is grounds for penalties, including termination of the Contract, by the University. The University retains the right to inspect the records of the below entity, subcontractor and sub-subcontractor employee who performs work under the Contract, and to conduct random verification of the employment records of the below entity and any subcontractor and sub-subcontractor who works on the Contract, to ensure that the below entity and each subcontractor and sub-subcontractor is complying with the warranties set forth above.

(firm)

(address)

(signature required)

(Phone)

(print name)

(fax)

(print title)

(Federal Taxpayer ID Number)

(Purchasing 09-23-2008)

SUPPLIER SUSTAINABILITY QUESTIONNAIRE

Company Name: _____ Date: _____

The Supplier Sustainability Questionnaire must be completed and returned with your Bid/Proposal. This questionnaire is applicable to firms that provide only services as well as those that provide goods.

1. What policies are in place to monitor and manage your supply chain regarding environmental issues? Please check the items that apply.

- We apply environmental criteria when making purchasing decisions.
- We purchase "green" (recyclable, reusable, non-toxic, bio-degradable, and made from 100% post-consumer recycled materials) supplies, products and materials.
- We specify sustainable products and or locally manufactured products
- We specify products using Electronic Products Environmental Assessment Tool (EPEAT) standards
- We partner with sustainable suppliers or utilize suppliers who share in the sustainability commitment
- Our Director of Sustainability is researching industry best procurement practices

Other – describe other ways your company monitors and manages your supply chain regarding environmental issues:

2. What type of sustainable packaging/shipping materials do you use? Please check the items that apply.

- Our packaging/shipping materials are recyclable
- Our packaging/shipping materials are reusable
- Our packaging/shipping materials are bio-degradable
- Our packaging/shipping materials are made from 100% post-consumer recycled materials

Other – describe other types of sustainable packaging/shipping materials you use:

3. Does your company have a Green Transportation Plan for your operation? Please check the items that apply.

- We encourage carpooling, public transportation, and using other alternative modes of transportation
- We subsidize public transportation for employees
- We are developing a Green Transportation Plan
- We have an established Green Transportation Plan (describe below)
- We offer flexible hours, telecommuting or a compressed work week
- We utilize teleconference, video conference, WebEx or GoTo Meetings
- We purchase carbon offsets
- We own electric, hybrid, or E-85 fueled vehicles
- We rent hybrid vehicles

Other – describe your company’s Green Transportation Plan for your operation:

4. What does your company do to minimize the environmental costs associated with shipping? Please check the items that apply.

- We are evaluating what the company can do to minimize the environmental costs associated with shipping
- We combine deliveries with customer visits
- We consolidate deliveries
- We use bike couriers for local delivery
- We utilize electronic communications and electronic transfer of documents. E-mail, fax and Portable Document Format (PDF)
- We use eco-friendly courier’s packaging/shipping materials that include post-consumer waste recycled materials and are recyclable
- Our packaging and shipping materials are reused until they eventually get recycled
- We have established a sustainability plan that minimizes the need for shipping (describe below)
- We update mailing lists to minimize unwanted mailings
- We specify products that can be purchased within a 500 mile radius of the delivery location

Other – describe what your company does to minimize the environmental costs associated with shipping

5. Does your company have an environmental policy statement? Please check the items that apply.

- We are developing an environmental policy statement
 - Our environmental policy statement consists of a commitment to promote environmental stewardship
 - Our environmental policy statement describes our company's Sustainability Initiative
 - We have formed an oversight committee to ensure the success of our environmental policy
 - Our environmental policy statement describes how our company explores opportunities to work with communities, governments and non-governmental and professional organizations to help articulate, teach and advance the principles of sustainability
- Other - Provide (or supply a link) your company's environmental policy statement

6. Has your company ever been cited for non-compliance of an environmental or safety issue? Please check the item that applies.

- No, my company HAS NOT been cited for non-compliance of an environmental or safety issue.
- Yes, my company HAS been cited for non-compliance of an environmental or safety issue.

State the reason, date and outcome of the citation

7. What programs do you have in place, or planned for promoting resource efficiency? (i.e. an environmental or waste audit)? Please check the items that apply.

- We recycle consumables, reduce waste and practice energy reduction when possible
- We are developing a recycling program
- We utilize a formal energy management system
- We are a member of various environmental organizations
- We have formed a Sustainability Committee to identify sustainable solutions for our company
- We have a company-wide Recycling Program
- Our Director of Sustainability initiates and supports sustainability

efforts

- We have performed an environmental or waste audit
 - We are recognized by peers and environmental organizations for providing leadership in sustainability
 - We are a carbon-neutral company
- Other - what other programs do you have in place, or planned for promoting resource efficiency

8. Does your company have web-based materials available documenting your "Green" initiatives? Please check the items that apply.

- We are developing web-based documentation of "Green" initiatives (provide link)
- Our website includes "Green" reference information (provide link)
- Our website contains an environmental policy statement (provide link)
- Our website includes materials that document company's "Green" initiatives (provide link)
- Our website contains our company's Sustainability Report (provide link)

Other – Does your company have other web-based materials available documenting your "Green" initiatives? (provide link)

9. If you are providing a product, does the manufacturer of the product that you are bidding/proposing have an environmental policy statement?

Please check the item that applies.

- No, the manufacturer of the product that I am bidding/proposing DOES NOT have an environmental policy statement
- Yes, the manufacturer of the product that I am bidding/proposing HAS an environmental policy statement
Provide Environmental Policy Statement

10. If you are providing a product, has the manufacturer of the product that you are bidding/proposing ever been cited for non-compliance of an environmental or safety issue? Please check the item that applies.

No, the manufacturer of the product that I am bidding/proposing HAS NOT been cited for non-compliance of an environmental or safety issue

Yes, the manufacturer of the product that I am bidding/proposing HAS been cited for non-compliance of an environmental or safety issue
Provide reason, date and outcome of the citation

11. Has an environmental life-cycle analysis of the product that you are bidding/proposing been conducted by a certified testing organization, such as Green Seal? Please check the item that applies.

No, an environmental life-cycle analysis of the product that I am bidding/proposing HAS NOT been conducted by a certified testing organization, such as Green Seal

Yes, an environmental life-cycle analysis of the product that I am bidding/proposing HAS been conducted by a certified testing organization, such as Green Seal.

Provide certification

12. If selected pursuant to this solicitation, what are your plans if there is a major and/or catastrophic pandemic influenza outbreak for continuing your operations and services to ASU?

RETURN TO ASU	ARIZONA STATE UNIVERSITY SUBSTITUTE W-9 & VENDOR AUTHORIZATION FORM				DO NOT SEND TO IRS
Foreign persons who are non-residents for US Tax purposes do not complete the ASU Substitute W-9 form. Instead, complete IRS Form W-8 BEN available at http://www.irs.gov/pub/irs-pdf/fw8ben.pdf					
► Taxpayer Identification Number (TIN)					<input type="checkbox"/> Employer ID Number (EIN) <input type="checkbox"/> Social Security Number (SSN)
► LEGAL NAME: (must match TIN above)					
Are you doing business in Arizona for purposes of sales/use tax collection and remittance? <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes" please provide Arizona License # _____ and sales/use tax rate charged _____ % DUNS# _____					
► LEGAL MAILING ADDRESS:		(Where tax information and general correspondence is to be sent)			
DBA/Branch/ Location:					
ADDRESS:					
ADDRESS LINE 2:					
CITY:			ST:		ZIP:

► REMIT TO ADDRESS:		<input type="checkbox"/> Same as Legal Mailing Address			
DBA/Branch/Location:					
ADDRESS:					
ADDRESS LINE 2:					
CITY:		ST:		ZIP:	
► ENTITY TYPE					
<input type="checkbox"/> Individual (not a business)	<input type="checkbox"/> Sole proprietor (individually owned business) or sole proprietor organized as LLC or PLLC	<input type="checkbox"/> Corporation (NOT providing health care, medical or legal services)	<input type="checkbox"/> Corporation (providing health care, medical or legal services)	<input type="checkbox"/> Partnership, LLP or partnership organized as LLC or PLLC	
<input type="checkbox"/> The US or any of its political subdivisions or instrumentalities	<input type="checkbox"/> A state, a possession of the US, or any of their political subdivisions or instrumentalities)	<input type="checkbox"/> Tax-exempt organizations under IRC §501	<input type="checkbox"/> An international organization or any of its agencies or instrumentalities	<input type="checkbox"/> State of Arizona Employee	
► CERTIFICATION					
Under penalties of perjury, I certify that:					
<ol style="list-style-type: none"> 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me I am no longer subject to backup withholding, 3. I am a U.S. person (including a resident alien). 					
Certification instructions: You must cross out item 2 above if you have					

been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return.

The Internal Revenue Service does not require your consent to any provision of this document other than the certification required to avoid backup withholding

Signature of U.S. Individual	Date:
------------------------------	-------

NOTE: IF BOTH PAGES OF THIS FORM ARE NOT COMPLETED THE FORM WILL BE RETURNED TO YOU. **Arizona State University (ASU) is fulfilling a mandate associated with state agencies increasing procurements from Arizona Small and Diverse Businesses.**

RETURN TO ASU	ARIZONA STATE UNIVERSITY SUBSTITUTE W-9 & VENDOR AUTHORIZATION FORM	DO NOT SEND TO IRS
▶ Legal Name:		TIN:
SECTION 1 - FEDERAL INFORMATION - <i>REQUIRED</i>		
<p>What is the <u>Federal</u> classification type of your business? - See definitions on link below. (S.B.A. Small Business definition FAR 19.001 and size standards FAR 19.102) http://www.sba.gov/size</p> <p>LARGE Business? YES <input type="checkbox"/> NO <input type="checkbox"/> SMALL Business? YES <input type="checkbox"/> NO <input type="checkbox"/></p>		
<p>Please check <u>all that apply</u> to your business for Federal Supplier Type:</p>		
Service Disabled Veteran Owned (VD) <input type="checkbox"/>	Small Disadvantaged (SD) <input type="checkbox"/>	Women Owned (WO) <input type="checkbox"/>
Veteran Owned (VO) <input type="checkbox"/>	Minority Institution (MI) <input type="checkbox"/>	HUB Zone (HZ) <input type="checkbox"/>
SECTION 2 - STATE OF ARIZONA SMALL BUSINESS INFORMATION - <i>REQUIRED</i>		
<p>Are you self-certified according to this State of Arizona definition? <i>"100 full-time employees or less OR \$4 million in volume or less in the last fiscal year"</i></p>		<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>
<p>Per FAR 52.219-1 and under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUB Zone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall be punished by imposition of fine, imprisonment, or both; be subject to administrative</p>		

remedies, including suspension and debarment; and be ineligible for participation in programs conducted under the authority of the Act.			
Print Name:			
Signature:			
PHONE:			FAX:
VENDOR – LIST PRODUCT or SERVICE PROVIDED			
IF BUYER NAME IS LISTED PLEASE RETURN TO BUYER	Buyer:	Phone:	Fax:

NOTE: IF BOTH PAGES OF THIS FORM ARE NOT COMPLETED THE FORM WILL BE RETURNED TO YOU. **Arizona State University (ASU)** is fulfilling a mandate associated with state agencies increasing procurements from Arizona Small and Diverse Businesses.

ATTACHMENT 1 – RISK ASSESSMENT AND VALUE ADDED PLAN

Introduction

The purpose of the Risk Assessment and Value Added (RAVA) plan is to identify if a vendor can quickly calculate the risks on a future project in terms of money, time, and client expectation (of quality and performance).

The RAVA plan is used to:

1. Assist the client in prioritizing firms based on their ability to understand the risk of a project.
2. Provide high performing vendors the opportunity to differentiate themselves from their competitors due to their experience and expertise.
3. Minimize the effort of experienced companies who are competing for the project.
4. Provide a mechanism for the high performers to regulate the low performers by ensuring that if they are not selected, the selected company will have to minimize all risks that they have identified.

Vendors should keep in mind that the RAVA plan is only one step in the selection process. If all the RAVA plans are the same, the RAVA plan will have little impact in the selection (other factors, such as past performance and interview will dictate the selection).

RAVA Plan Format

The format for the RAVA plan is attached. The RAVA Plan should clearly address the following items in a non-technical manner:

1. List and prioritize major risk items that are unique to this project. This includes areas that may cause the project to not be completed on time, not finished within cost expectations, generate any changes, or may be a source of dissatisfaction for the owner.
2. Explain how the vendor will avoid / minimize the risk. If the vendor has a unique method to minimize the risk, they should explain it in non-technical terms.
3. Propose any options that could increase the value (expectation or quality) of their work. List any value or differential they are bringing to the project.

In order to minimize any bias by the evaluation committee, the RAVA Plans must not contain ANY names (such as vendor, sponsor, or personnel names, project names, product names, or company letterhead).

The RAVA Plans should not contain any marketing information.

The client's goal is to make the selection process as efficient as possible. Efficiency is to minimize the effort of all participants, especially those who will not get the project. Therefore, the RAVA plan should be a brief and concise overview of the major risks on the future project. The RAVA plan must not exceed **3** pages.

Risk Assessment and Value Added Plan Format (2 Page Maximum)

Please prioritize the risks (list the greatest risks first). You may add/delete the risk tables below as necessary. (Font to be no smaller than size 10)

Risk 1:
Solution:

Risk 2:
Solution:

Risk 3:
Solution:

Risk 4:
Solution:

Vendors should identify any value added options or differentials that they are proposing, and include a short description of how it adds value to the project/the Universities. Identify if the items will increase or decrease schedule, financial consideration, or expectations. You may add/delete the value tables below as necessary.

Item 1:
Impact:

Item 2:
Impact:

Item 3:
Impact:

ATTACHMENT 2 – PAST PERFORMANCE INFORMATION - VENDOR

Guide to Collecting, Submitting, and Updating Past Performance Information

Section 1.0 - Background

Past Performance Information (PPI) is used to assist users in identifying the past performance capability of a vendor and key components of their team. This is achieved by surveying clients on past projects that have been completed. In this process, the vendor is responsible for assuring that they received high performing survey responses on all of their critical team components. One of the greatest benefits of this PPI process is that once a vendor or individual has been through the process, they do not have to re-submit this information on future best-value projects (minimizing the efforts of all parties). All of the information is stored in a database and re-used on all future best-value projects. Please note: Although having documented high PPI scores is important, it is generally only one of the components being used and analyzed by the user.

Section 2.0 - Overview of the PPI Process

There are four different options on how vendors/individuals can proceed with the PPI Process. All new vendors/individuals must follow the PPI process outlined in this document (Option 1). All existing vendors/individuals that already have PPI in the system have three options that they may proceed with (Options 2-4).

- PPI Option 1: The firm/individual does not have an existing PPI database on record. They must follow the instructions outlined in this document.
- PPI Option 2: The firm/individual has an existing PPI score and wishes to use the database without any modifications. No further action is required.
- PPI Option 3: The firm/individual has an existing PPI score and would like to submit additional surveys. No existing surveys can be deleted from the database. The firm/individual must follow the PPI process outlined in this document.
- PPI Option 4: The firm/individual can permanently delete their existing database and create a new database. The firm/individual

must follow the PPI process outlined in this document.

The PPI process consists of five major tasks, which are outlined in the Figure 1 (the procedures apply to individuals as well as companies):

1. The vendor prepares a list of past clients that they have done work for (called a "Reference List")
2. The vendor sends each past client on the Reference List a survey questionnaire.
3. The past clients complete the survey and send the survey back to the vendor.
4. The vendor will compile all of the surveys and submit the surveys as part of their proposal package.
5. The PBSRG averages all of the returned surveys to compile the vendor's average PPI score.

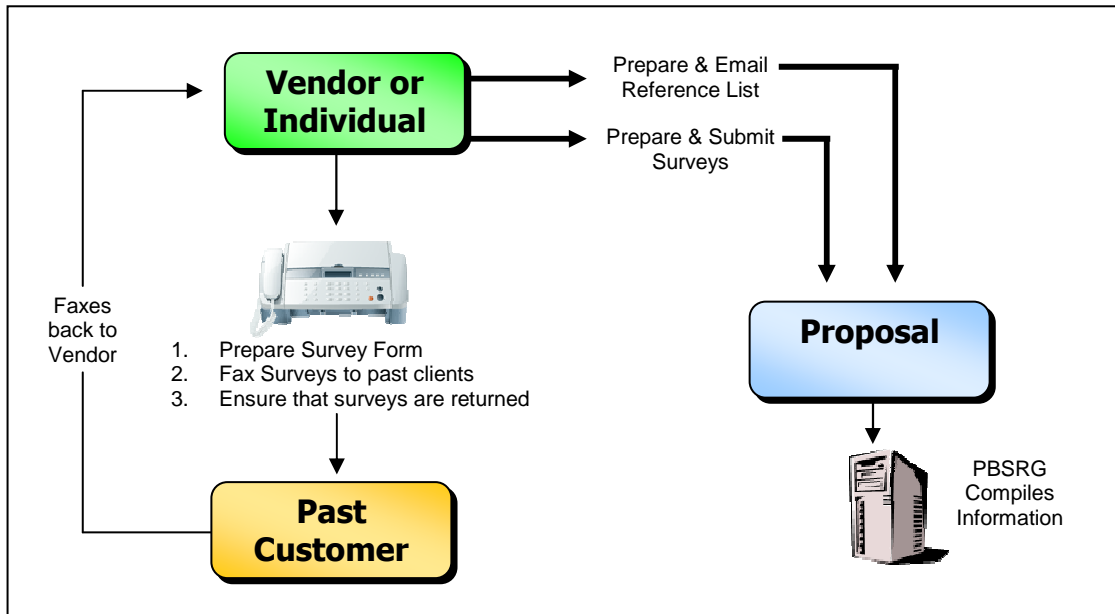


Figure 1: Survey Process

Section 3.0 – Creating a Reference List

- 3.1. All individuals identified in Section VII must create a list of past users that will evaluate their past performance. This will be referred to as a “*Reference List*”.
- 3.2. The “*Reference List*” must be submitted on a MS Excel spreadsheet. A template can be downloaded at: www.pbsrg.com/pips/ppi-database-az/
- 3.3. Each critical team member will be treated as a separate entity. Therefore, each critical team member must submit **separate** “*Reference Lists*” (they cannot be combined into one file).
- 3.4. The “*Reference List*” must contain two sheets: “Past Project List” and “Vendor or Individual Profile”.
- 3.5. The “Vendor or Individual Profile” sheet requests information about the critical team member (firm or individual) being surveyed. If the “*Reference List*” is being submitted for a company, then you will fill in the vendor information. If the “*Reference List*” is being submitted for an individual, then you will fill in the individual information. Do not fill in both. See Figure 2 for an example. “*Point of Contact*” is the individual that can answer questions about the contents of the “*Reference List*”.

The screenshot shows a Microsoft Excel spreadsheet titled "Microsoft Excel - PPI Template.xls". The spreadsheet is divided into two main sections: "REFERENCE LIST FOR VENDOR" and "REFERENCE LIST FOR INDIVIDUAL". The "REFERENCE LIST FOR VENDOR" section includes fields for "Company Name", "Type (GC, Mech, Elec)", "Point of Contact", "Phone", "Fax", and "Email". The "REFERENCE LIST FOR INDIVIDUAL" section includes fields for "Individual Name", "Company Name", "Point of Contact", "Phone", "Fax", and "Email". The "Vendor or Individual Profile" sheet is selected and circled in red. The status bar at the bottom indicates "Ready" and "NUM".

Figure 2: The “Vendor or Individual Profile” Sheet Contains Basic Information on the Entity Being Surveyed

3.6. The “Vendor or Individual Profile” also requires you to select a PPI Option.

- PPI Option 1: The firm/individual does not have an existing PPI database on record and is submitting their first database.
- PPI Option 2: The firm/individual has an existing PPI score and wishes to use the database without any modifications.
- PPI Option 3: The firm/individual has an existing PPI score and would like to submit additional surveys. No existing surveys can be deleted from the database.
- PPI Option 4: The firm/individual has an existing PPI score but is requesting to permanently delete their database. A new database will be created based on a new Reference List.

3.7. The “Past Project Info” sheet (Figure 3) requests information on each past project that will be surveyed. This includes the following (all data fields are required and must be accurate):

- CODE* - A unique (different) number assigned to each project
- FIRST NAME* - First name of the person responding to the questionnaire
- LAST NAME* - Last name of the person responding to the questionnaire
- PHONE NUMBER* - Current phone number for the reference (including area code)
- FAX NUMBER* - Current fax number for the reference (including area code)
- USER NAME* - Name of the company or institution for which the work was performed
- PROJECT NAME* - Name of the project (i.e. Bird High School A-Wing)
- DATE COMPLETED* - Date when construction was 100% completed. Construction must also be 100% completed for any design projects that are submitted.
- COST OF PROJECT* - Awarded cost of project. For design firms/individuals the cost should be the estimated cost of construction.

	A	B	C	D	E	F	G	H	I
1	CODE	FIRST NAME	LAST NAME	PHONE	FAX	USER NAME	PROJECT NAME	DATE COMPLETED	COST OF PROJECT
2	101	Jody	Link	555-659-3215	555-659-3216	North American	Data Processing Office	11/16/04	\$ 11,500,000
3	102	Bruce	Rohde	555-598-6548	555-598-6549	Plymouth Plastic	Deer Ridge Operations Cent.	05/19/03	\$ 50,000,000
4	103	Jodie	Larson	555-976-6532	555-976-6533	Edina Realty	Office Building Improve.	11/17/03	\$ 1,250,000
5	104	Mike	Paradise	555-654-6547	555-654-6548	Stone Container	Office Building Addition	06/16/05	\$ 4,700,000
6	105	Rick	Dodd	555-321-5648	555-321-5649	T.S.I. Plastics	Production Facility Renov.	09/16/04	\$ 3,400,000
7	106	Luma	Grims	555-488-4488	555-488-4489	Thomas Manned	Division Tower Bldg	07/17/05	\$ 650,000

Figure 3: The “Past Project Info” Sheet Contains Information on the Past Projects Being Surveyed

- 3.8. The “Reference List” should contain the vendors/individuals “best” past projects. Do not submit references for past clients that may give you low ratings. It is the vendor’s or individual’s responsibility to ensure that their past references are highly satisfied and will provide very high ratings. Important note: Once a survey is returned, it will not be deleted*, so it is the vendor’s or individual’s responsibility to ensure that they do not receive low ratings. (*See Section 2.0 of this attachment on how to delete an entire database)
- 3.9. The past projects do not have to be similar to any type of project. You should submit the vendors/individuals best past projects.
- 3.10. The “Reference List” must contain past projects that are 100% complete. Projects that are substantially complete or on-going may not be submitted (no credit will be given for projects that are not complete). For design firms and individuals, all projects on the reference list must also be 100% constructed. If a designed project has not been constructed, it may NOT be listed in the Reference List.
- 3.11. The maximum number of past projects that will be given credit for, is **10 (ten)** for the firm (Dealer/Manufacturer) and **5 (five)** for each individual. The minimum number of past projects that will be given credit for is 1 (one) for each component.
- 3.12. Credit will be given to vendors/individuals with more high performing surveys (Figure 4).

No	Criteria	Firm A	Firm B
1	Average customer satisfaction ratings (1-10)	9.5	9.5
2	Number of different jobs surveyed	25	1
3	Number of different customers surveyed	25	1

Figure 4: Number of Returned Surveys May Impact Competitiveness

- 3.13. Vendors/Individuals may submit as many references as they want to increase their (1-10) ratings. If the Vendor/Individual exceeds the credit limit on the “Number of different jobs” and “Number of different customers”, those numbers will be capped (as described in Section 7.3. of this attachment).
- 3.14. The “*Reference List*” must contain different projects. You cannot have different people evaluating the same job. However, you are allowed to have one person evaluate several different jobs. All different jobs require a separate code and separate survey, even if evaluated by the same person.
- 3.15. The past **client/owner** must evaluate and complete the survey. You cannot have other vendors (contractors, subcontractors, designers) evaluate your performance.
- 3.16. All critical team components must submit separate “*Reference Lists*”. The file should be saved as the Vendor or Individual Name followed by “Ref List” (see Figure 5).

Name	Size	Type	Date Modified
ABC Contractor Ref List.xls	44 KB	Microsoft Exc...	8/8/2007 1:33 PM
CCC Ref List.xls	22 KB	Microsoft Exc...	8/2/2007 12:42 PM
Jack Smith Ref List.xls	25 KB	Microsoft Exc...	9/13/2007 2:42 PM
Sylvia Roberts Ref List.xls	23 KB	Microsoft Exc...	7/20/2007 1:50 PM
Zack Thomas Ref List.xls	30 KB	Microsoft Exc...	6/22/2007 2:16 PM

Figure 5: Save Your Reference List So It Can Be Easily Identified

- 3.17. The vendor/individual is responsible for verifying that their information is accurate prior to submission.
- 3.18. The PPI process is a one-time function. The firm/individual does not have to repeat this process on future projects (once they have established their PPI scores). The firm/individual will be allowed

to add more projects to their “Reference List” at any time (as long as they submit an updated “Reference List”).

Section 4.0 – Creating and Sending Out Surveys

- 4.1. Each critical team member is responsible for creating and sending out a survey questionnaire to each of their past clients. The survey questionnaire can be found in Attachment 5.
- 4.2. The vendor/individual should input the required information on the survey questionnaire (survey code, past clients contact information, project information, and name of the firm and/or individual being surveyed) prior to sending to past clients.
- 4.3. All the information on the survey form must match the information in the “Reference List” (see Figure 6).

	A	B	C	D	E	F	G	H	I
1	CODE	FIRST NAME	LAST NAME	PHONE	FAX	USER NAME	PROJECT NAME	DATE COMPLETED	COST OF PROJECT
2	101	Jody	Link	555-659-3215	555-659-3216	North American	Data Processing Office	11/16/04	\$ 11,500,000
3	102	Bruce	Rohde	555-598-6548	555-598-6549	Plymouth Plastic	Deer Ridge Operations Cent.	05/19/03	\$ 50,000,000
4	103	Jodie	Larson	555-976-6532	555-976-6533	Edina Realty	Office Building Improve	11/17/03	\$ 1,250,000
5	104	Mike	Paradise	555-654-6547	555-654-6548	Stone Container	Office Building Addition	06/16/05	\$ 4,700,000
6	105	Rick	Dodd	555-321-5648	555-321-5649	T.S.I. Plastics	Production Facility Renov.	09/16/04	\$ 3,400,000
7	106	Luman	Greene	555-496-4560	555-496-4560	Gilthman Maper	Diversify Tower Bldg	07/17/05	\$ 950,000

**Past Performance Questionnaire
(Construction Services)**

To: Jodie Larson Phone: 555-976-6532 Code 103
 Fax: 555-976-6533

Subject: Past Performance Survey of: ABC Construction
(Name of Company Being Surveyed)
Joe Smith (PM), Sam Roberts (SS), Dena Fox (Est), Bill Larson (PCS)
(Name of Individuals Being Surveyed)

The City of Peoria collects past performance information (on firms and key personnel) to assist in procuring/awarding projects based on value. The firm/individual listed above has listed you as a reference for a past project they have completed. We would greatly appreciate it if you would take a few moments to complete this survey.

Rate each of the criteria on a scale of 1 to 10, with 10 representing that you were very satisfied (and would hire the firm/individual again) and 1 representing that you were very unsatisfied (and would never hire the firm/individual again). Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge of past performance in a particular area, please leave it blank.

Client Name: Edina Realty Date Completed: 11/17/03
 Project Name: Office Building Improvements

Figure 6: Information Survey Form Must Match Your Reference List

- 4.4. All critical individuals that participated on the project should be listed on all of the vendor's surveys (Figure 7). This eliminates the need to re-survey the client in the future (based on the individuals).

Subject: Past Performance Survey of: <u>ABC Construction</u> <small>(Name of Company)</small> <u>Joe Smith (PM), Sylvia Roberts (SS), Tim Nelson (Est), Jill Jones (Pre Con)</u> <small>(Name of Individuals)</small>
--

Figure 7: Vendors Should List All Critical Individuals on Survey

- 4.5. The critical individuals that should be listed on every survey are identified in Section 3.2 of this attachment.
- 4.6. You may only list one individual per position on each survey (i.e. If Joe Smith was a PM on the project, you cannot list another individual as a PM on that same project.).
- 4.7. The Vendor should also modify the "return information" at the bottom of the survey with a contact person and an accurate fax number (Figure 8). Remember, the survey will be sent from your past client to you (so you must enter a valid fax number).

Again, thank you for your time and effort in assisting the University of Minnesota in this important endeavor. Please fax the completed survey, no later than January 16, 2008, to: Joe Smith (ABC Construction) at Fax # (555) 555-5656

Figure 8: Vendors Should Provide an Accurate Fax Number

- 4.8. Once you have entered all of the required information, you must fax the survey to your past client. The vendor/individual should call to confirm that the survey was received, and that the past client will return the survey to the vendor prior to the due date. (Note: The previous PPI process required the surveys to be sent directly to the PIPS User from the past client. In the current process, the surveys are returned directly to the vendor or individual).
- 4.9. All returned surveys MUST be evaluated and signed by the past client. If a survey is not signed, it will NOT be accepted (Figure 9).

<u>PHIL MCGILL</u>	<u>Phil McGill</u>
Printed Name (of Evaluator)	Signature (of Evaluator)
Again, thank you for your time and effort in assisting the University of Minnesota in this important endeavor. Please fax the completed survey, no later than January 16, 2008, to: Joe Smith (ABC Construction) at Fax # (555) 555-5656	

Figure 9: Past Clients Must Sign the Survey Before Returning

- 4.10. All individuals listed on the survey will receive credit for the survey, provided that they have submitted a “*Reference List*” that contains the project as a reference.
- 4.11. PBSRG may contact the reference for additional information or to clarify survey data or ratings. If the reference cannot be contacted, there will be no credit given for that reference/survey.

Section 5.0 – Submitting PPI as part of your Proposal

- 5.1. The vendor/individual is required to submit a PPI Package as part of their proposal. The PPI Package must include the following:
 - a. Hardcopy of all returned surveys
 - b. Hardcopy of the reference list
 - c. CD with an electronic copy of the Reference List (in MS Excel .xls format)
- 5.2. Please make a photocopy of all surveys prior to submitting the package. In the event that surveys are lost in transit, they can easily be recopied and resubmitted. This will prevent you from having to resurvey your past clients.
- 5.3. You may not scan/email the surveys. All surveys must be in hardcopy and submitted in a package.
- 5.4. If you are submitting PPI for different components (i.e. several different individuals), each component must be separate in your proposal. Do not combine surveys and reference lists into the same section for all of the areas. If you have received one returned survey and wish to use the survey for both the firm and individual, please make a photocopy and place the surveys in the appropriate PPI sections.

Section 6.0 – Calculating Your PPI Score

- 6.1. Once the Universities receive the PPI Package, the survey scores will be entered into a spreadsheet.
- 6.2. Only surveys that are returned in the proper format will be entered.
- 6.3. PBSRG will then average all of the survey responses, to obtain an average rating for each criterion. PBSRG will also calculate the number of different jobs and different customers that returned a survey (Figure 10).

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	No	Criteria	ABC Average	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119
2	1	Ability to maintain the project cost	9.6	10	8	9		10			10	9	10	10		10	9	10		10		
3	2	Ability to maintain project schedule	9.6	10	8	9		10			9	10	10	10		10	9	10		10		
4	3	Quality of workmanship	9.3	9	8	8		10			9	9	10	10		10	8	10		10		
5	4	Ability to manage	9.4	10	7	9		10			10	8	10	10		10	9	10		10		
6	5	Close out process	9.2	9	8	9		9			9	9	10	10		9	9	9		10		
7	6	Ability to communicate	9.6	10	8	9		10			10	9	10	10		10	9	10		10		
8	7	Ability to follow requirements	9.4	10	8	9		10			9	9	9	10		10	9	10		10		
9	8	Overall customer satisfaction	9.6	10	8	9		10			9	10	10	10		10	9	10		10		
10	9	Number of different jobs	12	1	1	1		1			1	1	1	1		1	1	1		1		
11	10	Number of different customers	12	1	1	1		1			1	1	1	1		1	1	1		1		

Figure 10: Calculating the Vendors/Individuals PPI Scores

- 6.4. Important note: Once a survey is returned to the Universities, it will not be deleted* so it is the vendors/individuals responsibility to ensure that they do not receive low ratings. (*See Section 2.0 of this attachment on how to delete an entire database)
- 6.5. PBSRG may contact the reference for additional information or to clarify survey data. If the reference cannot be contacted, there will be no credit given for that reference/survey.
- 6.6. PBSRG will not include/count surveys if:
 - a. The past client states that the project is not complete
 - b. The raters name, client's name, or project name do not match the name in the "Reference List" (excluding minor discrepancies)
 - c. The person who rated the survey is not the same person listed in the "Reference List"

d. The past client does not sign the survey as required.

Section 7.0 – How to Modify or Update Your Existing PPI Database

- 7.1. Vendors/Individuals that have an existing PPI Database may submit more references at any time to increase their PPI score. The vendor/individual must follow the PPI Process outlined in this document.
- 7.2. The vendor/individual may update their PPI scores by submitting a new “*Reference List*” and by submitting additional surveys. The new Reference List should contain all of the previous projects, and include a list of additional (or new) projects that are to be added to the database.
- 7.3. If the Vendor/Individual exceeds the maximum credit limit on the “Number of different jobs” and “Number of different customers”, those numbers will be manually capped as shown in Figure 11. The 1-10 will still be an average of all returned surveys (no surveys are deleted).

No	Criteria	Firm J (Actual)	Firm J (Credited)
1	Average customer satisfaction ratings (1-10)	9.27	9.27
2	Number of different jobs surveyed	42	10
3	Number of different customers surveyed	31	10

Figure 11: Surveys Will Be Capped if They Exceed the Maximum Credit Limit

- 7.4. The “*Reference List*” should contain the vendors/individuals “best” past projects. Do not submit references for past clients that give you low ratings. It is the vendor’s or individual’s responsibility to ensure that their past references are highly satisfied and will provide very high ratings. Important note: Once a survey is returned to PBSRG, it will not be deleted, so it is the vendor’s or individual’s responsibility to ensure that they do not receive low ratings. The vendor/individual does have the opportunity to completely delete all PPI surveys. If the vendor/individual elects to do this, all previous surveys and Reference Lists will be permanently deleted. The vendor/individual will be responsible for re-surveying any previous clients that may have returned a survey in the past.

Section 8.0 – ADDITIONAL INFORMATION

8.1. The vendor/individual is responsible for contacting their past clients and informing them about the importance of the survey and any applicable deadline for submission. PBSRG may contact the references for additional information. If the reference cannot be contacted, there will be no credit given for that reference.

8.2. The following is a list of documents that can be found on the website that pertain to PPI:

No	Document and Website Address
1	<i>Survey Form (Furniture)</i> http://pbsrq.com/pips/ppi-database-az/6.doc
2	<i>List of Companies and Individuals with PPI Scores</i> http://pbsrq.com/pips/ppi-database-az/4.xls
3	<i>PPI Code Request</i> http://www.pbsrq.com/pips/code_req_az.htm
4	<i>PPI Scores</i> http://pbsrq.com/pips/ppi-database-az/5.xls
5	<i>PPI Database Request (\$100 fee)</i> http://www.pbsrq.com/pips/pline_req_az.htm

8.3. For additional information, please visit the website (www.pbsrq.com), or contact Jake Smithwick by email: Jake.Smithwick@asu.edu

9.0 – Frequently Asked Questions

1. *How do I know if someone returned a survey?*

Answer: Firms and Individuals are now responsible for their own collection of surveys; therefore it is their responsibility to keep track of the surveys that are returned to them. If a firm or individual missed the PPI seminar October 21st, 2008 at ASU or missed the window for which no administrative fee was charged for copies of PPI databases, the following link can be used to request copies of performance lines on file prior to October 21st, 2008
http://www.pbsrg.com/pips/pline_req_az.htm

2. *Why is a survey not counted in the PPI Database?*

Answer: A returned survey will not be counted if it does not follow the directions in this document. Most common reasons for not counting a survey include: the project is not complete, the survey information does not match the information in the reference list, the survey was turned in late.

3. *We submitted surveys with 5 individual's names on a survey but not all of the individuals have PPI scores on the Internet and their names are not listed in the table of registered individuals?*

Answer: A Reference List must be submitted along with surveys in order for an individual/company to have a PPI score. Simply including an individual's name on a reference list does not create a PPI score for that individual. All individuals must have a separate reference list submitted in their name.

4. *If I am an engineer, can I submit a past project that has not been constructed yet?*

Answer: No. Projects that have not been constructed will not be counted. All past projects must have construction completed.

5. *How do I get my internet code?*

Answer: Your online code which allows you to view your PPI score can be obtained by using the following link:
http://www.pbsrg.com/pips/code_req_az.htm

6. *How do I improve my PPI scores?*

Answer: Submit additional surveys which indicate you are a high performing individual or firm. You must also submit a new Reference List

7. *How do I get a copy of my past performance score?*
Please see Section 8.3 of this attachment for a complete list of information available on the website
8. *Our firm submitted 30 references and surveys how do you choose which 25 are counted?*
Answer: All thirty surveys are counted in your PPI score. All returned surveys (in the proper format) are counted in the PPI Score. No surveys are deleted. See Section 7.3 of this attachment.
9. *If an individual changes firms, does their PPI score follow them?*
Answer: Yes, if an individual switches employers their PPI score does follow them. The individual does not have to resubmit surveys or a Reference List. We ask that anyone changing employers please complete the following form and return it to the fax number indicated on the form: <http://pbsrg.com/pips/ppi-database-az/employer-change.doc>
10. *Is it better to get 20 surveys with 8 ratings, or 3 surveys with 10 ratings?*
Answer: There is no way to know since this is dependent on every client and all other vendors/individuals competing on a project. For example, if all other vendors competing on a project have 20 surveys with 8 ratings, then it may be better to get more surveys. However, keep in mind that all criteria are weighted and that most clients also look at other criteria besides PPI.
11. *How many surveys should I turn in?*
Answer: As many highly rated surveys as possible.
12. *How will the owner remember the job if it was done a long time ago?*
Answer: Simply ask the past client if they remember the job and if they would complete a survey on your behalf. The vendor may need to provide proof to the client that they completed the project.
13. *What if nobody can answer the survey?*
Answer: If nobody is capable of filling out a survey for a particular job then find a different past client to survey.
14. *What if the contact moved jobs, can I still get him to evaluate me?*
Answer: Yes. However, the PBSRG may verify this information. Also, the past client cannot work for the current vendor (to prevent any conflict of interest).

15. *Do I have to send multiple surveys to the same client (for each different job)?*

Answer: Yes. Every different job requires a different survey.

16. *Can I send multiple surveys to a client (just in case they don't like the Site Superintendant or Civil Engineer)?*

Answer: Yes, you can send out multiple surveys if you would like to. It is up to you to determine how you want to survey past clients.

We suggest including all critical personnel on one survey in order to minimize the amount of effort put forth by your past clients.

17. *Do the past projects have to be specific or similar to this project?*

Answer: Past projects do not have to be similar to the current project.

18. *Are you evaluating the size of the project?*

Answer: The project size is not evaluated in the PPI Process. However, this information may be reviewed in other steps of the Best-Value selection process (such as the interviews).

19. *How can we delete bad scores?*

Answer: The only way to delete bad scores is by deleting a firm/individual's entire database and start over by submitting a new reference list and surveys. See Section 2.0 of this attachment.

20. *Do we get more credit for projects that are similar?*

Answer: More credit is not given for similar projects. However, during the interviews questions about similar experience may be asked.

21. *What if I don't get any surveys?*

Answer: If no surveys are turned in than you will be given credit for one survey and an average rating of 5.

22. *Is this going to take too much time and effort?*

Answer: The PPI process is a onetime process. Once the process is complete a vendor or individual never needs to repeat it. The information is stored in a database and accessed on any future proposals. The vendor/individual may also elect to not do the PPI process (in which case they will be given credit for 1 returned survey and an average rating of 5).

23. *Are we going to get reimbursed if we don't get the award?*

Answer: No.

24. Can we submit a project that is substantially complete?

Answer: No.

25. Can we list multiple PM's on a survey if we had more than one PM work on a past project?

Answer: No. You can only list one individual per area on a single project. If you had multiple PM's work on a project, you must pick one PM that will be given full credit.

26. Can we Email surveys to past clients?

Answer: Yes, you can email the surveys, but the survey must be returned with a signature and date (from the past client). All surveys must be submitted as part of your proposal in hardcopy (the Universities will not accept electronic surveys).

27. What if we are a sub consultant and the building owner may not know that we worked on their past project?

Answer: Contact the client and let them know that you worked on the project. You may need to provide evidence that you worked on the project. You may also list the main consultant (who contracted with the client) and list your firm as a sub-consultant on the survey form. However, the survey form must have the firms/individuals name on it to receive credit.

ATTACHMENT 3 – PROPOSAL FORM

This form must be completed and stapled to the Risk Assessment and Value Added Plan and the Milestone Schedule as part of your submittal.

VENDOR INFORMATION

1. Your firm has read and will comply with all items listed in Arizona State University RFP 080909 if awarded this contract? Yes No

RAVA Plan Checklist:

- The RAVA Plan is stapled to this form.
- The RAVA Plan is 3 pages or less and is in the required format.
- The RAVA Plan does NOT contain any names, past projects, or information that may identify the contractor or critical team members.

Service Proposal

- The Service Proposal is stapled to this form.
- The Service Proposal is 2 pages or less and is in the required format.
- The Service Proposal does NOT contain any names, past projects, or information that may identify the contractor or critical team members.

PPI – Vendor Checklist:

- Surveys have been distributed to the past/current clients on the reference lists.
- All reference lists have been included in submittal package.
- The surveys have been completed and are included as part of the proposer’s submittal package.

Name of Company

Printed Name of Firm Representative Signature of Firm Representative

Phone Fax Date

ATTACHMENT 4 – PRE-PLANNING AND QUALITY CONTROL PERIOD

The pre-planning period follows the prioritization of the best value vendors. The preplanning period starts with a preplanning kickoff meeting, and ends with a final presentation before the award of the contract. During the preplanning period, the best value vendor is to perform the following tasks. Only the potential best value vendors are required to adhere to the following requirements.

- A) Create a quality control plan from the following documents:
1. RAVA plan.
 2. Lists of other risks identified by other vendors.
 3. Concerns of the client (user and project manager.)
 4. Scope/Specification and requirements.
 5. Interview minutes.
 6. Other discussion during the preplanning period.

The format of the quality control plan will be:

1. Detailed Project Scope, identifying areas of uncertainty or that lack clarity.
2. Risk Minimization Plan that clearly differentiates risks the vendor does not control and how those risks will be mitigated. The plan should be in a simple format such as:
 - a. Risk.
 - b. Plan to minimize risk for those risks the vendor does not control.
 - c. Risk/Cost to the Universities
3. Client action item list with item/action need, date required, who in the client organization is responsible, that persons contact info, and impact if requirement is not met (in \$, days, etc.)
4. Schedule with critical milestones and client action items.
5. List of Client accepted value added items as proposed in the bid RAVA Plan.

B) Create a quality assurance checklist, which will be checked weekly by the vendor, signed, and delivered to the client's project manager. The checklist is to consist of the risk as identified in the Risk Minimization plan, in abbreviated format, with checkboxes next to each risk.

Objective of Preplanning Period

The vendor is responsible for:

1. Identifying items that cannot be completed
2. Give recommendations
3. Coordinate all aspects of the project

Preplanning Final Meeting

The following actions will be conducted in the final meeting:

1. Vendor presents to University Project Management Team a completed Quality Control Plan and Quality Assurance Checklist.
2. Vendor provides a PowerPoint presentation detailing and summarizing the results of the Pre-Planning Period
3. ASU Project Manager approves the Plan and the Checklist

Weekly Report

The best value vendor will fill out a bi-weekly report throughout the life of the project that will list items which may cause the time, cost, or quality to change. Details on the bi-weekly reporting system are given following the pre-planning period checklists below.

Preplanning Period / Preplanning Meeting Checklist

Preplanning Period Activities:

Before the Final Preplanning Meeting, the potential best value vendors must complete the following activities:

<input type="checkbox"/>	Create a detailed schedule of the entire project illustrating critical tasks, risk and decision milestones.
<input type="checkbox"/>	Coordinate the project with all the critical participants (project manager, subconsultants, subcontractors, equipment suppliers, etc) during preplanning period, to make sure there are no issues with the requirements, costs, or delivery schedules.
<input type="checkbox"/>	Clarify any open issues (that do not have a date and identified accountable person) or concerns with responsible parties.
<input type="checkbox"/>	Coordinate the project with all ASU representatives (list out pertinent ASU reps and other critical groups (i.e. local gov, permitting, etc) and their requirements). Ensure that the vendor can meet their requirements.
<input type="checkbox"/>	Identify any action items needed from the Universities. This includes the client Project Manager, Facility Manager, and any other pertinent personnel. Each item should have a due date of when the vendor

	needs a response and an individual assigned to each item.
<input type="checkbox"/>	Prepare list of suggestions to the Project Manager on how the vendor can make the project more efficient. Gain approval prior to Preplanning Meeting.
<input type="checkbox"/>	Coordinate any value added items from the RAVA Plan.
<input type="checkbox"/>	Review interview statements.
<input type="checkbox"/>	Review and minimize any additional risk issues.
<input type="checkbox"/>	Prepare the Quality Control Plan
<input type="checkbox"/>	Prepare the Quality Assurance Checklist
<input type="checkbox"/>	Prepare the Preplanning Meeting Power Point presentation (see below)
<input type="checkbox"/>	Prepare the Preplanning Document (see below)

Preplanning Meeting Presentation:

At the preplanning meeting, the vendor will give a presentation to address the following:

<input type="checkbox"/>	Detailed schedule of the entire project with critical risk milestones including University action items.
<input type="checkbox"/>	List of University action items with due dates.
<input type="checkbox"/>	Respond to any questions from any University representatives (minimal.)
<input type="checkbox"/>	Review of additional risk items and plan to minimize the risks. This should include impact on cost, schedule, and “what ifs” at critical points in the project.
<input type="checkbox"/>	Review the approved list of value added items.
<input type="checkbox"/>	Identification of how the vendor will manage the project. Show how the vendor will minimize ASU’s need to make decisions, control, or manage the project.
<input type="checkbox"/>	Review the Quality Control Plan / Quality Assurance Checklist

Preplanning Document

To be considered responsive, the potential best-valued vendors must submit this document along with the attachments identified below, before the award can be made:

Please attach the following documents:

<input type="checkbox"/>	Vendor's original Proposal Form
<input type="checkbox"/>	Vendor's original RAVA Plan
<input type="checkbox"/>	Vendor's interview statements
<input type="checkbox"/>	Additional risks identified by other vendors and the client
<input type="checkbox"/>	A completed and signed Preplanning Period Checklist
<input type="checkbox"/>	Preplanning presentation slides
<input type="checkbox"/>	Preplanning meeting minutes
<input type="checkbox"/>	Quality Control Plan
<input type="checkbox"/>	Quality Assurance Checklist

The Quality Control Plan must include the following:

<input type="checkbox"/>	Detailed project schedule
<input type="checkbox"/>	Detailed list of client action items with individuals, dates, and repercussions assigned to each action item
<input type="checkbox"/>	Detailed list of all risks (identified by the vendor, and other parties) and action or solution to minimize all risks. <u>Risk the vendor does not control should be clearly delineated.</u>

Name of Company

Printed Name of Firm
Representative

Signature of Firm Representative

Risk and Performance Reporting System Summary

Overview

The risk and performance reporting system is a companion to the quality control (QC) program that is created by the best value Suppliers during the pre-planning phase. All unforeseen events or scope changes should be identified by the Vendor with a way to minimize the risk(s) (minimize the cost and time impact). The risk and performance report should be minimal, if the QC/QA was done properly by the Vendor during the pre-planning phase.

Further details about the implementation of the Risk and Performance Reporting Systems will be covered during the Pre-Award period.

ATTACHMENT 5 – VENDOR SUBMITTAL FORMS

PROPOSER SUBMITTAL CHECKLIST

Included?	Submittal
<input type="checkbox"/>	Mandatory certifications and Substitute W-9 as per Section XII
<input type="checkbox"/>	Risk Assessment and Value Added Plan (RAVA Plan) <ul style="list-style-type: none"> • <i>RAVA: no longer than two (2) pages</i> • <i>Transition Milestone Plan: one (1) page</i>
<input type="checkbox"/>	Service Proposal
<input type="checkbox"/>	Financial Proposal
<input type="checkbox"/>	Past Performance Information <ul style="list-style-type: none"> • <i>Company Reference List (hardcopy and CD)</i> • <i>Separate Individual Reference Lists (hardcopy and CD)</i> • <i>Hardcopies of all returned client surveys</i>
<input type="checkbox"/>	Financial Statements
<input type="checkbox"/>	Exceptions to Terms and Conditions

RISK ASSESSMENT TEMPLATE

This template must be used.

Please prioritize the risks (list the greatest risks first). You may add/delete the risk tables below as necessary. (Font to be no smaller than size 10)

Risk 1:
Solution:

Risk 2:
Solution:

Risk 3:
Solution:

Risk 4:
Solution:

Risk 5:
Solution:

Risk 6:
Solution:

Risk 7:
Solution:

Risk 8:
Solution:

Risk 9:
Solution:

VALUE ADDED PLAN TEMPLATE

This template must be used.

Vendors should identify any value added options or differentials that they are proposing, and include a short description of how it adds value to the project/the Universities. Identify if the items will increase or decrease schedule, financial consideration, or expectations. You may add/delete the value tables below as necessary.

Item 1: _____
Impact: _____

Item 2: _____
Impact: _____

Item 3: _____
Impact: _____

Furniture Project Performance Questionnaire

To: <<Name of Evaluator>> Phone: <<Contact Phone>> Code <<Code>>
 Fax: <<Contact Fax>>
 Subject: Past <<Name of Company>>
 (Name of Company Being Surveyed)
<<Name of Any Individuals>>
 (Name of Individuals Being Surveyed)

The PBSRG is a research group at Arizona State University that collects past performance information on vendors and key personnel to assist clients in awarding projects based on value. The firm/individual listed above has listed you as a reference for a past project they have completed. We would greatly appreciate it if you would take a few moments to complete this survey. Please rate each of the criteria on a scale of 1 to 10, with 10 representing that you were very satisfied and 1 representing that you were very unsatisfied. Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge in a particular area, please leave it blank.

Client <<Client Work Was Performed>> Date <<Date>>
 Project <<Project Name>>

N O	CRITERIA	UNIT	RATIN G
1	Ability to maintain the project cost (minimize change orders)	(1-10)	
2	Ability to maintain project schedule (complete on-time or early)	(1-10)	
3	Quality of service	(1-10)	
4	Professionalism and ability to manage	(1-10)	
5	Close out process	(1-10)	
6	Communication, explanation of risk, and documentation	(1-10)	
7	Ability to follow the users rules, regulations, and requirements	(1-10)	
8	Overall performance and comfort level in hiring again	(1-10)	
9	How well did the final product(s) match your	(1-	

	initial expectations?	10)	
10	Are you satisfied with the company / individual(s)?	Circle	Y / N
11	Installation is complete and final payment has been made?	Circle	Y / N

Printed Name (of Evaluator)

Signature (of Evaluator)

Thank you for your time and effort.
Please fax the completed survey to

APPENDIX E

RFP 080909 ADDENDUM AND CLARIFICATION



Request for Proposal 080909
Tri-University Furniture Contract

Addendum 1
March 17, 2009

Clarifications:

Past Performance Information

Attachment 2, Section 3.11 should read: The maximum number of past projects that will be given credit for is **10 (ten)** for each individual. The minimum number of past projects that will be given credit for is 1 (one) for each component.

We have requested that proposers collect information for: Manufacturer's Representative, Dealer's Representative, Lead Designer and Lead Installer. These positions may not accurately reflect your proposed structure. For instance, a Proposer may have separate designers that would work with the individual Universities or it may be a manufacturer proposing direct with no dealer representative involved. Any deviances should be listed out in your proposal.

PPI is only required for primary manufacturer, not all manufacturers proposed as additional products.

PPI is required for submittals for the Primary Budget award.

You may collect past performance information from members of the evaluation committee.

Risk Assessment and Value Added (RAVA) Plan

Section IX.2.b states - The RAVA Plan contains three sections: 1) Risk Assessment, 2) Value Added Differentiation, and 3) Transition Milestone Plan. The Risk Assessment and Value Added Differentiation sections must not exceed a combined length of two (2) pages. The Transition Milestone Plan must not exceed one (1) page in length.

Proposers may allocate the Risk Assessment and Value Added Differentiation in any manner they like, not to exceed 2 pages. Proposers are not required to have 10 items on the Risk Assessment section and 3 items of Value Added Differentiation. Proposers do not need to have one complete page of Risk Assessment and one complete page of Value Added items. These may be addressed as proposers see fit.

Questions:

1. Please give more detail on what you are looking for on the Transition Milestone Plan.

The Transition Milestone Plan should identify key action steps and milestone dates for transition to the new contract. Proposers shall provide the steps they plan to take to be fully ready to provide all services to all Universities by July 1, 2009.

2. Is there a preferred format to the Transition Milestone plan?

No.

3. How do proposers submit proposals if they choose to submit for more than one award category?

Proposers may submit one package for multiple award categories if RAVA plan, Transition Milestone plan, Service Proposal and key account individuals are all the same. The following revised Financial Proposal allows for designation of award category. Proposers should submit separate packages if there are any changes to the evaluation criteria submittals. PPI information only needs to be gathered and submitted once per individual.

4. Supplier Sustainability Questionnaire – should it be filled out by main vendor, distributor or both?

Sustainability questionnaire should be filled out by proposer of record. The questionnaire provides the ability to provide information for distributor and manufacturer policies.

5. Form of Proposal – should there be a tab for additional environmental information as requested in Section VI and e-commerce information as requested in Section V?

We anticipate that proposers will be able to meet all of the requirements outlined in the request for proposal. Exceptions should be noted in proposal response Section 7. Specific program details will be discussed with successful proposers upon contract pre-award.

6. Can you clarify what determines whether a project is a capital project?

Capital projects are those projects handled by our Capital Programs Management Group. The furniture budget of those projects varies based on the type of building being constructed. There is no minimum or maximum dollar amount that puts the furniture purchase into a 'capital project' category.

Sincerely,

Liz Chandler

Liz Chandler, C.P.M.
Purchasing Manager

Tempe Campus

PURCHASING and BUSINESS SERVICES

P.O. Box 875212, Tempe, AZ 85287-5212

Additional information requested for RFP 080909 – Tri University Furniture Contract

Please send all written correspondence to Jake Smithwick, jake.smithwick@asu.edu. The information must be submitted by **Friday, 6/5/09, 5:00PM**.

1. Main office furniture provider – provide complete specification and pricing guides for all lines proposed from the primary furniture manufacturer. Please deliver one set to each University.

ASU Purchasing – Attn: Liz Chandler
1551 S. Rural Rd.
Tempe, AZ 85281

NAU Purchasing Services – Attn: Carol Luckey
1415 S. San Francisco
Flagstaff, AZ 86011

UofA Contracting and Purchasing – Attn: Ted Nasser
220 W. 6th Street, 5th Floor
Tucson, AZ 85701

2. Provide further information about how your proposal, including primary furniture line and supplemental products, will meet the following. If an area or type is not covered, indicate as “N/A”.
 1. Classroom - tablet arm chairs, lecterns, instruction tables, stacking chairs, task chairs, etc.
 2. Training Tables - Plug & play and ganging capability, etc.
 3. Conference Tables
 4. Lounge Furniture - Lobbies, Libraries, Lounge/Study Areas and Residence Halls
 5. Outdoor Furniture - Benches, waste receptacles, tables and chairs
 6. Compact Shelving, Bookcases and shelving, Electronic Equipment Rack systems
 7. Office Accessories - clocks, hooks & racks, planters, trash, carts, etc
 8. Fixed Seating
3. Provide pricing for the attached typicals. There are two Excel files attached, and each excel file contains two separate tabs: “Primary Award” and “Budget Award”. The vendor should fill out the tab(s)

for which they are proposing. If the vendor is proposing on both the Primary and Budget Awards, they must fill out both tabs in each Excel file.

The "Installation" and "Design" fees should be actual costs for the given typical. Include a brief explanation of how it was calculated as it corresponds to your original proposal.

For the given typical, the vendor should provide "Lowest", "Mid-range", and "Highest" system cost solutions. If the vendor does not have differentiated system cost options for all three categories, then the vendor should just fill in those categories that they do have available for this contract.

The vendor is requested to submit costing for both the Tri-University and State of Arizona furniture contracts. If a vendor does not have a State contract, then this table should be left blank. There is no penalty if the vendor is not on, or does not have, a state contract.

APPENDIX F
BEST VALUE INTERVIEW QUESTIONS

Manufacturer Interview Questions Sheet

Interviewee Name (Dealer / Manufacturer) – Date

A performance-based individual has the following characteristics:

- Responds quickly and without hesitation to any technical or potential problem area.
 - Provides short, non-technical answers.
 - Minimizes the amount of work needed by the user.
 - Is able to prioritize risk.
 - Has a plan for each type of risk foreseen.
 - Understands that it is part of the job to minimize political risk, risk that is not related to the furnishing services performance.
 - Demonstrates an extensive knowledge of the service to be provided, as if they have already done it.
-

1. Draw out and explain your involvement in a typical project. Show key steps, approximate time.
 - a. What and where are the key risks you don't control and what will you do to minimize them?
 - b. What do you need from the client and when?
2. What are the main risks in working with _____ (dealer name) and how will you minimize those risks?
3. Do you currently document your performance and risks? If so, how do you document it?
 - a. Are you comfortable with documenting performance and risk?
4. How will you ensure that you remain knowledgeable about new products, technology, research, etc., that are being developed by your company? How do you ensure that the dealer incorporates your latest technological advances?
5. What percentage of the Primary line is available on the Express/Expedited program?
6. What are the lead-times for standard product, product on the Express program, and specials/custom from the time of order entry to delivery?

7. Can manufacturing time be reserved for projects, and if so what would be the necessary steps to obtain a reservation?
8. How would a multi-floor, multi-phase project be handled to ensure the product arrived at the correct time?
9. How do you ensure the end user receives your product as intended and on-time?
10. The needs of the end-user have changed, or a new user is assigned after product has been ordered. Could the Universities return new and unused products to the manufacturer?

Dealer Interview Questions Sheet

Interviewee Name (Dealer / Manufacturer) – Date

A performance-based individual has the following characteristics:

- Responds quickly and without hesitation to any technical or potential problem area.
 - Provides short, non-technical answers.
 - Minimizes the amount of work needed by the user.
 - Is able to prioritize risk.
 - Has a plan for each type of risk foreseen.
 - Understands that it is part of the job to minimize political risk, risk that is not related to the furnishing services performance.
 - Gives the impression that he or she has already implemented and operated the service.
-

1. Why were you selected for this contract?
2. How many similar clients have you worked with in terms of # of projects? Describe one contract w/ multiple projects.
3. Draw out and discuss the typical project. Show key steps, approximate time.
 - a. What and where are the key risks you don't control and what will you do to minimize them?
 - b. What do you need from the client and when?
4. What are the main risks in working with _____ (manufacturer name) and how will you minimize those risks?
5. On capital projects, what steps can you take to ensure that you are integrated at the beginning of the project to coordinate with the architect, designer & other construction components?
6. Do you currently document your performance? If so, how do you document it?
 - a. Are you comfortable with documenting performance and risk?



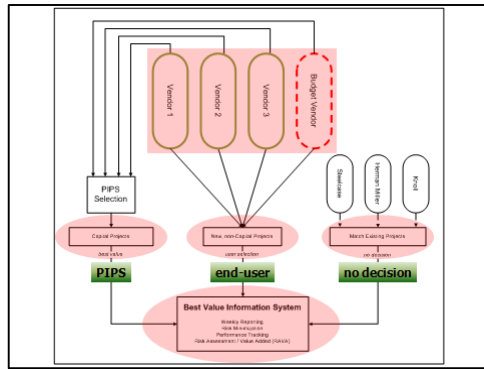
7. You have a project where the outside interior designer has shown the end-users high-end products that they love and want but cannot afford. How will you ensure the end-user is happy at the end of the project?
8. How would a multi-floor, multi-phase project be handled to ensure the product arrived at the correct time?
9. The needs of the end-user have changed, or a new user is assigned after product has been ordered. Could the Universities return new and unused products to the manufacturer?
10. How will you ensure that you are incorporating your manufacturer's latest technological advances?
11. NAU has consistently had to pay an additional cost for trip charges, per diem, lodging, travel, weekly/monthly service trips, etc. Will your dealership assess any additional costs for service to NAU or UofA?
12. What city are you based out of, and describe how you intend to provide full service to each university?

APPENDIX G
EVALUATION COMMITTEE TRAINING SLIDES

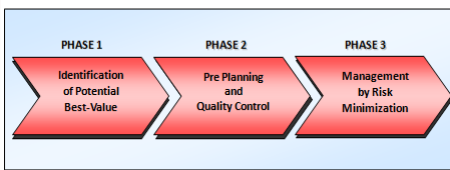
Performance Based Studies Research Group

Tri-U Furniture

Evaluation Committee Education

PIPS Best Value Overview



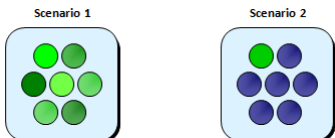
PIPS Performance Information Procurement System
WWW.PBSRG.COM

Best Value Objectives

- ▲ Award based on value
- ▲ We are assuming that furniture is NOT a commodity (not price based).
- ▲ In order to justify not awarding to the lowest price, the vendors must be able to prove their value.
- ▲ Vendors must prove their expertise and must differentiate themselves from the competitors

PIPS Performance Information Procurement System
WWW.PBSRG.COM

It is the Vendors' Responsibility to Provide "Dominant Information"



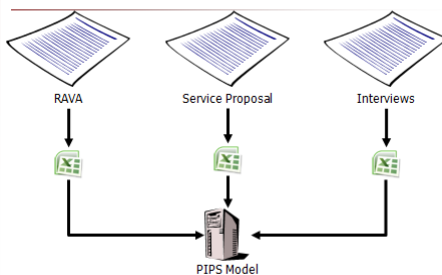
PIPS Performance Information Procurement System
WWW.PBSRG.COM

Evaluation Criteria

1. Interview
2. Risk Assessment Value Added (RAVA) Plan
3. Service Proposal
4. Financial Proposal
5. Past Performance Information

PIPS Performance Information Procurement System
WWW.PBSRG.COM

Rating Three Components



PIPS Performance Information Procurement System
WWW.PBSRG.COM

Service Proposal

Service Proposal Overview

- ▲ PURPOSE
 - describe, in non-technical terms, how the vendor will complete the service and meets the client
- ▲ MAJOR OBJECTIVES
 - outline of what the proposer is going to do
 - what will transpire as a result of this outline
 - show why/how the proposer knows the service is doable within client's constraints and needs
- ▲ RATINGS
 - rated comparatively to one another
 - numerical score (1-10) for each individual

PIPS Performance Information Procurement System™ WWW.PBSRG.COM 9


University Needs

- ▲ Installation, design, and training
- ▲ Ability to implement electronic commerce system
- ▲ Meeting specific needs of ASU, UA, and NAU for departmental and capital projects
- ▲ Ability to integrate with other phases of capital projects

PIPS Performance Information Procurement System™ WWW.PBSRG.COM 10

Rating Process

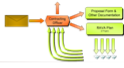
- ▲ The RAVA Plans are rated comparatively to one another and must not be rated against preset criteria
- ▲ The RAVA Plans should be rated on a 1-10 scale. They should all receive a 5 rating (average score) unless there is dominant information to give a higher/lower rating




- ▲ Rating should take no longer than 10 minutes per proposal

PIPS Performance Information Procurement System™ WWW.PBSRG.COM 11

Rating Process



- ▲ Committee will get a copy of:
 - Each Service Proposal (coded)
 - Service Proposal Rating Sheet
- ▲ Evaluation Committee MUST rate the Service Proposals individually (it must not be a group rating)



PIPS Performance Information Procurement System™ WWW.PBSRG.COM 12

Risk Assessment Value Added Plan (RAVA)

13

RAVA Plan Objective

- ▲ PURPOSE
 - RAVA Plan serves as a tool to assist the client in prioritizing vendors based on their ability to understand the project.
 - Provide vendor opportunity to differentiate themselves from their competitors (to prove they are not a commodity)
- ▲ MAJOR COMPONENTS
 - Risk Assessment
 - Value Added
 - Transition Milestones
- ▲ RATINGS
 - rated comparatively to one another
 - numerical score (1-10) for each individual
 - 10-20 minutes on each plan
 - individual ratings

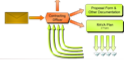
PIPS Performance Information Procurement System™ WWW.PBSRG.COM 14

Risk Assessment & Value Added (RAVA) Plan


1. Risk Assessment Section
 - Identify major risks
 - Explain why the risk is a risk
 - Address how the risk impacts time, money or satisfaction
 - Should be a unique risk to the current project
 - Identify solution to avoid / minimize the risk
 - Non-technical explanation
 - Must explain how risk is avoided
2. Value Added Section
 - Propose any options that could increase the value (expectation or quality) of their work.

PIPS Performance Information Procurement System™ WWW.PBSRG.COM 15

Rating Process




- ▲ Committee will get a copy of:
 - Each RAVA plan (coded)
 - RAVA Rating Sheet
- ▲ Evaluation Committee MUST rate the RAVA plans individually (it must not be a group rating)



PIPS Performance Information Procurement System™ WWW.PBSRG.COM 16

Rating Process

- ▲ The RAVA Plans are rated comparatively to one another and must not be rated against preset criteria
- ▲ The RAVA Plans should be rated on a 1-10 scale. They should all receive a 5 rating (average score) unless there is dominant information to give a higher/lower rating



- ▲ Rating should take 10-20 minutes per plan

PIPS Performance Information Procurement SystemSM WWW.PBSRG.COM 17

Example Rating Sheet

RAVA PLAN RATING SHEET
PROJECT ABC

Instructions:
The Risk Assessment and Value Added plan must **not** contain any names or products that may be used to identify who the contractor is. Risk plans are rated on a scale of 1-10, with 10 being the best and 1 being the worst. All plans should start from an average (or 5 rating) and go up and down depending on the relative value (compared to one another). If a plan stands out it should get a 10. If none of them seem any different, they should all get an average score of 5. If a plan is in fact that the owner feels like they should not get the project, they should be rated a 1.

No	Criteria	Team 1	Team 2	Team 3	Team 4	Team 5
1	Risk Assessment Evaluation <i>Identify risks and ensure controls exist across the project</i>					
2	Value Added Option Evaluation <i>Identify and rank the value added options of risks, costs, or quality</i>					
3	Overall RAVA Plan Rating					

By signing your name below, you state that you have based your scores on the contents of each Risk Assessment and Value Added Plan. You are also stating that you have had no prior knowledge of any plan and claim they belong to. You further agree that there is no collusion or conflict of interest between yourself and any other party involved.

Name: _____ Signature: _____ Date: _____

PIPS Performance Information Procurement SystemSM WWW.PBSRG.COM 18

RAVA Plan Summary

- ▲ The Plan is 3 pages maximum (RAVA: 2 pages, Milestone Plan: 1 page)
- ▲ No marketing / No technical information
- ▲ Avoid general risks / solutions
- ▲ Identify value added options (and explain why)
- ▲ The Plan becomes part of the final contract.
- ▲ If nobody can clearly differentiate themselves in the RAVA Plan, the prioritization will be based on other factors.

PIPS Performance Information Procurement SystemSM WWW.PBSRG.COM 19

Interviews

20

Interview Overview

- ▲ PURPOSE
 - see if individual has actually thought about the project
 - often more valuable than PPI, RAVA plans, or Service Proposals
- ▲ MAJOR OBJECTIVES
 - minimize work and effort of all parties (20 minutes per individual)
 - not a technical review of project
 - clarify information in RAVA or Service Proposals
- ▲ RATINGS
 - standard set of questions for each vendor; follow-up questions as needed for clarification
 - rated comparatively to one another
 - numerical score (1-10) for each individual

PIPS Performance Information Procurement SystemSM WWW.PBSRG.COM 21

Characteristics

- ▲ **Insight:** see the project before it is done, see it with very little information, and know what makes this project different
- ▲ **Expertise:** quickly identify the risk and how risk should be minimized.
- ▲ **Understanding:** problems and concerns of the unique client.
- ▲ **Value:** know how to add value to the project.
- ▲ **Accountability:** responsibility to solve the problems before/when they occur.
- ▲ **Vision:** what they are going to do and how they will measure their performance.

PIPS Performance Information Procurement SystemSM WWW.PBSRG.COM 22

Best Value Key Points

23

Remember...

- ▲ Look for dominant information and rate accordingly
- ▲ Avoid grouping the ratings

High Performer / Differentiates High Rating (10)	Low Performer / Unqualified Low Rating (1)
---	---

- ▲ Differentiation is the key
- ▲ It is the vendors' responsibility to show what they know

PIPS Performance Information Procurement SystemSM WWW.PBSRG.COM 24

APPENDIX H
EVALUATOR RATING FORMS

RAVA Plan Rating Sheet

Instructions:

The Risk Assessment and Value Added plan should not contain any names or products that may be used to identify who the vendor is. Criteria are rated on a scale of 1-10, with 10 being the best and 1 being the worst. All plans should start from an average (or 5 rating) and go up and down depending on the relative value. If a plan stands out it should get a 10. If none of them seem any different, they should all get an average score of 5. If a plan is so bad that the rater feels like they should not get the project, they should be rated a 1.

Teams

NO	CRITERIA	A	B	C	D	E	F	G
1	Risk Assessment Evaluation (Ability to identify and minimize potential risk unique to this project)							
2	Value Added Option Evaluation (Ability to add value to the project in terms of time, money, or quality)							
3	Transition Milestone Plan Evaluation							
4	Overall RAVA Plan Rating							

Teams

NO	CRITERIA	H	J	K	L	M	P	R	S
1	Risk Assessment Evaluation (Ability to identify and minimize potential risk unique to this project)								
2	Value Added Option Evaluation (Ability to add value to the project in terms of time, money, or quality)								
3	Transition Milestone Plan Evaluation								
4	Overall RAVA Plan Rating								

By signing your name below, you state that you have based your scores on the contents of each RAVA plan and that you have had no prior knowledge of any plan and whom they belong too. You further agree that there is no collusion or conflict of interest between yourself and any other party involved.

Printed Name

Signature

Date

Interview Rating Sheet

OVERVIEW AND INSTRUCTIONS

A standard set of questions will be asked to each firm. The rating committee reserves the right to ask for clarification on any question or response to a question. All individuals must be interviewed separately, and no other individuals (from the vendors group) can be present. The committee is encouraged to take notes because no rating will take place until all interviews are complete. The final objective is to assign a numerical score (1-10) for each Key Component. The scores must be done individually and should not be done on a group consensus. Once the scores are complete, they will be averaged together to get an overall team score. The interviews should be rated comparatively to one another. If there is an individual that stands out from the rest, you should give them a higher score (10). If there is an individual that you do not want on this project, you should give them a low score (1). If the interviews are all about the same, then you should give them all the same ratings (5). Do not feel obligated to rank the teams if there is no difference. If a firm has multiple individuals assigned to the same Key Component, provide an overall rating for that firm's Key Component.

PRIMARY Award

Teams

NO	KEY COMPONENT	Firm A	Firm B	Firm F	Firm H	Firm P	Firm S
1	Manufacturer's Rep.						
2	Dealer's Rep.						

BUDGET Award

Teams

NO	KEY COMPONENT	Firm A	Firm F	Firm K	Firm L	Firm R
1	Manufacturer's Rep.					
2	Dealer's Rep.					

By signing your name below, you state that you have based your scores on the contents of each Interview. You further agree that there is no collusion or conflict of interest between yourself and any other party involved.

Printed Name

Signature

Date