

Leadership Based Project Management Model Tested On Food Services at Arizona State University

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Abstract

A new project management model has been developed at Arizona State University (ASU). The model is based on concepts of leadership and transfers risk and control of the project to the contractor/vendor, allowing the project manager to minimize their risk management functions of decision making, direction, control, and inspection by up to 90 percent. With 98 percent success (on time, on budget, high customer satisfaction), the model has been tested in the delivery of construction over the last 13 years (Kashiwagi, 2008.) It was hypothesized that the new project management model would produce similar results in services/industries outside of construction. The project selected for the test was the ASU food services contract (\$400M, ten year contract). The contract has now been implemented for six months. Results thus far validate the theoretical foundation of the model, and show positive potential in the delivery of services other than construction.

Keywords

Leadership, Outsourcing, Management Structures

1. Problem

The Arizona State University purchasing and contracting group was faced with re-competing their food services contract in the fall of 2006. Their ability to administer the previous food services contract, and other services contracts were not going well. The current food services vendor was not acting in the best interest of the university. The university perceived that the amount of food being sold on campus was not being optimized, and the contractor did not track dominant performance metric even though it was in their contract. The university contracting/procurement personnel did not think that they were transferring risk and control to the vendors. When problems arose, the university did not have the rationale or the process to transfer the risk to the vendors.

ASU contracting personnel concerns included:

- Vendors commonly misunderstand the client's needs and intent, as expressed within the request for proposal (RFP).

- There is often too much focus by the vendors on marketing and “fluff”.
- The selection criteria are not based on performance or measurement.
- Competing vendors bring their highest performing personnel to interview for the project but then switch the personnel after award to a more inexperienced person.
- [There is] a disconnect between promises made by [the vendor’s] sales team and the responsibility for program delivery.
- When a contract is awarded to a non-incumbent vendor, the winning firm is usually under-prepared for the transition.
- There is a general overall lack of performance information or knowledge of how a vendor is performing, what value has been added, and what risks have occurred, who caused them, and the resulting impact.
- The traditional process results in adversarial relationships where the objectives of the client and the provider are not aligned.

2. Hypothesis

The hypothesis of this research is that the new best value alignment based PM model is better than the traditional expectation/influence model because the same issues which cause problems in food services and construction industry, and that the best value PIPS PM approach would be successful with services outside of construction. The researchers also propose that the problems may be caused by the structure of the current PM model including:

1. The client’s representative is the expert instead of the vendor.
2. The client is directing the vendor.
3. The vendors are merely responding to the client’s PM.
4. The client’s PM is making the decision on who is the best value, thus responsible for the level of service they receive.

3. Best Value PIPS PM Structure

The PIPS best value PM model is a three phase model that includes: 1) selection (based on past performance information on critical elements, financial package, vendor’s ability to identify and minimize risk that they do not control, and propose key individuals who can minimize risk ahead of time, document their performance, and manage their own project); 2) prioritization of the best value and requesting the best value vendor to create a quality control (QC) program that minimizes the risk that they do not control; and 3) having the awarded contractor controlling their own contract, documenting the risk, and managing by risk minimization. This PM model transfers the risk and control to the vendor. The best value PIPS PM model does not have the four characteristics of the status quo PM model discussed in the previous section.

The components included in the PIPS best value system that differed from traditional methods include:

1. PIPS requires the vendors to differentiate themselves through documented performance information and value adding capabilities.

2. The university selection committee is directed not to make any decisions. If the vendor was unable to present dominant, quantifiable information that clearly differentiated them from the other vendors, the owner should assume there was no difference. This transfers the risk and control to the vendor.
3. The best value vendor identifies and minimizes the risk that they do not control in a QC plan. The QC plan becomes the major part of the RFP, along with the proposed vendor program, financial package, and ASU legal documentation.
4. Vendor pre-planning, risk minimizing, and value added efforts before contract award.
5. A weekly reporting system that allows the vendor to document and communicate the performance and risks of the service, as well as hold all parties accountable by reporting any source of risk.

4. Methodology

The methodology of this test included:

1. Modified the PIPS best value model to fit the university's specific needs.
2. Create a best value RFP.
3. Run the best value PIPS model.
4. Measured and analyze the results.
5. Identify differentials from the status quo methodology and the new best value PIPS PM model.

5. Analysis and Results

The researchers are proposing that the new best value PIPS model is better than the status quo manage, direct, and control model. The differences will be shown by measurement of client satisfaction, measurement of value (quality and financial package), and whether the client repeats the process on another test. If the above three are positive, the authors will propose that the hypothesis is validated that the best value PIPS PM model may be more effective than the traditional model.

5.1 Client Satisfaction

The researchers looked at two measures to capture client satisfaction. The first was a survey that compared the traditional PM method to the PIPS best value PM model. The survey was distributed to the university's core committee members (eight in total), upon contract award. It consisted of seventeen questions regarding the selection process. Each of the seventeen questions required two answers, one answer as it related to the traditional method and another as it related to the PIPS best value method. The answers were on a scale from one to ten, with ten being optimal. Table 1 contains a sampling of the seventeen questions and the results. From the results of the survey, the participants stated that there was a 139 percent overall improvement. It was concluded that the first stage of the PIPS best value process was preferred over that of the traditional method. The second measure utilized was the client's willingness to reimplement the PIPS best value model on additional outsourced service contracts (sports marketing service, furniture buy, and the outsourcing of the IT

department Networking. The ASU procurement group has committed to transform themselves.

5.2 Value

An intuitive reason the university would have such high satisfaction is the increase in value they received as a result of the test. To identify the value the university received, the researchers looked to the selection stage results. The fundamental aspect of the selection stage is to identify the client's best value option. To identify such an option, the process takes into consideration past performance information, current performance information, and price. Table 2 presents the results of the selection stage. The shaded cells identify the highest rating for each criterion. It shows that Vendor B received the highest evaluation ratings in five out of the six performance based criteria. These ratings indicate that Vendor B was the highest performing vendor, but did not indicate that they were the best value. To come to that conclusion, the financial proposals had to be examined. After examining the financial minimum guarantees, it was identified that not only was Vendor B the highest performing vendor, but also proposed the best financial package, over \$32.5 million (62.3 percent) higher than the incumbent (from the raw numbers (not shown)). The PIPS best value model allowed Vendor B to differentiate themselves with a total selection phase score 13.2 percent higher than the next best vendor.

5.3 Efficiency (minimized effort)

An underlying objective in the approach was to increase efficiency (minimize everyone's efforts and resources used to select the best value.) The first sign of efficiency was less than 1/7th the size of an RFP created in the traditional method. The second sign was the size of vendor proposals, which consisted of eight hard copy pages and eight Microsoft Excel files, while proposals created in the traditional method consistently contain hundreds of pages, a near 85% reduction. The result of the substantially minimized documentation greatly reduced non-binding or marketing information and presented strictly performance data. The efficiency measured by the reduction in documentation was complimented by questions five, eight, and ten in the client satisfaction survey (Table 1). Another realized efficiency gain was the amount of time required for negotiation. The previous dining service contract at the university was in negotiation for an entire year before a contract was signed. Under the PIPS best value test, negotiation took 40 days (89 percent reduction in time). Another sign of efficiency was the repositioning of university management as a means for supervising the dining service contract. The repositioning resulted in a 100 percent gain in efficiency, when compared to the university's previous required efforts.

The last measures utilized to capture the gain in efficiency were the financial metrics. The following financial metrics were created and are tracked by Vendor B on a monthly basis.

- Revenue (Total, Retail, Catering, All Other)
- Total Commissions to ASU
- Total sales per labor hour & # of transactions
- Total Revenue per transaction
- Voluntary meal plan participants
- Mandatory meal plan participants

Figure 1 and Figure 2 are charts created from the financial metric data collected over the first six months of the service. The first bar in each of the charts identifies the incumbent vendor's fiscal year 2006-2007 monthly average, for comparison against Vendor B's performance. From the chart in Figure 2, it is clear that Vendor B has consistently averaged more sales per labor hour than the incumbent's fiscal year 2006-2007 monthly average. Increases in efficient performance are what allow Vendor B to produce higher revenues than that of the incumbent.

		TM	BV	%Δ
1	Your confidence in the chosen vendor	5.88	9.38	60%
2	Your knowledge of the vendors' capability, before contract award	5.13	8.88	73%
5	Ease in differentiating between vendors' capabilities/values	4.13	9.00	118%
6	The amount of pre-planning, risk minimizing, and value added by the vendor, before contract award	3.38	9.25	174%
8	The process minimizes the amount of meaningless information	2.63	9.13	248%
9	The process promotes win-win situations (benefits all parties)	5.25	9.00	71%
10	The process minimizes unnecessary management and decision making efforts on the part of the client	2.88	8.75	204%
15	The process documents performance via contractually binding measurements, which create accountability for all parties involved	3.29	9.13	190%
16	The process is fair for all parties involved	4.63	9.13	97%

Overall average **4.13 9.07 139%**

Table 1: Client Satisfaction Survey

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	15.77	16.78	13.53
4	Past Performance Information - Survey	9	8.82	8.99	8.84
5	Past Performance Information - #/Clients	1	1	0.53	0.78
6	Past Performance Information - Financial	15	10.53	13.01	10.35
7	Financial Rating	5	2	4	4
8	Financial Return - Commissions	7	3.309	6.5775	7
9	Capital Investment Plan	6	4.3118	6	3.6073
10	Equipment Replacement Reserve	2	1.7654	1.0034	2
	Total Selection phase score	100	65.09	78.13	69.04

Table 2: Selection Stage Results

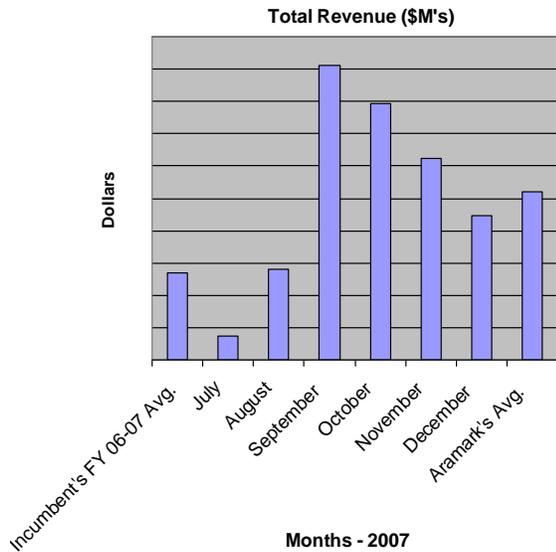


Figure 1: Total revenue of incumbent vs. new vendor

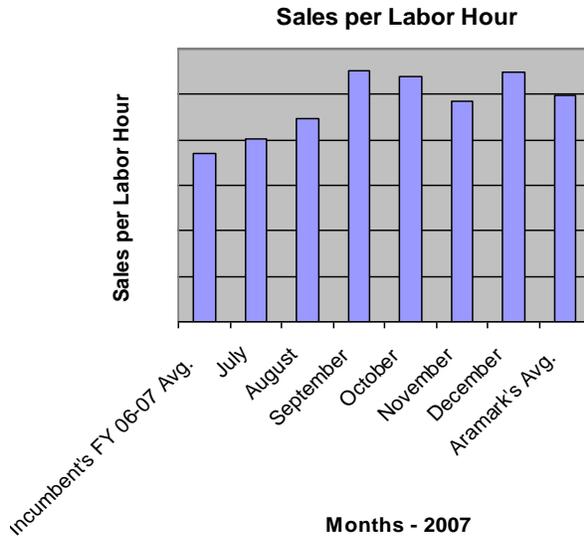


Figure 2: Sales per labor hour of incumbent vs. new vendor

6. Conclusion

The running of the food services test validated the following concepts:

1. The same problems that exist in construction exist in other services.
2. The best value PIPS PM model may be much more efficient, effective, and valuable than the existing system.
3. If risk is transferred from the client to the vendor, and leads the vendor instead of managing, directing, and controlling the vendor, efficiency, value, and performance increase.

ASU is testing the new best value PIPS PM model on the delivery of sports marketing, furniture, and the outsourcing of IT/networking services. The new PM model may be the model of the future in the outsourcing and efficiency environment of the future.