Best Value is the Practice of Responsible Procurement Professionals

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The future is now! The Best Value (BV) approach marks a paradigm shift in delivery systems and can lead your organization to sustainability and savings. The best value approach is logical, simple, and minimizes the cost of government and private sector owners by 10 – 30%. Find out how traditional contracting processes that direct suppliers and attempt to control the level of service and quality through a contract are attempting the illogical, the impossible and are destroying the expertise of the experts. Learn what it takes to create a sustainable procurement system that utilizes expertise. This is the model of the future for procurement agents.

Rules of Presentation

• Don’t take anything personal
• What looks simple is not simple
• For more information see the State of Oklahoma Central Purchasing expert Steve Hagar
Industry Structure

I. Price Based
- Buyer selects based on price and performance
- Vendor uses schedule, risk management, and quality control to track deviations
- Buyer practices reverse auction

II. Value Based
- Wrong person talking to buyer, management, direction, and control
- No transparency

III. Negotiated Bid
- Minimized competition
- Long term relationship based

IV. Unstable Market
- Perceived Competition
- High
- Low

MDC Systems Create Confusion, blindness, and reactivity

Owners
- Minimum
- Performance
- "The lowest possible quality that I want"
- High

Contractors
- Maximum
- Performance
- "The highest possible value that you will get"
- High

Utilization of Expertise

Customers
- Outsourcing Owner
- Partnering Owner
- MDC Environment

Vendor X
- Expertise
- Medium Trained
- Minimal Experience
Research Foundation

- Law of gravity
- Simple
- Metrics
- Transparency
- Decision making
- Need to communicate [buyer-expert, boss-worker, experts-non-experts]
- Trust and relationships
- Manage, direct and control [MDC]
- Utilize expertise

Natural Laws

<table>
<thead>
<tr>
<th>Past</th>
<th>Present</th>
<th>Future</th>
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</thead>
<tbody>
<tr>
<td># of Natural Laws</td>
<td># of Natural Laws</td>
<td># of Natural Laws</td>
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<tr>
<td>100%</td>
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</table>

Natural Laws are discovered and not created

Conditions Always Exist

<table>
<thead>
<tr>
<th>PAST</th>
<th>PRESENT</th>
<th>FUTURE</th>
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</thead>
<tbody>
<tr>
<td>Unique Conditions</td>
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<td>Unique Conditions</td>
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</tbody>
</table>

Conditions are unique and change according to natural laws
Unique Conditions Are Related

Event [by Observation]

Information Measurement Theory [IMT]

- Natural laws govern reality
- Natural laws govern the change of conditions over time
- No one can override natural laws
- Risk increases when people attempt to overcome natural laws
- When risk increases, observations are inaccurate
- Understanding natural laws minimizes the need to acquire data to understand the unique conditions
Research Proposal [Socratic approach]

**Know Nothing**
- Assume that we know nothing
- Minimize decision making
- Do not manage, direct and control (MDC)
- Utilize expertise
- Make experts identify the future
- Simple, metrics and risk that expert does not control

**Know Everything**
- Know everything
- Decision making
- MDC
- Do not utilize expertise
- Buyer tells expert what the expert will do
- Technical details

“Greater Value at Lower Cost”

- “How to know everything without knowing anything”
- Minimize transactions by 10 – 30%
- Minimize the time to learn by 50%
- Assist people to change themselves and become the best that they can be
- “Time travel without moving”

We Are Supply Chains

- Parents
- Children
- Children’s future families
- Children’s future jobs
- Children’s future children

Simplicity/Dominant Information

Technical Details

30k Foot Level
Difference in Environments

“Rules” Environment
- 7 moves in 14 years
- Financially living month to month
- Life revolves around father’s job and education advancement
- Traveling is a way of life
- Renting homes
- Never knew where family would be located in the next five years
- Older kids only know rules

“No-Rules” Environment
- No moves in 20 years
- Financially secure
- Life revolves around every individual in the family
- Traveling is only work related
- 8,000 SF home is owned by family
- Same neighborhood for 20 years
- Younger kids know no difference

Event of Marriage [by Observation]

Unique Final Conditions are Set by Initial Conditions [No controlling of event, Minimizing Decision Making]

Personal Life Silos

Unique Initial conditions

30K Foot Level
Natural Laws

Family Life
Family Behavior
Business Life
Business Behavior
Social Life
Social Behavior
Political Life
Political Behavior

Natural Laws

Natural Laws

Natural Laws

Time (dt)
MDC is a traditional practice

MDC does not work

It has not worked in delivering construction or other services, it does not work in academia with innovative research or teaching methods, it does not work in history or in the family

MDC is a practice of the “blind” or silo based “win-lose” relationships

Procurement personnel blame the laws, they say they can’t do anything about it

“Micro-manager’s Code”

The movement of risk.....

Don’t Mess With It!

YES NO

YOU MESS

YES NO

YOU MESS

YES NO

You’re Screwed!

YES NO

You’re Screwed!

YES NO

Look The Other Way

Anyone Else Knows?

You’re SCREWED!

NO

NO

YES

YES

NO

NO

NO PROBLEM!

Challenge: Minimize Decisions

• Decision Less Structure
• No management, direction and control (MDC) Approach (use expertise)

• Results
  – Transparency
  – Accountability
  – Experience and expertise
  – Detailed pre-planning
Traditional Risk Model [DM/C]

Whose Fault?
- Decision Making
- Transparency
- Risk
- Accountability

Minimize Decision Making

“No control”
- Control and influence [form of control to alter final outcome] causes risk and transactions
- Decision making accompanies MDC
- Control is not used in the Best Value approach
- BV PIPS is different because there is no use of control
- Cannot override NL
Influence vs. “No Influence”

More Likely to:
1. Believe in luck and chance
2. Blame others
3. Make decisions
4. Be surprised
5. Be emotional
6. Try to control others
7. Be controlled by others
8. Be reactive

More Likely to:
1. Plan things in advance
2. Be accountable
3. Utilize expertise
4. Have vision
5. Listen to others
6. Think of other people
7. Be at peace
8. Be organized

By Success model, NO control or Influence is reality

Lessons Learned
• Vendors do not know how to communicate simple description of deliverable
• Vendors do not see from beginning to end
• Vendors do not account for risk
• Vendors do not utilize expertise
• Vendors are in a silo and clients are in another silo
• No one has a complete plan from which deviations can be identified

No one likes surprises
Definition of Experts

- Minimize cost by seeing into the future
- Understand people and risk that they cannot control
- Risk mitigation through transparency
- Do not cause risk
- Metrics create transparency

Plan

- Detailed schedule from beginning to end
- Expertise used in areas where there is insufficient information [II]
- Risk that cannot be controlled [Risk]
BV Approach Creates Transparency

- Simple
- Communicate in form of metrics
- Does not require “trust”
- Accountable
- Forces pre-planning
- Goes against human nature

Best Value Approach

- Best value is the best value for the lowest cost
- Everyone is doing their best
- Everyone thinks they are doing their best
- Cost, negotiations, MDC will not bring the best value
- Utilize expertise to lower cost [not MDC]
- ICT is the lowest performing area [LT 25% success – OT, OB, successful]
- Construction delivery is much better [still can improve drastically]
- Client/buyer is the biggest source of risk [90% of all deviations]
- 10 – 30% of cost can be avoided by utilizing expertise

Model of the Future: Performance Information Procurement System

(expertise identified by natural law)

- Selection: Identify expertise
  - Dominant
  - Simple
  - Differential (non-technical performance requirements)

- Clarification: Pre-Award
  - Expertise must be acceptable to user
  - Risk Management using metrics
  - Quality Control
  - Quality Assurance
  - Schedule
  - Resource & Man-power
  - Expectation vs. delivered

- Execution: Expertise is utilized
Submittals and Selection Criteria

• Level of Expertise (PC)
• Risk Assessment Plan (RA)
• Value Added (VA)
• Price
• Interview

• Milestone schedule [not a selection criteria bridge to clarification period]

Selection Criteria Weights

• Level of Expertise 15%
• Risk and Risk Mitigation 10%
• Value Added 10%
• Price 15%
• Interview 50%

Project Submittals

• Project Capability, Risk Assessment, Value Added
  – Two pages
  – Claims and verifiable performance metrics
Rating System

- Two components:
  - Claims.
  - Verifiable performance measurements (VPM) to substantiate each claim.
    - High performance claim with VPM. 6-10
    - High/Low performance claim with no VPM. 5
    - If there is a blank sheet of paper. 4-1
    - Low performance claim with VPM.

Project Requirement/Intent

- New laboratory construction
- Intensive mechanical systems, clean room environment
- Fast track project
- University campus

Level of Expertise Submittal

Claim: best project manager in company, does only clean room projects, best in the Midwest area

Verifiable performance metrics:
1. Last 10 years
2. 20 clean room projects
3. Scope $50M
4. Customer satisfaction 9.5
5. Cost deviation .1%
6. Time deviation 1%
ICT Expertise Submittal

- Claim: vendor has completed two similar projects in the last year.
- Supporting Metrics:
  - Customer satisfaction: 9.5, cost/time deviation LT 1%
  - Scope: $10M, project duration: 1.5 year average
  - Function: ERP platform
  - Interface into average of six existing software packages
  - Users had six different departments, ten heavy users in each department, 10K transactions per month
  - Two maintenance managers, 120 hours training on system, $1K maintenance support for the first five years

ICT Industry Performance

- 75% of all projects do not meet the expectation of the client or are discontinued
- Netherlands just conducted a federal hearing to investigate the poor performance
- Projects are seen as complex [number of users, hardware/software systems, speed of change in technology, costs]

$13.3M Research, 20 years, 1700+ tests, 98%

Satisfaction
### Best Value Research

- **Construction Projects**: 1,622
- **Construction Projects ($)**: $4B
- **Non-Construction Projects**: 95
- **Non-Construction Projects ($)**: $2B
- **Projects on Budget**: 96.7%
- **Projects on Time**: 93.5%
- **Largest Awarded Client**: ASU
- **Total $ Award to Date at ASU**: $1.7B
- **Testing in Number of States**: 31
- **Testing in Number of Countries**: 6

### Owner Causes Most Project Deviations

- PIPS creates transparency
- PIPS allows vendors to identify and mitigate risk that they do not control
- PIPS forces client and buyer to be more accountable

### Overall MEDCOM Performance by NTP 2007-2011

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td># of Projects</td>
<td>110.00</td>
<td>129.00</td>
<td>122.00</td>
<td>92.00</td>
<td>27.00</td>
</tr>
<tr>
<td>Original Awarded Cost ($):</td>
<td>$181,945,282.27</td>
<td>$177,275,951.80</td>
<td>$183,989,041.03</td>
<td>$107,091,486.62</td>
<td>$16,278,439.41</td>
</tr>
<tr>
<td>Final Awarded Cost ($):</td>
<td>$193,881,007.60</td>
<td>$187,844,708.77</td>
<td>$192,602,961.59</td>
<td>$110,952,677.38</td>
<td>$16,352,909.79</td>
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<tr>
<td>Total % Over Budget:</td>
<td>6.56%</td>
<td>5.96%</td>
<td>4.68%</td>
<td>3.61%</td>
<td>0.46%</td>
</tr>
<tr>
<td>% due to Owner:</td>
<td>4.58%</td>
<td>5.59%</td>
<td>3.61%</td>
<td>2.36%</td>
<td>0.46%</td>
</tr>
<tr>
<td>% due to Designer:</td>
<td>0.00%</td>
<td>0.14%</td>
<td>0.00%</td>
<td>0.21%</td>
<td>0.00%</td>
</tr>
<tr>
<td>% due to Contractor:</td>
<td>0.11%</td>
<td>-0.17%</td>
<td>-0.01%</td>
<td>0.08%</td>
<td>0.00%</td>
</tr>
<tr>
<td>% due to Unforeseen:</td>
<td>1.88%</td>
<td>0.40%</td>
<td>1.09%</td>
<td>0.96%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total % Delayed:</td>
<td>51.56%</td>
<td>48.43%</td>
<td>36.77%</td>
<td>28.53%</td>
<td>3.31%</td>
</tr>
<tr>
<td>% due to Owner:</td>
<td>41.38%</td>
<td>39.96%</td>
<td>28.51%</td>
<td>16.53%</td>
<td>9.20%</td>
</tr>
<tr>
<td>% due to Designer:</td>
<td>0.00%</td>
<td>0.49%</td>
<td>0.00%</td>
<td>1.32%</td>
<td>0.00%</td>
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<tr>
<td>% due to Contractor:</td>
<td>1.86%</td>
<td>-0.02%</td>
<td>1.29%</td>
<td>0.12%</td>
<td>-6.40%</td>
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<tr>
<td>% due to Unforeseen:</td>
<td>8.32%</td>
<td>8.01%</td>
<td>6.97%</td>
<td>10.56%</td>
<td>0.51%</td>
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</tbody>
</table>
• Overmanagement of vendors
• Procurement and execution takes too long (12 years)
• Infrastructure repair is critically needed [drivers spend 1-2 hours on roads going and coming]

- 16 project, 6 awards, $1B test of best value PIPS
- Goal is to finish 10 projects in 3 years

**Dutch Implementation**

**Results**

- Program results: 15 projects finished (expectation was 10)
- Delivery time of projects accelerated by 25%
- Transaction costs and time reduced by 50-60% for both vendors and client
- 95% of deviations were caused by Rijkswaterstaat or external [not vendor caused]
- NEVI, Dutch Professional Procurement Group [third largest in the world] adopts Best Value PIPS approach
- Now being used on complex projects and organizational issues
- Concept in entire supply chain including engineers, risk/project managers

**Project/Risk Management**

- RISNET will rewrite the risk model
- Risk: what the expert cannot control
- Transparency minimizes risk
- Engineering practice
Schuberg Philis [BV Model/Approach]

Gerwin Schuring, Pim Burger, Dean Kashwagi, Philip Dries

Mission: Increase quality of environmental engineering services
Timeline: 1 year
Projects:
- Yuma: Air Quality
- ASAR: Water Quality
- Brownfields: Waste Management

Executive Team:
- Teena Ziegler
- Erik Massey

Canadian Efforts
- University of Alberta
- University of Ottawa
- University of Manitoba
- Wilfrid Laurier University
- Queen’s University
- University of Waterloo
- Western University
- Dalhousie University
- Simon Fraser University
- City of Spruce Grove
- Alberta Infrastructure
**Longest Sustaining U.S. Effort**

<table>
<thead>
<tr>
<th>State of Oklahoma Central Purchasing Best Value Project Results</th>
</tr>
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<tbody>
<tr>
<td># of Awarded Projects</td>
</tr>
<tr>
<td># of projects given to lowest bidder</td>
</tr>
<tr>
<td># of cancelled projects</td>
</tr>
<tr>
<td>Estimated $ of BV Projects Procured</td>
</tr>
<tr>
<td>Average $ per project</td>
</tr>
<tr>
<td>Estimated $ Cost Avoidance</td>
</tr>
<tr>
<td>Average $ cost avoidance per project</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
</tr>
<tr>
<td># of customer satisfaction surveys</td>
</tr>
</tbody>
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**Education/Research August 2014**

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**Best Value PIPS in Oklahoma**

Steve Hagar  
Central Purchasing Deputy Director  
Licensed by ASU  
Certified BV Expert  
405-522-3369  
Steve.Hagar@omes.ok.gov

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**Longest Sustaining U.S. Effort**

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<td># of customer satisfaction surveys</td>
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</table>
Observation/Logic over 20 years and 1,700 tests

- Utilization of expertise is the only real way to minimize cost
- MDC leads to low performance and minimum standards
- Concept of control of contractors is not effective
- Utilization of expertise and transparency is the only way to minimize risk
- Project non-performance is not a technical engineering or construction issue that can be resolved by construction technical expertise
- Hire based on expertise [system to measure]
BV Concepts Optimize Behavior

- Tested concept in Kashiwagi family
- Now testing in ASU honors program
- Optimizes behavior through simplicity, natural laws and transparency
- Minimizes negative behavior (depression, drugs, instability, suicide)
- Creates vision

BV Environment Changes People

- Contractors in Hawaii become experts
- Contractors increase profits and finish faster
- “Blackballed” contractor turns into performer in BV structure
- Goes bankrupt when exposed to traditional environment
- BV contractors deliver at much lower costs

Case Studies show BV can improve performance of “blind”
CL Performance at ASU

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**CL Business Outcomes: Costs**

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<tr>
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<tbody>
<tr>
<td>MSA Baseline</td>
<td>$12.29M</td>
<td>$10.81M</td>
<td>$11.96M</td>
</tr>
<tr>
<td>Growth – Out of Scope</td>
<td>N/A</td>
<td>N/A</td>
<td>$1.15M</td>
</tr>
<tr>
<td>Value Add</td>
<td>N/A</td>
<td>$0.43M/yr</td>
<td>$0.98M/yr</td>
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<tr>
<td>Net MSA</td>
<td>$12.29M</td>
<td>$10.38M</td>
<td>$9.83M</td>
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**CL Business Outcomes: Reliability & Satisfaction**

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<thead>
<tr>
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<tbody>
<tr>
<td># of Major Outages</td>
<td>N/K</td>
<td>37</td>
<td>11</td>
</tr>
<tr>
<td>% Uptime</td>
<td>99.802</td>
<td>99.989</td>
<td>99.998</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>3.6</td>
<td>3.71</td>
<td>3.81</td>
</tr>
<tr>
<td>% of Tickets within SLA</td>
<td>94%</td>
<td>97%</td>
<td>97%</td>
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</table>
## Business Outcomes: Technology

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<tbody>
<tr>
<td>% Network supported</td>
<td>89%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>(Not at end of maintenance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% 1Gb- Wired Connections</td>
<td>57.0%</td>
<td>71.5%</td>
<td>96.0%</td>
</tr>
<tr>
<td>% Wireless(n)</td>
<td>9.0%</td>
<td>8.7%</td>
<td>92.6%</td>
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<tr>
<td>IT Spending Ratio</td>
<td>6/94</td>
<td>26/74</td>
<td>56/44</td>
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<tr>
<td>(New vs. Maintenance)</td>
<td></td>
<td>(New vs. Maintenance)</td>
<td>(New vs. Maintenance)</td>
</tr>
</tbody>
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## Conclusions
- Replace MDC with the utilization of expertise
- Create transparency with metrics
- Project managers become leaders who align resources in a transparent environment
- Experts can see into the future and create transparency
- New language of PM is “metrics”

## Effort to Change the Future
- FM visionaries [IFMA subgroup]
- PM visionaries [PMI/IPMA]
- Risk managers [Risnet/CROW]
- Procurement visionaries [NIGP/ISM]
- Professional services [engineering and architects]
- Expert vendors/services
Best Value Education

Linked in
Dean.kashiwagi@asu.edu
YouTube
Pbsrg.com
ksmileadership.com

Jan 11 -15, 2015
Tempe, AZ
2014 Best Value Education and Training
PBSRG.com
Research partnerships