
Industry Transformation: Testing Best-Value and Leadership in Non-Construction Industries

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The Performance Based Studies Research Group (PBSRG) in the Del E. Webb School of Construction at Arizona State University has conducted research in the development and application of best-value and leadership based process models in construction for the past 14 years. Despite significant success in terms of construction performance, the concepts and ideas of the best-value/leadership process models have met consistent resistance. Due to the construction industry's characteristics, fragmented system, and inability to change easily, documenting industry impact has been difficult. The PBSRG has embarked on an effort to test their research concepts of best-value/leadership process models in industries outside of construction, with a less fragmented system, but with similar characteristics. In this way, the authors hope to gain a better understanding of the research models' impact on an industry. This paper presents the initial testing of the best-value/leadership process model in the area of dining services, specifically on a \$300+ million contract for one of the largest campuses in the United States, Arizona State University. The initial results show a significant increase in guaranteed money, performance, and risk minimization. The expanse of the effort seeks to create an industry transformation model to be first tested in dining services and then brought back to the construction industry as an example to drive change in the future.

Key Words: Risk minimization, best-value, leadership, industry transformation

Introduction

Over the past fourteen years the Performance Based Studies Research Group (PBSRG) in the Del E. Webb School of Construction at Arizona State University has conducted research in the development and application of best-value and leadership based process models (Kashiwagi 2008). The process models, like most construction research, seek to enhance efficiency, performance, and minimize risk; however, the developed process models accomplish this by uniquely (and somewhat counter-intuitively) attempting to:

- Reduce client management requirements, direction, and control;
- Create an effective risk transfer and minimization framework;
- Assist in defining performance and value (for entities, departments, vendors, or individuals)
- Establish accountability through measurement;
- Motivate continuous improvement,
- Develop a supply chain mentality/mode of operation;
- Minimize any contractual leverage; and
- Increase organizational efficiency through a win-win environment.

The process models provide a cyclical method to define, measure, analyze, improve, and control (Pande and Holpp 2001) the performance of services, vendors, and personnel. The research group's best value model based on principles of efficiency to deliver construction and has been documented to minimize management by up to 90% and increase performance at an average of 98% (with 530 construction project valuing \$683 Million, finishing 98% on time, on budget, and with 100% client satisfaction) (Sullivan et al 2007). The PBSRG's best value and leadership concepts have been implemented within organizations and overlaid across most construction procurement and delivery structures including design-bid-build, CM at Risk, Design-Build, IDIQ, JOC, and low bid, providing enhanced results.

Beyond the project level, the leadership based models have been observed to create a type of "paradigm shift" in organizational culture due primarily to the rigorous and data driven analysis, alignment, measurement, and accountability required by the process models. Due to performance and risk based data produced by the models, bureaucratic inefficiencies are spotlighted and required to be minimized or eliminated. The models are not designed to reconfigure or drastically change any existing systems, only to enhance and incrementally adjust processes to encourage an increase in performance.

In the field of construction, the concepts have repeatedly met resistance from the majority of the industry that the PBSRG has proposed to. The reasons for resistance vary but primarily center on opposition to: 1) the claimed research results, 2) the requirement for reduced client involvement and control, and 3) the consistent measurement and updating of performance to drive accountability. Additionally, like any new system, there is a natural resistance to change, which seems to often manifest itself in a form based upon the reasons previously mentioned.

Since the research is "research," all participating clients and research partners are strongly encouraged to not trust or "take at face value" any of the proposed concepts or results; but instead are encouraged to test the concepts in some way within their organization. While the partners must rely on PBSRG and their expertise for the education of the correct application of the concepts and tools, the client results experienced should be consistent with the historical testing. It is from "pioneering" research clients that the effort has grown to over \$1.3 Billion of total construction and services procured, managed, and tested. The results, albeit academically substantial, are insufficient to truly impact and improve the construction industry, let alone change any entity's behavior or standard business practices at face value.

For an industry that is plagued by poor performance, decreasing productivity, questionable quality, low profit margins, high levels of risk, high levels of competition, and an overall disappointing image, change is needed. The proposed changes and research conducted by the PBSRG have consistently experienced high levels of performance improvement, profit increases, cost decreases, better quality, and reduced client management costs; but the changes needed to reshape and improve the entire construction industry, though perceivable, are yet unlikely if the PBSRG research effort continues with a traditional research model.

In order to gain greater understanding of the research's impact on an industry, the authors propose to test the concepts and developed process models in other industries with less fragmentation and perhaps lower levels of change resistance when compared to construction. As

such, the PBSRG has embarked on an aggressive research testing platform for industries outside of construction so a more complete industry wide analysis can be achieved, the concepts tested, and models improved based on industry transformative change. Once verified, the research will return to the construction industry with more results and test data that can be used to persuade potential research clients, push the research forward, and help realize industry wide improvements in construction.

This paper highlights the initial results of the authors' efforts in industries outside of construction and concludes with the path forward for the research effort.

Research Methodology

The methodology employed to test best value and leadership based process models outside of construction consisted of three primary steps:

1. Examination of the outsourcing process (and literature) to find suitable non-construction test industries
2. Development and application of best-value/leadership based process models derived from the PBSRG research concepts
3. Evaluation of results and modification of process models based on collected data.

Over time, as the testing increases and expands, the research will focus on the impacts on the industry transformation and the most successful strategies to realize sustainable change.

Identifying Test Industries: Outsourcing is Outsourcing

Outsourcing is defined as, "Send[ing] out (work, for example) to an outside provider or manufacturer in order to cut costs (Outsourcing, 2008)." Construction is an outsourcing industry. Clients outsource design and construction to architects and general contractors, respectively, who in turn outsource it to engineers/consultants and subcontractors. These sub-trades then complete the majority of the "actual" work. Whether it is IT Outsourcing, Application Service Providers, Business Process Outsourcing, Knowledge Process Outsourcing, or Person-to-Person Outsourcing, the act of outsourcing continues to grow in popularity across all industries, including those of the built environment. The strategy or business practice of outsourcing is finding a home in a growing number of industries, and is predicted by many studies to continue doing so. (Clancy, 2006; "Customers admit blame," 2007; Collins, 2006; Taylor, 2007; "Offshore Product Design," 2007; Mukherjee, 2007; Kanth, 2007; Sankappanavar, 2007).

Despite the number of outsourcing growth projections, a consistent and robust outsourcing strategy has yet to be developed. For example in construction, many methods exist to outsource construction: design-bid-build, CM at Risk, design-build, etc.; however, no substantial research exists empirically proving one method is better or worse than another. Each has its strengths and flaws, but the underlying problems remain consistent across all avenues of delivery. In other

industries, a large number of companies that choose or have chosen the outsourcing route are learning that, based upon the current methods, it is more challenging than anticipated. This common issue was captured in the following PricewaterhouseCoopers (2005) report excerpt. “Most senior executives are not blind to the risks of outsourcing, but many consider them as having been addressed in the course of their company’s due diligence review. Some recognize that critical risk factors change continuously, but, under pressure to achieve the business benefits of outsourcing, they can still be persuaded to approve outsourcing initiatives that lack an effective risk-management process. Others simply don’t know how to manage such complexity.”

Most accounts of outsourcing failures were defined by unmet expectations and/or premature contract terminations. Multiple studies conducted by separate entities have identified outsourcing failure rates reaching frequencies of up to fifty percent (PricewaterhouseCoopers, 2006; “Providers and users alike,” 2005). One of the most extreme cases was found in a study conducted by Compass Management Consultants, which claims “Some 65 percent of outsourcing deals worth more than £20 million are failing before the contract expires (Snell, 2007).”

While many conclusions indicated that outsourcing has had high rates of failure, none of the rates were 100 percent. Therefore, some researchers have identified a sample of clients satisfied with their outsourcing results and experiences (PricewaterhouseCoopers, 2007; Lepeak, 2007). Reading further into each report, among the researchers who found satisfaction in outsourcing ventures, none could disagree that there is a need for improvement in the outsourcing process. Identifying the inefficiencies and/or the sources of outsourcing failures, similar areas in need of improvement were found across a number of outsourced services. It was seen that there are a number of common problems faced as a result of the current outsourcing business strategy, which cause negative affects regardless of the technical nature of the service being outsourced (“Gartner,” 2006; Ruggles 2007; PricewaterhouseCoopers, 2005; PricewaterhouseCoopers, 2007; “Customers admit blame,” 2007; “Providers and users alike,” 2005; FMLink, 2002; Cao & Wang, 2006; Click, 2004).

Summarizing the predominant or common inefficiencies identified in the literature, the authors captured the following:

- A lack of formal strategy or pre-planning
- Ineffectiveness in differentiating vendors’ performance levels/capabilities
- Excessive client decision making, and therefore acceptance of risk
- Poorly defined project scope and service requirements
- Unrealistic/misaligned expectations that lead to adversarial relationships
- A lack of effective risk identification and management process
- A lack of performance measurements
- Inability to develop an appropriate level of relationship control/management (governance)

The key problem continuously surfacing in the available past research is that most outsourcing models require the clients to make too many decisions. The advice to create detailed contract terms and a governance structure based upon direction and inspection, in an attempt to control the vendor, requires the client to accept all risks associated with each of their decisions. By telling the vendor exactly what to do, how to do it, and by when it needs to be done, the client

becomes accountable for the success of the service. In other words, the party that makes the decision(s) becomes accountable for the result(s). To outsource a function is to hire an outside individual/vendor, which possesses greater efficiency than personal/in-house capabilities. It is illogical for a client, who is consciously transferring an aspect of their business to a specialist or expert to feel comfortable telling the specialist what to do and how to do it.

The problem therefore identified is that the current outsourcing methods rely too heavily on client decision making. The effect of which is a difficulty in differentiating between the value of each competing vendor, and the responsibility of minimizing project risk being retained by the client (who is less capable/qualified than the expert/specialist, because they would not be outsourcing otherwise). This problem, seen in most outsourcing industries with available literature, is prevalent and key in the inefficiencies of construction. So in seeking a comparable industry to construction to begin the authors' non-construction research and testing, the literature and past research indicated that any industry that outsources seems to be comparable. Table 1 below shows a side-by-side comparison of general outsourcing inefficiencies and construction inefficiencies.

Table 1

Inefficiency Comparison/Similarities

General Outsourcing Inefficiencies	vs.	Construction Inefficiencies
A lack of formal strategy or pre-planning		Reactive; A lack of pre-planning
Ineffectiveness in differentiating vendors' performance levels/capabilities		Inability to differentiate contractors' performance level/capabilities
Excessive client decision making through detailed requirements and service level agreements		Excessive client decision making through detailed requirements
Poorly defined project scope and service requirements		Unaligned expectations/Excessive client decision making
Unrealistic expectations that lead to adversarial relationships		Unaligned expectations that lead to adversarial relationships
A lack of affective risk identification and management process		A lack of affective risk identification and management process
A lack of performance measurements		No performance information; Lack of accountability
Inability to develop an appropriate level of relationship		Inappropriate/ineffective level of client control

The Dining Service Industry

The traditional dining service vendor selection process is very similar to most service procurement methods. The opportunity is advertised, a request for proposal (RFP) is created, proposals are submitted, and interviews are conducted. The vendor is most commonly selected based upon the dollar amount proposed, their skills in sales and marketing, and their relationships within the industry. Once the selection is made, a contract is then negotiated, executed, and managed by the client.

More specifically, large dining service contracts start with the creation of a RFP that is hundreds of pages in length. The hundreds of pages contain detailed specifications that address every component of the dining service. Vendors are usually evaluated by means of their proposals and interviews. In most public projects, the traditional selection criteria are broken down into three categories (Sutton 2007):

- The vendors' financial projections
- The vendors' dining program (i.e. types of food/brands)
- The vendors' qualifications (i.e. the project team, the company history, safety program, training program, etc.).

The usual weights given, in a public contract, are roughly (Sutton 2007):

- 40% for financial projections
- 30% for the vendor's program
- 30% for the qualifications

Because roughly 70% of the selection criteria weight is given to proposed finances and the future dining program, the choice is strongly based upon dollar amounts and marketing information. The vendors' proposed finances are built around the client's requirements and are not guaranteed values. They are non-binding figures that are built to be changed in the negotiation period. The general outcome of this structure is the submittal of proposals containing over 1000 pages of (non-binding) marketing information, (non-binding) sales intensive interviews, and minimal pre-award effort from the project teams. Because the selection focus is on sales and marketing, the project team is often not committed to seriously considering the project execution and risk until after an award has been made. This often leaves them ill prepared for the transition (Scotty, 2007).

Riley (2006) explains the selection process from the owner's view. Interviews typically consist of vendors feeding the evaluation committee with exquisite foods and making idealistic promises. With their limited information, the evaluation committee then ends up choosing the vendor that presents the highest quality of food (which may have no relationship to the food serviced by the contract) and makes the biggest promises. Upon negotiation, the vendor's lawyers battle to keep the promises out of the contract. At this point, there is often not enough time to re-bid or negotiate with another vendor before dining services are needed, and the client is forced to proceed with the selected vendor. This situation creates the beginning of a long, tedious, and often adversarial relationship. This approach to differentiating and selecting vendors ultimately gives the competitive advantage to those with the most talented sales and marketing personnel, instead of those capable of delivering the greatest value.

As soon as a contract is signed, the client begins managing the vendor. Even though the client has hired the vendor for their expertise, they direct the vendor's service through the detailed contract specifications, which outline exactly what to do, how to do it, and how often it needs to be done. This structure encourages the vendors to minimize risk by ignoring their personal expertise and simply doing what the client thinks is best. The client's attempt to take control over the service requires them to pay employees in their organization to manage the outsourced service provider. These positions are used to inspect the vendor's compliance with the client's specifications and manage any client directed changes to the service. As challenges arise, the client decides how to solve the problems and their responsible personnel oversee the solutions' execution. Because the majority of clients manage their outsourced services in this fashion, the market underutilizes vendor expertise and creates a safeguard for unskilled service providers.

This structure gives no competitive advantage to high performing vendors and, because the outcome of the service is the result of client decisions/control, the client retains the risk.

The characteristics of the traditional construction delivery environment are comparable to the traditional dining service selection process (Kashiwagi 2008):

1. Contractors are competed as a commodity and selected primarily on the amount of their proposal.
2. No competitive advantage is given to contractors with experience, training, ability to preplan, or satisfy the customer's needs.
3. Specifications are relied on by the client to ensure quality level, but are often used by the contractor to provide the minimal amount of service required. These conflicting views support an adversarial environment.
4. Performance is viewed as adherence to prescribed technical requirements, even though they may not satisfy the needs of the client.
5. Once a contract has been signed, the contractor is heavily directed, managed, and controlled by the client.

Initial Tests

The adage of “the first time is always hardest” could not be truer in the case of transferring a construction based best-value/leadership driven process model into another industry. After numerous unsuccessful proposals, presentations, and discussion with numerous clients and different potential users, the authors succeeded in convincing several key vice presidents and directors at Arizona State University to allow the test application of the PBSRG best-value/leadership model onto the procurement, setup, and management of the university's new ten-year, \$300+ Million dining services contract (set to commence Fall 2007). This was a groundbreaking opportunity as it afforded the initial test to be on the largest campus dining contract ever signed. Several important theories and hypotheses would begin to be tested as a result of this opportunity:

1. *Theory:* If the problems in construction and other outsourcing industries are process based, then a process correction is needed.
2. *Hypothesis:* An efficient and effective leadership model is transferable to any industry as leadership processes are not dependent upon any technical details or specifics of an operation, they are based on correct principles and concepts.
3. *Hypothesis:* As in construction, vendors/contractors struggle with risk identification and minimization due to the clients' traditional requirement and system structure that encourages reactive behavior as opposed to proactive behavior.
4. *Hypothesis:* Adaptation of a performance measurement and risk measurement driven accountability system requires a significant change from traditional modes of business and will correlate with an increase overall performance.
5. *Theory:* In an outsourced system where a high performing vendor has been selected based upon performance information, and risk minimization has been conducted prior to

contract award, the majority of issues, problems, and inefficiencies during the course of the service will be due to the client.

Overview of the Best-value/leadership Test in Dining Services

The first action in testing the construction based best-value/leadership model in dining services was to examine the predominant inefficiencies in the traditional vendor selection/management process as described to the authors by consultants and client managers in the dining services industry. This information was used for a benchmark as well as to identify how the best value principles needed to be applied to fit the needs of the dining service industry. The problems found to take place during the outsourcing of dining services were identified as the following:

- Vendors commonly misunderstand the client's needs and intent, as expressed within the RFP.
- [There is] a disconnect between promises made by [the vendor's] sales team and the responsibility for program delivery.
- Too much focus on marketing and fluff. What is presented in the proposal is never realistic of the actual contracted service.
- The selection criteria and eventual service provided are not based on performance or measurement.
- [W]e have seen where high quality individuals are presented, but do not actually commit to being part of the team (commonly referred to as bait and switch).
- The traditional process results in adversarial relationships where the objectives of the client and the provider are not aligned.
- Lack of involvement of the management team in preparing the proposal; typically, food service proposals are prepared by Business Development folks who are more concerned with winning the bid than creating a win/win outcome.
- When a dining service contract is awarded to a non-incumbent vendor, the winning firm is usually not prepared for the transition.

Beyond the inefficiencies identified by the client and consultant, the authors identified or interpreted the following:

- An abundance of client directed specifications that require client decision making and acceptance of risk.
- Excessive client management - direction, inspection, and control.
- An excessive use of non-binding information (marketing) in proposals and interviews. Beyond this problem creating unrealistic and misaligned expectations, it becomes difficult to objectively differentiate the vendors' value.
- The interviews/presentations are given by sales and marketing personnel, not critical team components.
- Large promises made by the vendors that were kept out of the contract by the vendor's lawyers (lack of accountability).

These inefficiencies or problems resulting from the industry closely align with the literature and those of the construction industry, providing confidence in the original conclusion that dining

services is indeed a comparable industry to construction as it faces the same outsourcing problems.

The Selection of the Vendor

As discussed previously, traditional RFPs, and the technical requirements within them, were found to commonly be comprised of hundreds of pages. The purpose of such detailed terms was an attempt by the client to control the service level received, and for the use of leverage throughout the life of the contract. These traditional detailed requirements serve the same purpose and generate the same inefficiencies as the construction industry’s minimum standard specifications. They create unaligned expectations and lead the client to believe that extremely tight terms would force every vendor to perform the same. The service providers were therefore seen as commodities, and the only evaluation criterion taken seriously by the client was price.

Upon understanding the concerns, constraints, and identifying the intent of the university, the best-value/leadership principles were tailored to fit the dining service selection and contract management and a new process model was created. Figure 1 illustrates the process described in the RFP, which include past performance information, risk and value analysis, interviews, and financial proposal (min guaranteed commissions). Once selected the chosen vendor moved into preplanning and eventually weekly risk reporting once the contract began. Tables 2 & 3 presents the evaluated categories and results (raw and weighted scores respectively) of the selection.

Vendor B was award the contract and moved into the preplanning component of the best-value/leadership model. As is evident in Table 2, the incumbent (Vendor A) was substantially lower in its financial proposal than the other two proposers. The other two proposers, conversely, were within \$300,000 of each other for minimum guaranteed commission and investment in the university across the ten year time horizon. It is possible that the incumbent was not able to see the university changing its behavior to move into a best-value/leadership based process where the vendor is afforded greater control and responsibility. This is an additional theory that was spawned from the initial non-construction test and must be examined further.

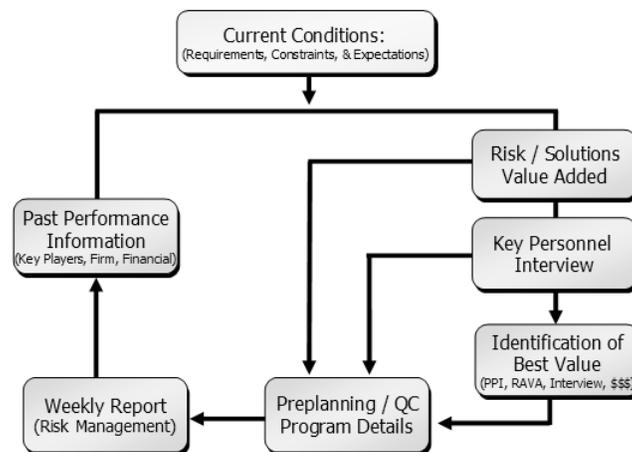


Figure 1: Dining service procurement best value process

Table 2

Raw Data for Dining Services Selection

No.	Selection phase criteria	Unit	Vendor A	Vendor B	Vendor C
1	RAVA Plan	1-10	5.91	7.09	6.31
2	Transition Milestone Schedule	1-10	5.17	6.96	6.33
3	Interview	1-10	5.41	6.71	6.31
4	Past Performance Information – Survey	1-10	9.80	9.99	9.82
5	Past Performance Information – Survey	Max	5.67	3.00	4.42
6	Past Performance Information – Financial	1-10	7.02	8.67	6.90
7	Financial Rating	1-10	4.00	8.00	8.00
8	Financial Return – Commissions	Max	\$30,254,170	\$60,137,588	\$64,000,000
9	Capital Investment Plan	Max	\$14,750,000	\$20,525,000	\$12,340,000
10	Equipment Replacement Reserve	Max	\$7,213,342	\$4,100,001	\$8,171,811
Total Minimum Guaranteed Financial Return			\$52,217,512	\$84,762,589	\$84,511,811

Table 3

Weighted Data for Dining Services Selection

No.	Selection phase criteria	Weight	Vendor A	Vendor B	Vendor C
1	RAVA Plan	28	16.55	19.85	17.67
2	Transition Milestone Schedule	2	1.03	1.39	1.27
3	Interview	25	13.53	16.78	15.78
4	Past Performance Information – Survey	9	8.82	8.99	8.84
5	Past Performance Information – Survey	1	1.00	0.53	0.78
6	Past Performance Information – Financial	15	10.53	13.01	10.35
7	Financial Rating	5	2.00	4.00	4.00
8	Financial Return – Commissions	7	3.31	6.58	7.00
9	Capital Investment Plan	6	4.31	6.00	3.61
10	Equipment Replacement Reserve	2	1.77	1.00	2.00
Total Sum		100	62.84	78.13	71.28

Preplanning (Quality Control)

A critical component of the best-value/leadership model is the identification and minimization of risk prior to the start of an activity (also known as Quality Control). In the case of dining services the vendor was required to identify the risk that it did not directly control, what would be done to minimize the risks if the should be realized, and at what point the impact from the risk event would revert back to the client. This component of the best-value/leadership model alleviated one of the common outsourcing predicaments of misaligned expectations. Alignment is a necessary and key part of effective leadership (Collins, 2001).

It was found that the neither the vendor nor the client had ever participated in as rigorous effort to indentify and minimize risk, align expectations, and provide a framework where there is substantial goal alignment between the vendor’s financial success and the university’s satisfaction.

Performance Measurement and Accountability (Weekly Risk Reporting)

The final and most extensive component of the best-value/leadership model is constant performance measurement and the implementation of an accountability system. The application

of this piece of the best-value/leadership model was and continues to be the most difficult. The initial non-construction test has yielded the measurement of numerous financial, environmental, productivity, and customer satisfaction metrics. A summary of the initial reports of the key financial results is presented in Table 4. Prior to the application of the best-value/leadership process, the information presented in Table 4 had never been available to the university.

Table 4

Initial Financial Performance Summary

Metric	FY 06-07 (Year Prior)	Sept 07	Projected (65% of 12 mn)	Projected Difference	% Difference	Vendor's Internal Projection
Retail Revenue (in \$M's)	\$10.20	\$2.30	\$17.94	\$7.74	76%	\$15.92
Catering Revenue (in \$M's)	\$1.80	\$0.15	\$1.19	(\$0.61)	(34%)	\$2.52
All Other Revenue (in \$M's)	\$4.10	\$2.00	\$15.60	\$11.50	280%	\$17.12
Total Revenue (in \$M's)	\$16.10	\$4.45	\$34.73	\$18.63	116%	\$35.56
Total Commissions to ASU (in \$M's)	\$1.94	\$0.34	\$2.63	\$0.69	35%	\$2.69
Total sales per labor hour	\$37.03	\$54.05	\$54.05	\$17.02	46%	
Total number of transactions (#M's)	3.95	0.72	6.06	2.11	54%	
Total revenue per transaction (\$)	\$4.08	\$6.17	\$5.73	\$1.65	40%	
Voluntary meal plan participants		2,651				2,241
Mandatory meal plan participants		6,228				6,531
Total participants		8,879				8,772

Evaluated Results of Initial Test in Dining Services

To evaluate the initial test of the best-value/leadership process model on a non-construction outsources service, a 17 question survey was created and distributed to the key clients and users involved in selection process and dining contract operation (eight individuals). For each question or statement, the survey taker was asked to rate their level of agreement on a one-to-ten scale, with ten being completely agree and one being completely disagree. Table 5 shows the 17 questions and the averages of their responses.

It is clear by looking at the responses that the client committee members found the best-value approach to be superior to the traditional approach, in each of the 17 questions compared. It was found that the average difference between the ratings received for the best value process in excess of the traditional process was approximately five points on each question.

Initial Results & Conclusions

The initial results of the dining services test have yielded data allowing preliminary analysis of the research hypotheses and theories: 1) By adjusting the process to a best-value/leadership model dining services efficiency was increased, 2) The existent best-value/leadership process was successfully transferred from construction to the ASU dining services contract with no adjustment to the fundamental concepts, 3) As is evident in the risk plan scores, the vendors struggled in identifying and minimizing risk, and 4) The performance measurement system and

risk report (no shown here due to space constraints) have been completely foreign to the dining services participants.

The fifth theory/hypothesis proposed by the authors was the idea that the majority of issues would arise from client inefficiencies. This has been the case in the dining services contract. The vast majority of issues, risk, and inefficiencies have come as a result of internal client misalignment, bureaucratic tendencies, and overall lack of accountability. Using the vendor maintained risk and performance report, the process has begun to drive accountability into the university structure by holding individual personnel accountable for their actions, inactions, and decisions forced upon the vendor. Specific issues include untimely transfer of meal dollars from the university to the vendor although the vendor has already incurred all cost to service the meals, delinquent and negated client required maintenance and service to facilities, financial misunderstanding between university contracting and accounting, and inefficient expansion of dining contract from main campus to all campuses.

Table 5

Evaluation of Initial Test in Dining Services

No	Criteria	Traditional Method	Best-Value/ Leadership	Δ
1	Your Confidence in the chosen vendor	5.88	9.38	3.50
2	Your knowledge of the vendors' capability, before contract award	5.13	8.88	3.75
3	Your satisfaction with the proposal (expectation of "promises" being executed)	5.00	8.38	3.38
4	Your understanding of project risks, before the contract begins	3.00	9.38	6.38
5	Ease in differentiating between vendors' capabilities/values	4.13	9.00	4.88
6	The amount of pre-planning, risk minimizing, and value added by the vendor, before contract award	3.38	9.25	5.88
7	The process is logical	5.88	9.00	3.38
8	The process transfers a large amount of meaningless information	2.63	9.13	6.50
9	The process promotes win-win situations (benefits all parties)	5.25	9.00	3.75
10	The process minimizes unnecessary management and decision making efforts on the part of the client	2.88	8.75	5.88
11	The process minimizes adversarial relationships (unaligned interests/motives)	2.88	8.13	5.25
12	The process encourages risks to be identified by all parties	2.75	9.63	6.88
13	The process transfers risk to the most appropriate party	2.63	9.63	7.00
14	The process generates a contractually binding flow of efficient communication, throughout the life of the contract	3.50	8.75	5.25
15	The process documents performance via contractually binding measurements, which create accountability for all parties involved	3.29	9.13	6.25
16	The process is fair for all parties involved	4.63	9.13	4.50
17	The process is a step in the positive direction, in the world of service procurement	2.00	9.38	7.38
Overall average		3.81	9.05	5.28

Future Research & Industry Transformation

The university has expanded the use of the best-value/leadership process model onto other services including sports marketing and furniture, and plans to continue the expanse. In regards to the industry transformation efforts discussed in the introduction, dining services has emerged as the initial and most likely candidate for testing. With the small number of large vendors and the results of the Arizona State University dining services contract having spread, the dining services industry is a convenient and efficient test group. Also another university is already into procurement using the model with several others soon to follow suit. The industry wide research effort is underway.

The transformative goal of the authors includes the creation of a network of best-value/leadership based dining service universities where real-time performance measurements are available. These metrics systems will be linked into a national performance network that will affect, real-time, a vendor's ability to compete for future work at another campus. So, for example, if ten universities have tested and are running a best-value/leadership based dining services contract, their weekly performance numbers would be inserted into a performance database updating every vendor's and critical individuals personal performance score. A new university wanting to participate in the network would run the best-value leadership model and use the networked performance score as a major criterion in the selection model. Thus accountability for performance would stem beyond any one campus to include all potential future work. This accountability system, along with the campus level best-value/leadership model, is predicted to help transform the dining services industry. If this model is successful, a similar application can begin to be testing in construction, with innovative clients and users building a nationwide performance measurement and accountability system. This however, is in the distant future of the research effort.

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