



Best Value Procurement & Project Delivery

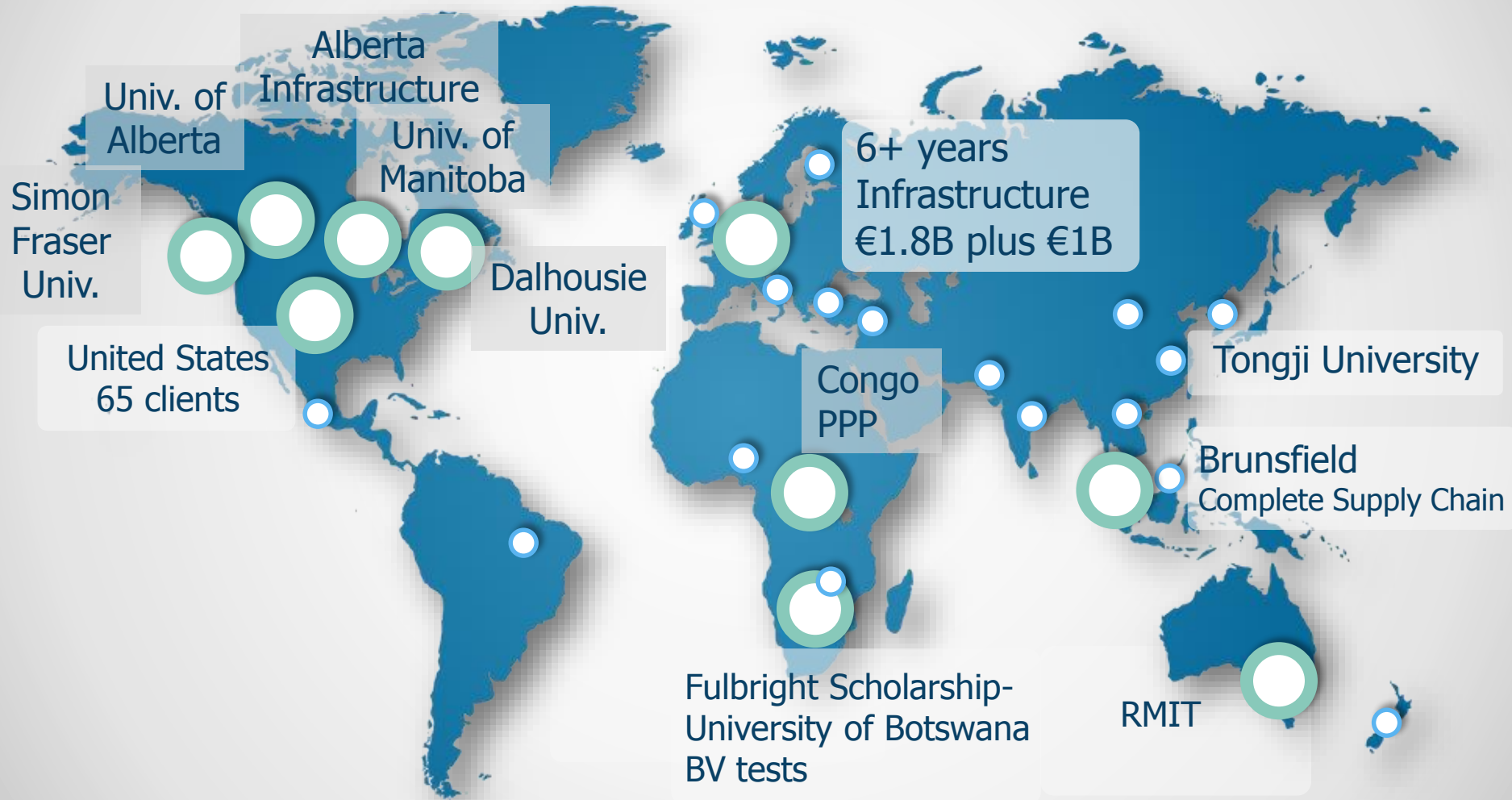
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Brian C. Lines

Research Background

- Worldwide leader in Value-Based Project Delivery
 - **18** Years
 - **210+** Publications
 - **550+** Presentations
 - **1600+** Projects
 - **\$5.7 Billion** Services & Construction
 - **98%** Customer Satisfaction
 - Awards: PMI, NIGP, IFMA, COAA, IPMA
 - Owners: Federal, State, Local, Private



International Efforts & Partners



Information Technology

networking help desk services
data centers eProcurement
hardware
COTS software
ERP systems

Facility Management

maintenance custodial
landscaping conveyance
security service pest control
building systems
industrial moving
waste management
energy management

Health Insurance/ Medical Services

Manufacturing

Business / Municipal / University Services

dining material recycling
multi-media rights bookstores
fitness equipment furniture
online education
document management
property management
audiovisual
communications systems
emergency response systems
laundry

Construction / Design / Engineering

large gc small gc DBB
infrastructure renovation CMAR
municipal repair DB
laboratory maintenance IDIQ
education roofing JOC
hospital demolition Low Bid
financial development IPD
large specialty supply chain

How Client Organizations work with us

- Desire to test BV concepts within their organization
- Form a Strategic Research Partnership with ASU
 - Strategic Plan, Contract, education efforts, project training, etc.
- Identify/self-identify champion(s) of pilot / core group
 - Ensure proper executive level support
- Choose a test project or projects
 - Project team, needs, baseline metrics, etc.
- Initial Efforts & First project(s)
 - Strategic Plan w/ metrics
 - Step-by-step assistance, educate heavily all along the way, support all aspects of the project, etc. etc.

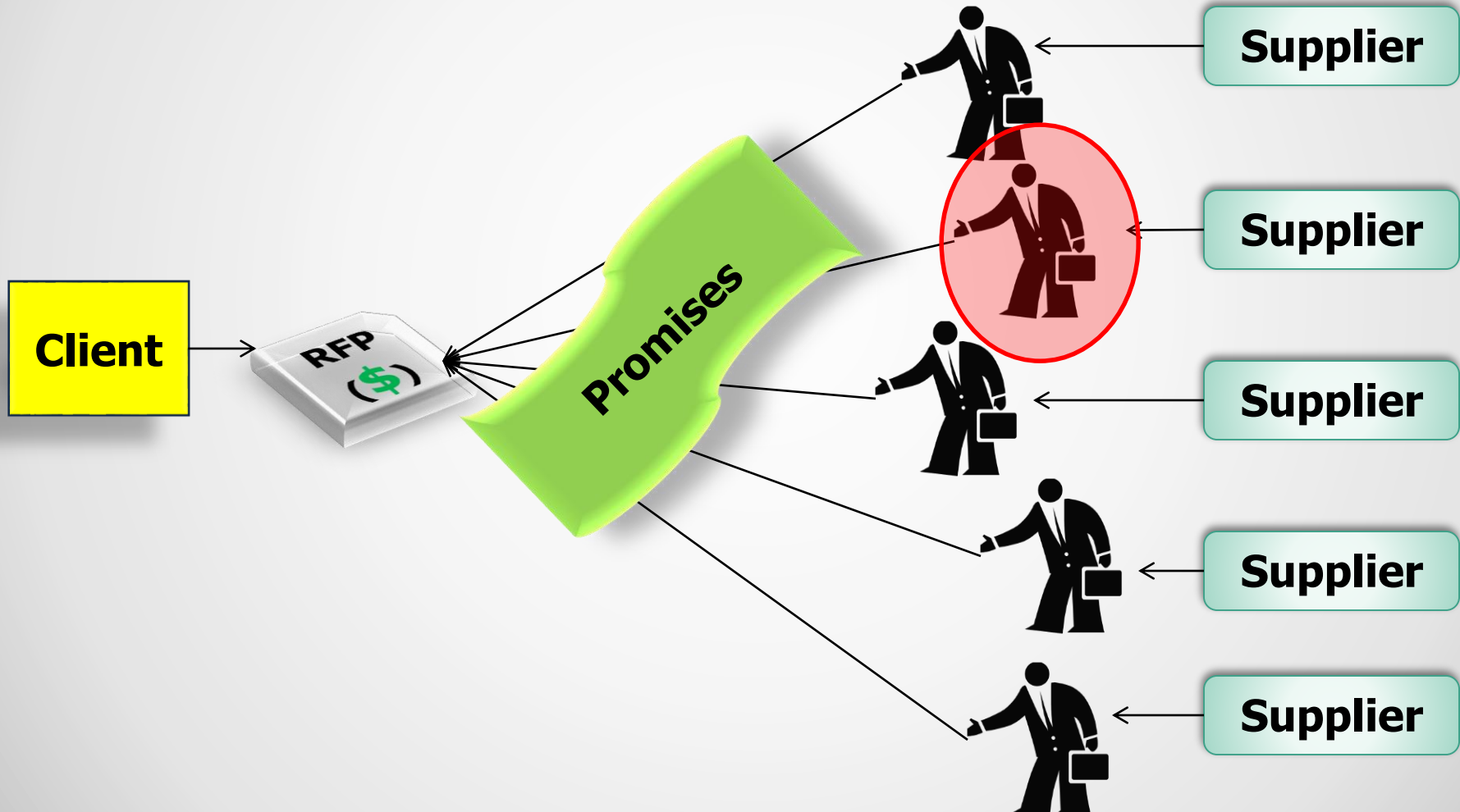
How Vendors/Suppliers work with us

- Desire to master BV concepts within their organization
- Form a Strategic Research Partnership with ASU
- Identify/self-identify champion(s) of pilot / core group
 - Trainers/BV-SME (& ensure proper executive level support)
- Implement
 - Concept Education/Leadership
 - Competitive Proposal Response Techniques
 - Preplanning Tools, Processes, & Education
 - Performance Measurement & Management
 - Client Education
 - During Interview/Potential Preplanning
 - Existing/Potential Clients

Agenda

- Topics:
 - BV Procurement
 - Challenges in Traditional Proposal Processes
 - Value-Based Differentiators
 - Considerations for Holistic Project Delivery
 - Pre-Planning Techniques
 - Project Control & Risk Management Systems
- Presentation Structure:
 - Best Value Process Steps
vs. Best Practices identified in Research (LL's)
 - Owner & Supplier perspectives

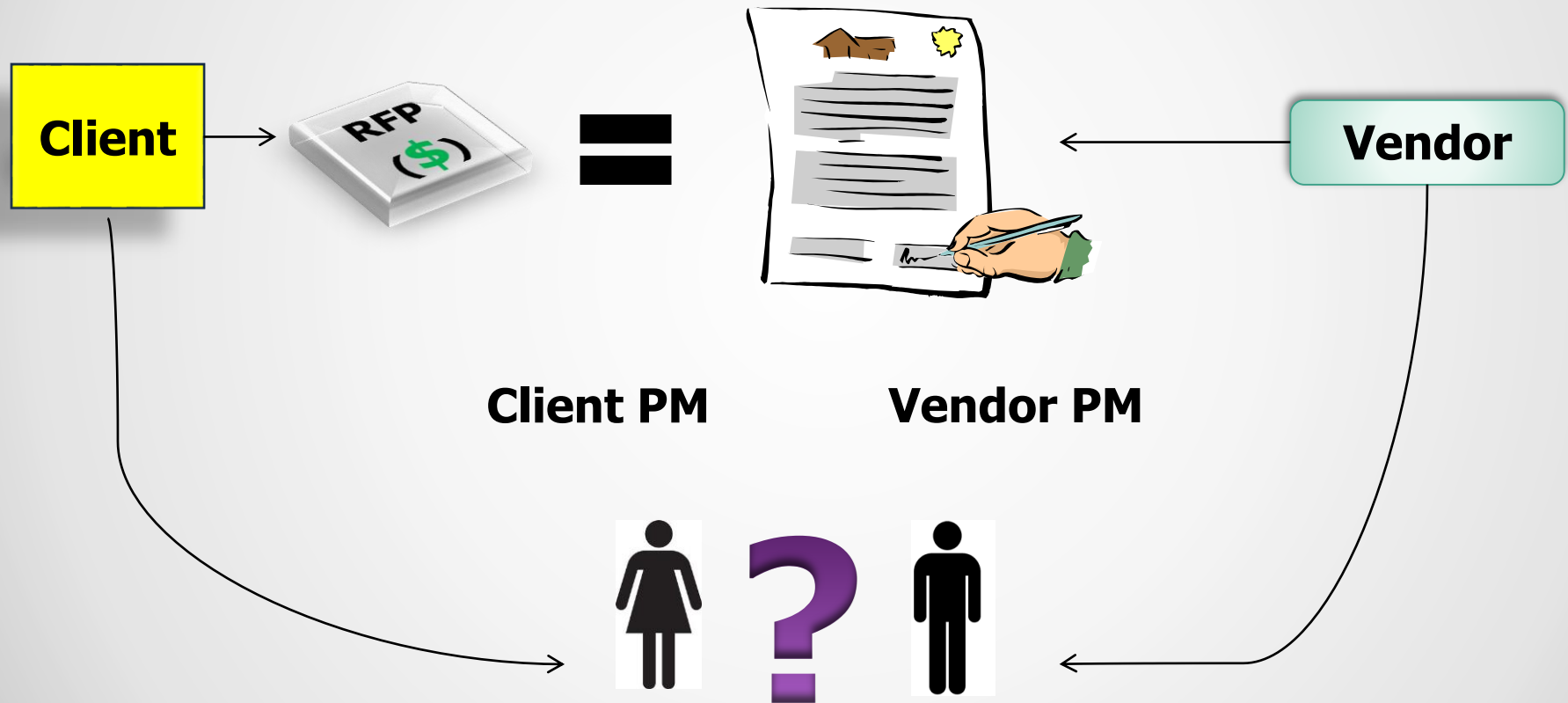
Challenges we have seen in the proposal process...



Challenges we have seen in the proposal process...



What we have seen...



***"The Greatest Risk that I
always face
is how to accomplish all of the
things
that our sales team
promised we could do."***



We Know: Suppliers are Not a Commodity



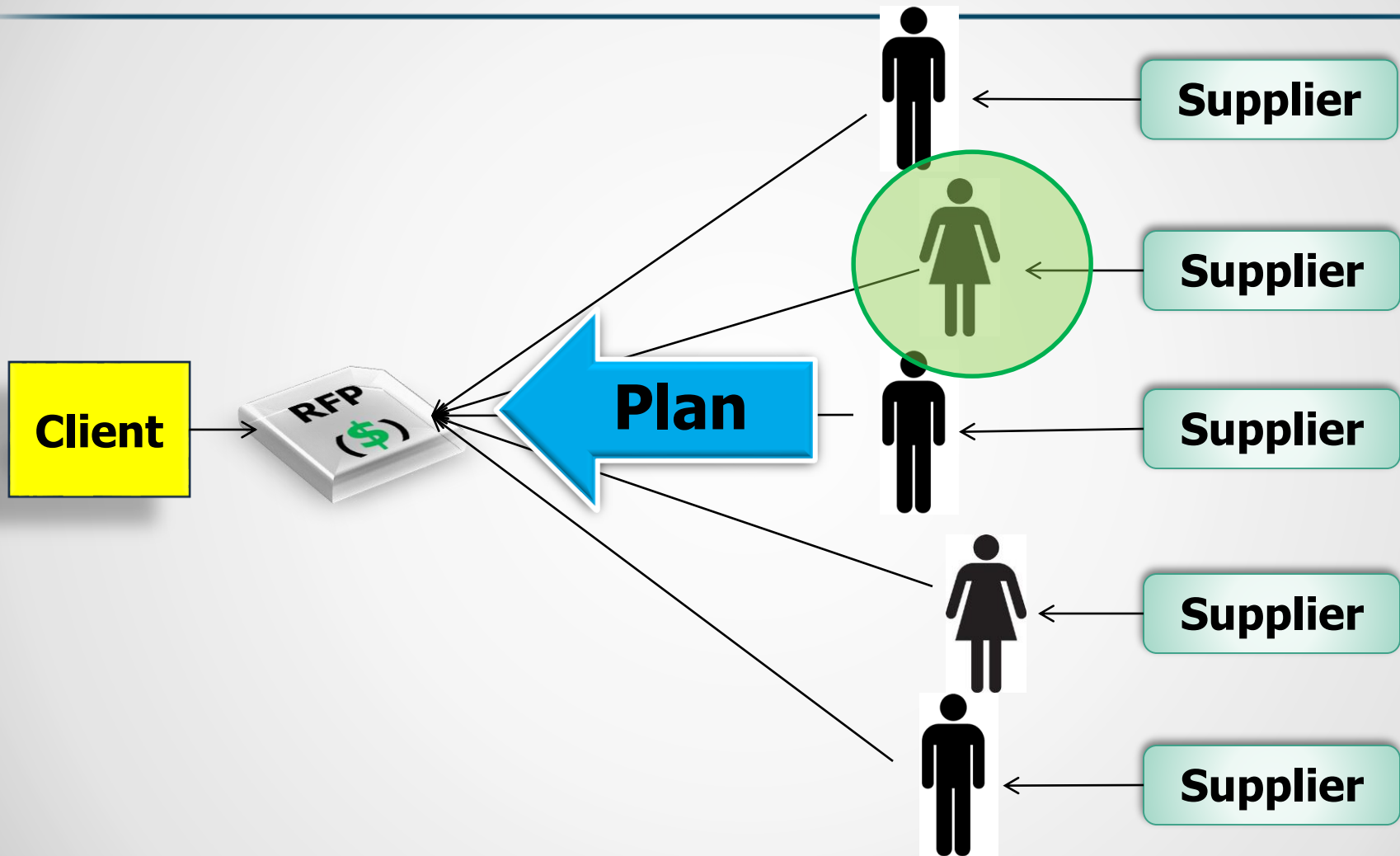
...but how do we know who to select?



Common Evaluation Frustrations

- Marketing Information – cutting through the “fluff”
- Lengthy proposal binders
- Lack of project-specific information (supplier trying to sell the owner what they think the owner wants to hear)
- Difficulty in conducting evaluations
- Challenging to justify selection

What is different...



Value-Based Project Delivery



Objective: minimize cost by increasing efficiency

- Holistic view of the contract lifecycle
- Link procurement to operational performance
- System to promote sustained performance

Value-Based Project Delivery



1. *Differentiate Expertise:* within a value proposition

Value-Based Project Delivery



1. *Differentiate Expertise:* within a value proposition
2. *Pre-Planning Before Award:* focused on operational risk

Value-Based Project Delivery



1. *Differentiate Expertise:* within a value proposition
2. *Pre-Planning Before Award:* project teams - focused on operational risk
3. *Performance Measurement:* track risks & impacts to operational plan

DOES NOT CHANGE...

- Specifications
- Terms and Conditions
- Insurance & Bonding
- Contract
- Delivery System
- Pricing / Financials

Overlays on top of these...

Value-Based Project Delivery

Must be a win-win scenario

- **Owner** - minimize the risk of non-performance
 - Greater value for cost
 - Differentiate key individuals & leverage expertise
 - Become a client of choice
- **Vendor** – minimize client management & decision-making
 - Ability to lay out the optimal operational plan
 - Identify any support needed from the client
 - Maximize profit by being more efficient

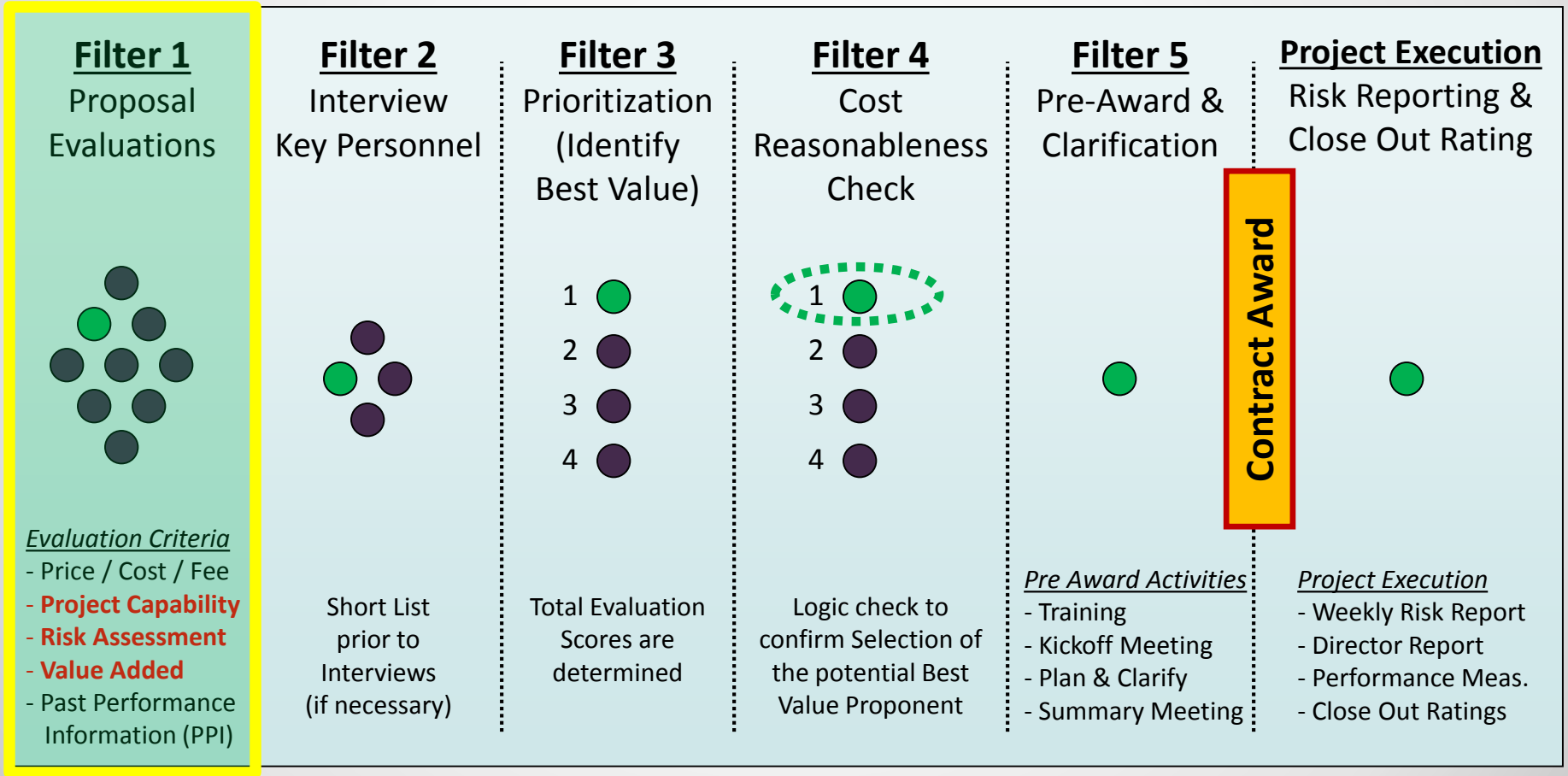
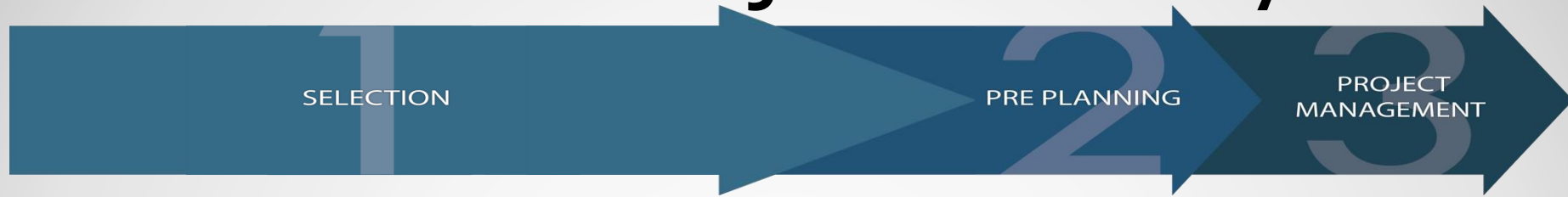
Value-Based Project Delivery



1. *Differentiate Expertise:* within a value proposition

- Identifying, prioritizing, and minimizing project risks
- Opportunity to propose value added options
- Interviewing approaches & structures

Value-Based Project Delivery

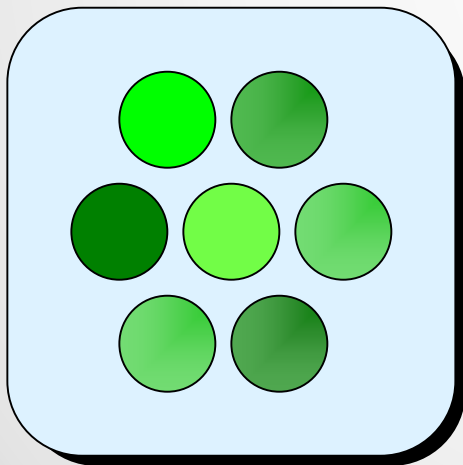


What are we trying to accomplish?

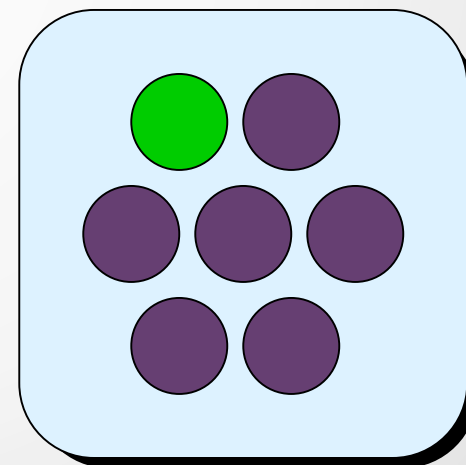
Question:

If Purchasing wants to buy a “green circle”, in which scenario is hiring the right “green circle” easiest to justify?

Scenario 1



Scenario 2



**APPENDIX "F" TO PROPOSAL FORM
VALUE ADDED OPTIONS**

This template must be used. Modifications to the format of this template may result in disqualification (i.e. altering font size, altering font type, adding colours, adding pictures, etc.). Do not list any names/information that can be used to identify your firm. You may add additional rows but do not exceed the 2-page limit. (You may delete these instructions.)

The Proponent is to identify any value added options, ideas, or services that are beyond the standard requirements in the tender. An explanation of "Why it is a Value Add" must be provided for each item. The corresponding cost impact of each value added option must be included. (You may delete these instructions.)

<p>+ Item 1:</p> <p>Why is it a Value Add? _____</p> <p>Cost Impact (\$): _____</p>	<p>Item 2:</p> <p>Why is it a Value Add? _____</p> <p>Cost Impact (\$): _____</p>
<p>+ Item 3:</p> <p>Why is it a Value Add? _____</p> <p>Cost Impact (\$): _____</p>	<p>Item 4:</p> <p>Why is it a Value Add? _____</p> <p>Cost Impact (\$): _____</p>
<p>+ Item 5:</p> <p>Why is it a Value Add? _____</p> <p>Cost Impact (\$): _____</p>	<p>Item 6:</p> <p>Why is it a Value Add? _____</p> <p>Cost Impact (\$): _____</p>

**APPENDIX "E"
RISK A**

This template must be used. Modifications to the format of this template may result in disqualification (i.e. altering font size, altering font type, adding colours, adding pictures, etc.). Do not list any names/information that can be used to identify your firm. You may add additional rows but do not exceed the 2-page limit. (You may delete these instructions.)

The Proponent is to identify risk items they do not want to occur from negatively impacting project performance. Risk items must be identified. (You may delete these instructions.)

<p>+ Risk 1:</p> <p>Why is it a Risk? _____</p> <p>Solution: _____</p>	<p>+ Risk 2:</p> <p>Why is it a Risk? _____</p> <p>Solution: _____</p>
<p>+ Risk 3:</p> <p>Why is it a Risk? _____</p> <p>Solution: _____</p>	<p>+ Risk 4:</p> <p>Why is it a Risk? _____</p> <p>Solution: _____</p>
<p>+ Risk 5:</p> <p>Why is it a Risk? _____</p> <p>Solution: _____</p>	<p>+ Risk 6:</p> <p>Why is it a Risk? _____</p> <p>Solution: _____</p>

This template must be used. Modifications to the format of this template may result in disqualification (i.e. altering font size, altering font type, adding colours, adding pictures, etc.). Do not list any names/information that can be used to identify your firm. You may add additional rows but do not exceed the 2-page limit. (You may delete these instructions.)

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<p>Technical Concern 1: Approach and/or Documented Performance 1: _____</p>	<p>Technical Concern 2: Approach and/or Documented Performance 2: _____</p>
<p>Technical Concern 3: Approach and/or Documented Performance 3: _____</p>	<p>Technical Concern 4: Approach and/or Documented Performance 4: _____</p>
<p>Technical Concern 5: Approach and/or Documented Performance 5: _____</p>	<p>Technical Concern 6: Approach and/or Documented Performance 6: _____</p>

Submittal Requirements

- ✦ In order to minimize any bias, the Submittals must **NOT** contain any names that can be used to identify who the proponent is (such as proponent name, personnel names, project names, etc).
- ✦ Template are provided and must be used. Proponents are NOT allowed to re-create, re-format, or modify the templates.
- ✦ The plans should not contain marketing material.
- ✦ Each Submittal must NOT exceed **2 pages**.
- ✦ Recommended Evaluation Procedures
 - Blind
 - Independent
 - Comparative



Example of Solutions

Risk: Noise from Demolition

Type: Project Capability



- **Plan 1**

- We will work with the user to minimize the impact of noise from demolition.

- **Plan 2**

- We have planned to demolition during off hours and weekends. This will have a slight impact on our cost (less than 1%), but the impact to customer satisfaction justifies this.
- We will also install rubber sheets on the floors to diminish noise and vibrations.
- Both solutions can be performed within your budget.
- Both solutions have been used on multiple previous projects w/ high levels of customer satisfaction (9.4/10).

Example of Solutions

Risk: Loss of Radio Flagship in Major Market

Type: Risk Assessment



- **Plan 1**

- We will work very hard to maintain excellent affiliate relationships. If we lose a radio station (e.g. it changes its format) we will move quickly to replace the lost station. If we cannot quickly replace a flagship station, we can be very creative and could even consider purchasing all local inventory from a new flagship station.

- **Plan 2**

- In the past 10 yrs, on over 50 accounts, 7 radio stations format changes have occurred. The following solution is optimal.
- We own and will maintain two radio contracts covering the area, where signals can be switched if required. The flagship station will be the station with the stronger signal and greater coverage.
- If a station is lost we will have a equal replacement within 2 months. If within two months a replacement is not contracted we will purchase inventory from another station or discount the cost of an inventory purchase and add it to our payments to the client.

Example of Solutions

Risk: Getting water to the site

Type: Risk Assessment



- **Plan 1**

- Coordination with [water company] is critical. We will coordinate and plan with [water company] as soon as the award is made to make sure that we get water to the site to irrigate the fields.

- **Plan 2**

- We will coordinate and schedule the water with [water company]. However, based on past experience there is a high risk they will not meet the schedule (the water company does not meet schedule over 90% of the time).
- We will have temporary waterlines setup and ready to connect to the nearby fire hydrant to irrigate until [water company] is ready.
- We will also have water trucks on-site if there is problems with connecting the lines.

Risk Assessment Example



- **RISK:** Major risk items typically associated with transit implementations revolve around change management and business process impact. New technology implementations create change for the users. Change often causes issues with technology adoption. Requirements and scope creep also creates challenges. Systems may have thought a certain technology or component was incorporated in the RFP and/or needs assessment process that is not included in the actual scope of work or contract. Communication is also an area that can be a challenge.
- **SOLUTION:** A clearly defined scope of work and communication of the scope at the beginning of the project minimizes scope creep. If there is a discrepancy, scope or requirements can be discussed early on in the process versus at the end of the process. Communication is the key to successful implementations. Change management and business process re-engineering for organizations can be minimized at the technology and management levels. Management can get early buy-in at the “grass roots” level and include them in the technology planning process. The Team focuses on providing very configurable and flexible tools to minimize process re-engineering tasks. The Team focuses on automating existing business processes and providing additional tools to improve those processes that need to be improved such as data management....

Things to Avoid



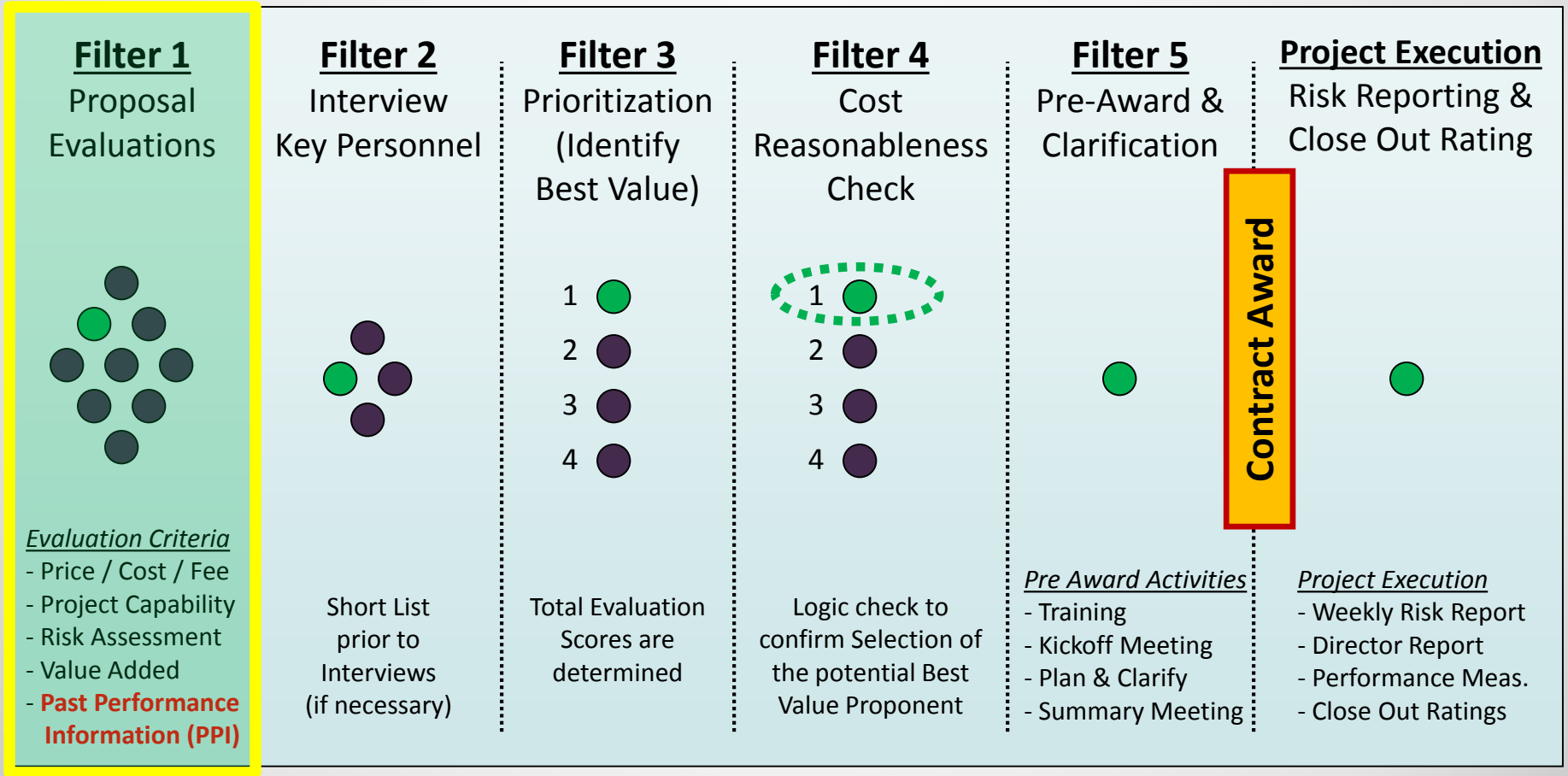
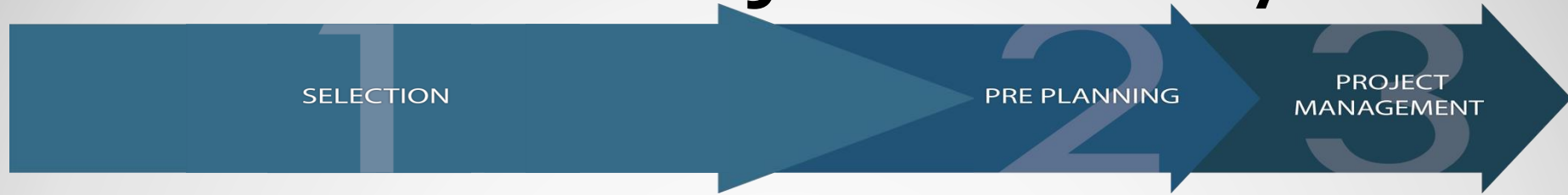
- **Marketing data:**
 - Our company is known worldwide as a leader in...
 - We will use our 20 years of expertise to...
 - We will use a state-of-the-art process to...
 - Non-project specific risk solutions
- **Technical data:**
 - The system we propose has 200% elongation and 600psi tensile strength.
 - The product will pass the ASTM-568a test.
 - The system can process up to 24GB per second
- **Transferring risk back to client:**
 - We will work with the owner to resolve issues...
 - We will work with the user to establish the proper tests/procedures to ensure that data is transferred properly...
 - We will have team meetings / partnering meetings with the owner...

Example: Value Added Items



- Reroofing this building will not stop all water leaks. The majority of the leaks are caused by cracks in the parapet walls, broken/missing glass, and poor caulking. For an additional \$10K and 3 weeks in schedule we can replace and repair all of these items.

Value-Based Project Delivery



PPI Survey Form

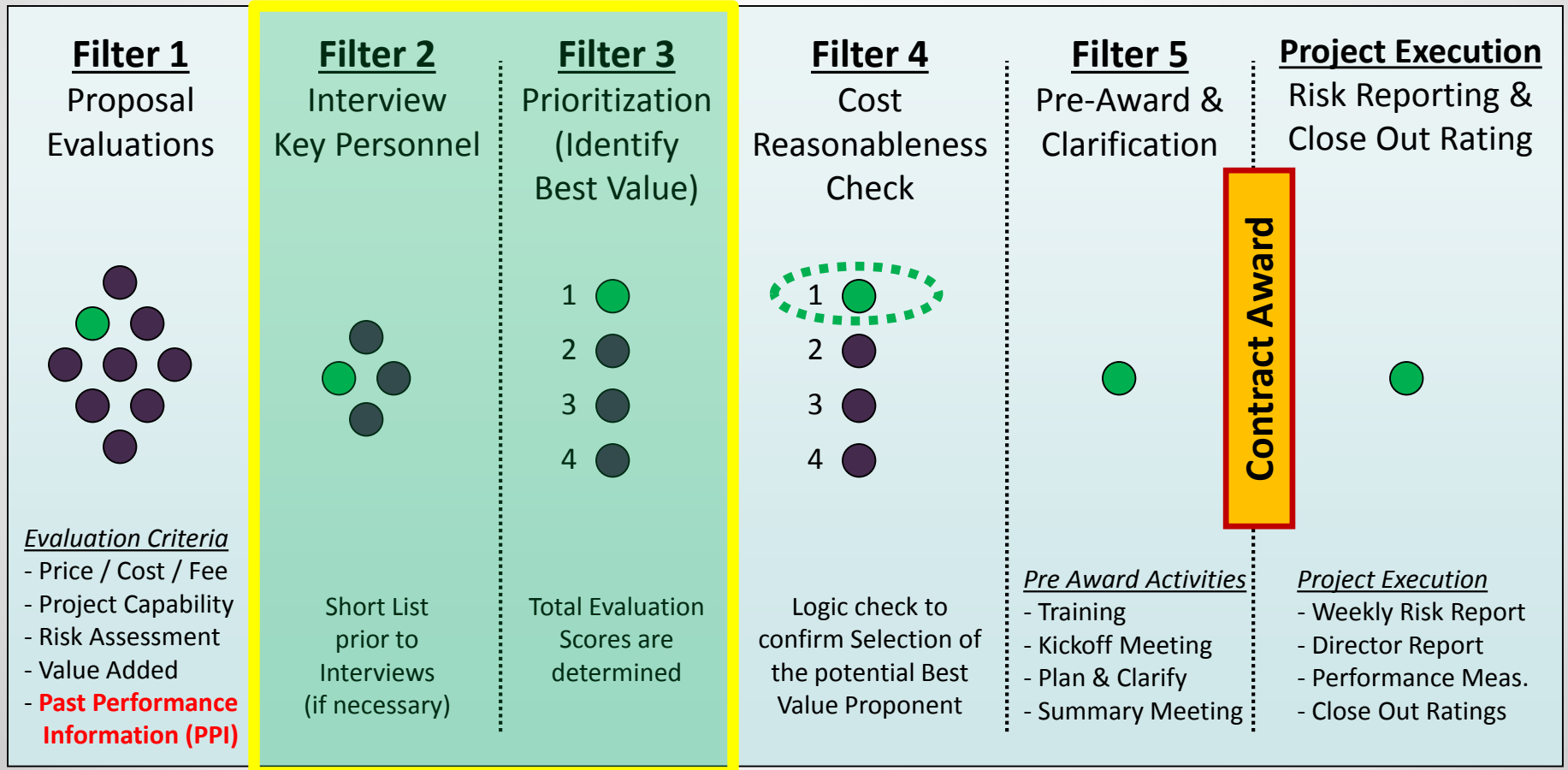
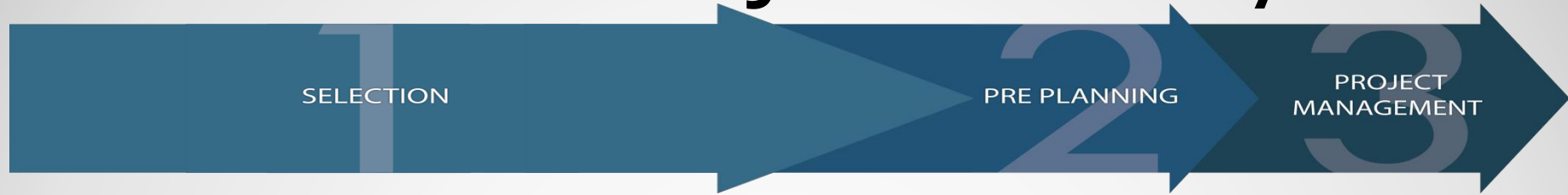
PERFORMANCE QUESTIONNAIRE – DESIGN BUILD PROJECT			
To: _____	Survey ID _____		
<i>(Name of person completing survey)</i>			
Phone: _____	Fax: _____		
Subject: Past Performance Survey of: _____			
<p>The University of Alberta (the University) is their key personnel. The information will be provided to the supplier/individual listed above has li appreciate your taking the time to complete</p> <p>Rate each of the criteria on a scale of 1 (representing the worst performance) and 10 (representing the best performance). Please rate each of the criteria to the best particular area, leave it blank.</p> <p>Client Name: _____</p> <p>Project Name: _____</p>			
NO	CRITERIA	UNIT	
1	Ability to manage costs	(1-10)	
2	Ability to provide and maintain project management and construction schedule	(1-10)	
3	Quality of work	(1-10)	
4	Professionalism and ability to manage	(1-10)	
5	Ability to minimize and respond to user complaints	(1-10)	
6	Communication, explanation of risk, and documentation	(1-10)	
7	Ability to work through regulatory compliance process for validation	(1-10)	
8	Overall customer satisfaction and hiring again based on performance (comfort level in hiring firm again)	(1-10)	

NO	Criteria	Unit	
1	Ability to manage costs	(1-10)	
2	Ability to provide and maintain	(1-10)	
3	Quality of work	(1-10)	
4	Professionalism and ability to	(1-10)	
5	Ability to minimize and respon	(1-10)	
6	Communication, explanation c	(1-10)	
7	Ability to work through regulatory compliance process for validation	(1-10)	
8	Overall customer satisfaction and hiring again based on performance (comfort level in hiring firm again)	(1-10)	

Printed Name (of Evaluator) _____ Signature (of Evaluator) _____

Thank you for your time and effort in assisting us in this important endeavor.
Please fax the completed survey to: Proponent fax number

Value-Based Project Delivery



Interview Format

- Q&A, NOT a presentation
- All individuals are interviewed separately
- Standard set of questions will be asked to each individual – specific to their project role.
- Typically 15-20 minutes per individual

Interview Questions:

Identifying Expertise

1. Why were you selected for this project?
2. How many similar projects have you worked on? Please briefly describe one.
3. Draw out the process for this project by major milestone activities.
 - Identify, prioritize, and how you will minimize the risks of this project.
 - What risks don't you control? How will you minimize those risks?
 - What do you need from the client and when do you need it?

Goal: Minimize Risk

“I have no idea why I am here today”

“My boss called me last night and told me to show up for this interview”

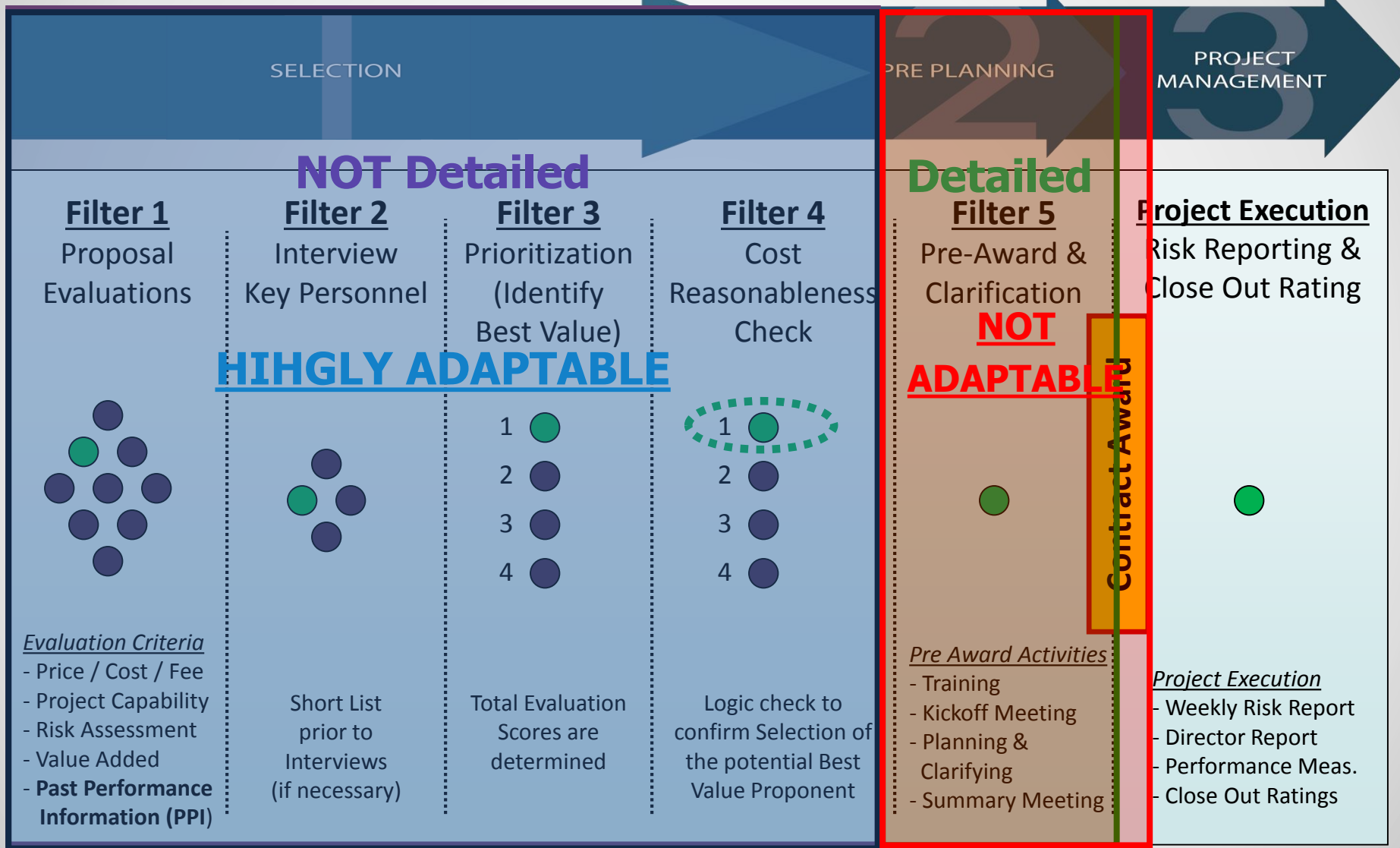
“I did not participate at all in preparing our proposal”

“I am not currently employed by this company, but if we win this project, they will then hire me”

“I have never managed a project of this size/scope”

“There is no risk on this project”

Value-Based Project Delivery

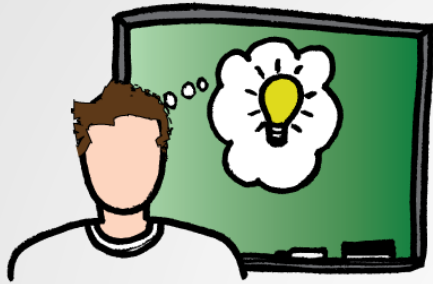


Value-Based Project Delivery



1. *Differentiate Expertise:* within a value proposition
2. *Pre-Planning Before Award:* focused on operational risk

Clarification / Preplanning Period



1 Pre Award Education



2 Kickoff Meeting



3 Plan & Coordinate Deliverables



4 Insert Deliverables Into Contract



5 Summary Meeting



6 Contract Signed

Kickoff Meeting

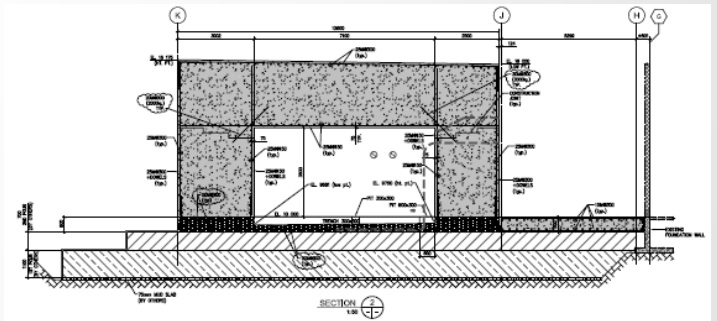
- Agenda: Supplier runs the meeting
 - Review plan in detail
 - Project Milestone Schedule
 - Address client concerns (if given)
 - Address supplier risks and unknowns
(it is ok not to know things in BV, just need to know when you will know them and what could happen along the way)
 - Have day-by-day schedule for clarification period
 - Client Action Items

Importance of Pre-Award



Bad news is really good news if found out during the Pre-Award

- Actual Building dimensions
 - Field review revealed significant square footage difference from bridging documents
 - DB proposed floor layouts to incorporate additional space & minimize cost impact
- Cyclotron Vault Design
 - Wall thickness, foundations, piling, shielding
 - DB proposal minimized schedule impact
- Existing structure concerns
 - Field review revealed cracking on perimeter concrete beams
 - DB proposed to address structural issues during roof deck replacement



Pre Award Final Summary Meeting

- Is not a “Q&A” meeting
 - All issues resolved
 - All coordination complete
 - All risks that are not in vendors control have been identified
 - All value added options have been addressed
- PA Final Meeting is to summarize all of the coordination that has been complete and walk through the PA Document/RMP
- Upon successful completion of the PA Final Meeting, the client will make the award

Impact of Clarification/Pre-Award

(General Services Administration)

No	CRITERIA	Traditional RFP	ASU-BV
1	Number of projects analyzed	11	10
2	Total awarded cost	\$14,244,385	\$9,994,887
3	Total awarded schedule	1,822	1,373
4	Percent awarded cost below budget	4.4%	6.0%
5	Average time RFP Release to Contract	68 days	78 days
6	Average BV-PA duration (days)	0	7
7	Average Overall Change Order Rate	50% Decrease	
8	Average Overall Project Delay Rate	38% Decrease	
9	GSA Satisfaction Rating of Contractor/Job	34% Increase	

For within BV projects, also tested “<1 week” PA vs “>1 week” PA

- Longer PA had **33%** lower change order rate (**73% reduced overall**)
- Longer PA had **69%** lower delay rate (**73% reduced overall**)

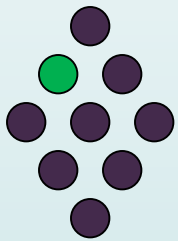
Value-Based Project Delivery

SELECTION

PRE PLANNING

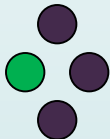
PROJECT
MANAGEMENT

Filter 1
Proposal
Evaluations



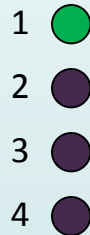
- Evaluation Criteria
- Price / Cost / Fee
 - Project Capability
 - Risk Assessment
 - Value Added
 - **Past Performance Information (PPI)**

Filter 2
Interview
Key Personnel



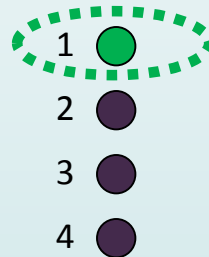
Short List
prior to
Interviews
(if necessary)

Filter 3
Prioritization
(Identify
Best Value)



Total Evaluation
Scores are
determined

Filter 4
Cost
Reasonableness
Check



Logic check to
confirm Selection of
the potential Best
Value Proponent

Filter 5
Pre-Award &
Clarification



- Pre Award Activities
- Training
 - Kickoff Meeting
 - Planning & Clarifying
 - Summary Meeting

Project Execution
Risk Reporting &
Close Out Rating



- Project Execution
- Weekly Risk Report
 - Director Report
 - Performance Meas.
 - Close Out Ratings

Contract Award

Project Management

Common Service Delivery Challenge - **Sustaining Performance**

- Weekly Risk Report
 - Tool for documenting risk that impacts the project
 - Measurement in terms of cost, schedule, and client expectation
- Performance evaluation
 - Client closeout evaluation of vendor performance
 - Updates Past Performance Information

Definition of a risk

- A risk is anything that impacts money, time, or the expectation

What is the Weekly Risk Report?

- The Weekly Risk Report, or WRR, is a project measurement tool that:
 - Contains a summary of the original project plan with known potential risks (RMP)
 - Tracks all project deviations (risk) from the original contract plan
 - Tracks the resolution & responsibility of each risk
- WRR is filled out by Vendor, weekly
 - Even if there are no risks to report, it is still submitted
- The WRR is not a action items list, meeting minutes tracker, or a “whoopsies report”

Purpose of the WRR

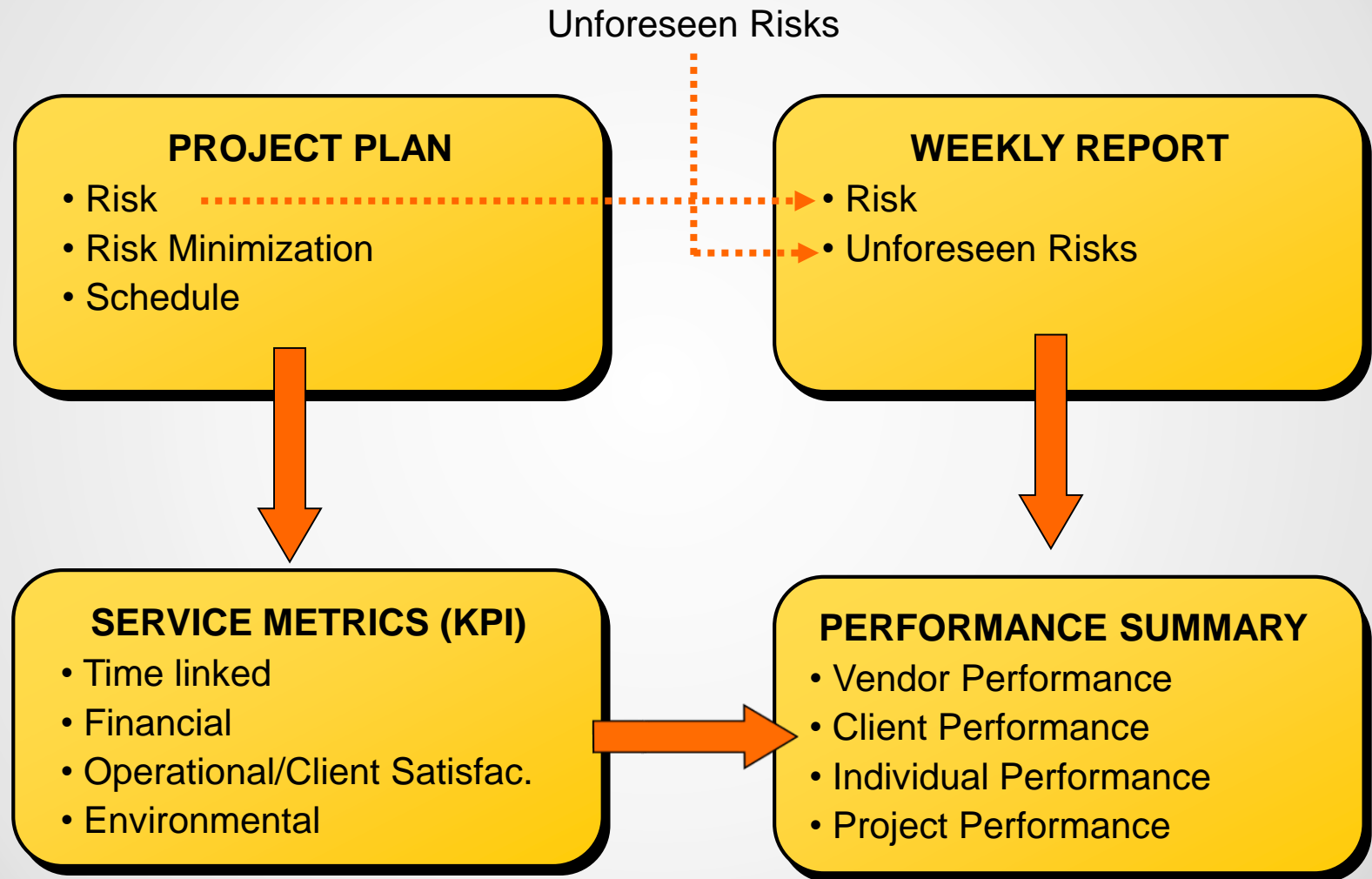
- Purposes
 - Identifies performance of a project
 - Identifies and summarizes all project risks
 - Identifies why risk, cost impact, and/or delays occurred
 - Identifies who caused the risks
 - Complete documentation of risk & resolutions
- Client Benefits
 - Weekly analysis of project(s)
 - Dominant information for each project's status
 - Easy analysis for areas of improvement
 - Helps drive accountability
 - Used to measure performance of entire organization
- Vendor Benefits
 - Allows vendor to document all impacts to cost/schedule
 - Allows vendor to document unresolved issues (client included)
 - Allows vendor to document all client decisions/changes/directives
 - Helps drive accountability

Weekly Risk Report

- Excel Spreadsheet that tracks risks and impacts to service
- Client will setup and send to vendor once Award/NTP issued
- The final project rating will be impacted by the accuracy and timely submittal of the WRR

No	Date Entered	Risk Items	Plan to Minimize Risk	Planned Resolution Date	Actual Date Resolved	Impact Days to Critical Path	Impact to Cost	Owner/ Contractor Generated	Satisfaction Rating (1-10)
0	3/17/2006	EXAMPLE: Risk A	Risk A Plan: 1) Problem background - why is this an unexpected project risk? 2) What will be done to minimize this? 3) Who is responsible for the plan? 4) What kind of impact will this have?	9/9/2006		75	\$ 10,000	0	5
1									
2									
3									

Measurement of Deviation from the Expectation Management by Risk Minimization



NO	DATE ENTERED	RISK CATEGORY	RISK DETAILS	PLANNED RESOLUTION DATE	OPERATIONAL ROLLOUT	ACTUAL DATE RESOLVED	IMPACT TO SCHEDULE	IMPACT TO COST	OWNER RISK SATISFACTION
0	2-Nov-10	Please identify a category from the dropdown list:	Please describe the details of the risk: 1. What is the risk / why was it unexpected? 2. What will be done / what is your plan to minimize this risk? 3. Who is responsible for resolving the issue? 4. What kind of impact will this have? 5. Any updates to this risk (if applicable)	22-Nov-10	15-Oct-11	24-Nov-10	No	\$10,000	5
32	5-Nov-13	1) CLIENT IMPACT - Scope Change / Decision	1) Reduction of services at Elerslie Farm/ buildings demolished. 2) Change implemented as of April 1, 2013. Credit has been issued to the University, by Bee Clean, from April to October to reflect the reduction of services to half for those 7 months. November's invoice will be for 1/2 of previous billing. 3) Carolyn Smolley is responsible for getting the credit issued. David Whalen is responsible for making the amendment to the contract up. 4) Impact to price from April 2013 to July 2014	5-Nov-13	5-Nov-13	5-Nov-13	Yes	\$18,944.68	10
38	10-Jun-11	1) CLIENT IMPACT - Regulations	1. Steam Cleaning schedule that approaches operational hours (ending between 4-6:00 AM). 2. Bee-Clean will begin to shift the steam cleaning schedule to an earlier start and end time to address appropriate dry times. 3. Rob and Bill have adjusted schedules where appropriate to maximize dry times. 4. No cost impact. 5. Revised office service schedules are operational.	7/15/11		8/1/11	Yes	\$ -	10
39	11-Oct-13	1) CLIENT IMPACT - Scope Change / Decision	1)Reduction of services at Elerslie Farm/ buildings demolished. 2)Change implemented as of April 1, 2013. Credit has been issued to the University, by Bee Clean, from April to October to reflect the reduction of services to half for those 7 months. November's invoice will be for 1/2 of previous billing. 3)Carolyn Smolley is responsible for getting the credit issued. David Whalen is responsible for making the amendment to the contract up. 4)Impact to price from April 2013 to July 2014	11-Oct-13	11-Oct-13	11-Oct-13	No	-\$18,944.68	10
40									

Project Title: Custodial Services
 Client: University of Alberta
 Location: Edmonton, Alberta
 Vendor: Bee-Clean
 Contract Year: Year 3

Total Number of Risks: 7.0
 Overall Client PM Risk Satisfaction: -
 Number of Unresolved Risks: 1

Overall Cost Impacts (Compared Against Award)

Awarded Cost (fixed annual): \$ 5,885,407.34
 Contract Escalator Cost Change \$ 230,699.60
 Total Cumulative Additions: \$ 1,324,121.25
 Total Cumulative Exceptions:
 Current Total Annual Cost: \$ 7,440,228.19
 Percent Change: 26.4%

Vendor Change Order Rate 14.3%
 Non-Vendor Change Order Rate 85.7%

Risk Analysis - Year 2 (August 1, 2012-July 31, 2013)

Risk Impact Analysis	# of Risks	Cost Impacts
1) CLIENT IMPACT - Scope Change / Decision	2	\$ 52,005.32
1) CLIENT IMPACT - Regulations	2	\$ -
1) CLIENT IMPACT - Additional Sites	2	\$ 238,637.71
1) CLIENT IMPACT - Other	0	\$ -
2) VENDOR IMPACT - General Issues	1	\$ -
2) VENDOR IMPACT - Sub/Supplier Issues	0	\$ -
2) VENDOR IMPACT - Customer Service	0	\$ -
2) VENDOR IMPACT - Labor	0	\$ -
2) VENDOR IMPACT - Capital Investment	0	\$ -
2) VENDOR IMPACT - Other	0	\$ -
3) UNFORESEEN CONDITIONS	0	\$ -
Totals:	7	\$ 290,643

Annual Cost Summary

Year 1: Aug 1, 2011 - July 31, 2012

Baseline Cost: \$ 5,885,407.34
 Additions: \$ 861,488.75
 Closeout Cost: \$ 6,746,896.09
 Percent Change: 14.6%

Year 2: Aug 1, 2012 - July 31, 2013

Baseline Cost: \$ 6,000,706.73
 Additions (Year 1): \$994,344.12
 Additions (Year 2): \$ 10,262.62
 Closeout Cost: \$ 7,005,313.47
 Percent Change: 16.7%

Year 3: Aug 1, 2013 - July 31, 2014

Baseline Cost: \$ 6,116,106.94
 Additions (Year 1): \$1,014,227.04
 Additions (Year 2): \$ 71,256.50
 Additions (Year 3): \$ 238,637.71
 Closeout Cost: \$ 7,440,228.19
 Percent Change: 21.6%

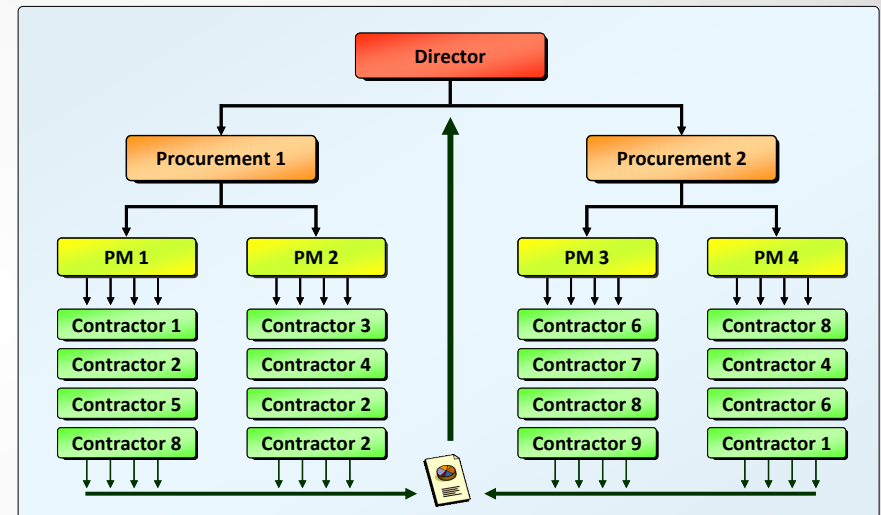
	Name	Description	Raw Data Score	Level	%	Target	Rating	Converted Score	Weighting	Points	Measure
<i>Priority Level Service Level Agreement Metrics (categories as appearing on eQuest "Create New Workorder" page)</i>											
1	Immediate/Urgent Response (except for the agreed upon exception list)	All Emergency Janitorial Services have someone on-site within 30 minutes from the time of call and the task is completed in a timely manner	100	Meet Target	100.00%	Green	Green	100	20.00%	20	number of responses < 30 minutes
				Warning	99.9% - 95.1%	Yellow					over
				Alert	<95%	Red					Total EMR service requests
2	Non-Urgent Response	All requests have someone on-site within the same or next scheduled full service from the time of the call, except when the FM requests a different time schedule, and completed next business day from call received	100	Meet Target	95.00%	Green	Green	100	10.00%	10	number of NER calls < 1 business day
				Warning	94.9% - 90%	Yellow					over
				Alert	<90%	Red					Total NER service requests
3	Scheduled Events and Special Events	Scheduled events are staffed as prescribed by Building and Grounds Services or by end user groups. Facility RPPM is maintained throughout event and following day.	100	Meet Target	100.00%	Green	Green	100	10.00%	10	number of fulfilled events
				Warning	99.9%-95.1%	Yellow					over
				Alert	<95%	Red					total number of events
4	Periodic Services	Sites received periodic services within 2 weeks of the week as stated in the yearly schedule supplied to the University of Alberta	100	Meet Target	100.00%	Green	Green	100	15.00%	15	periodic services completed
				Warning	99.9%-90%	Yellow					over
				Alert	<90%	Red					periodic services scheduled
<i>Non-Priority Level Service Level Agreement Metrics</i>											
5	Number of Callbacks	Call backs are less than 5% of the total calls (as defined by WO's generated from 1 and 2 above)	100	Meet Target	<5%	Green	Green	100	5.00%	5	number of EMG+NEMG callbacks
				Warning	5.1% - 7%	Yellow					over
				Alert	>7%	Red					Total EMG+NEMG service requests
6	Result of Quality Assurance Inspections performed by Bee-Clean	Total percentage of inspections that meet or exceed facility RPPM	100	Meet Target	85.00%	Green	Green	100	25.00%	25	number of sites that meet or exceed
				Warning	84.9% - 80.0%	Yellow					over
				Alert	<80%	Red					total number of sites surveyed
7	Result of Quality Assurance Inspections performed by the University of Alberta	Total percentage of inspections that meet or exceed facility RPPM	91	Meet Target	85.00%	Green	Green	100	15.00%	15	number of sites that meet or exceed
				Warning	84.9% - 80.0%	Yellow					over
				Alert	<80.0%	Red					total number of sites surveyed

Page 1

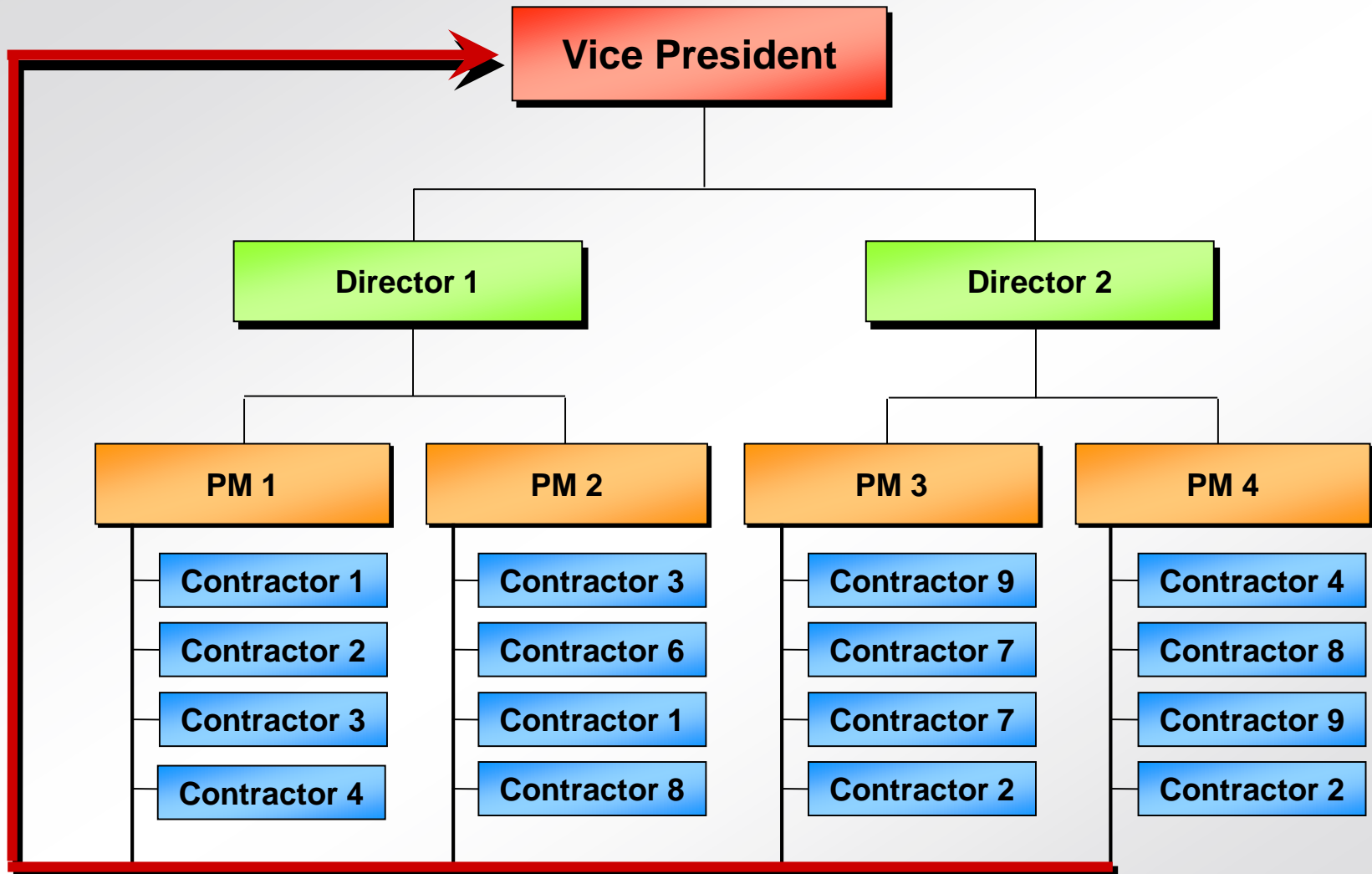
Directors Report Analysis

- Directors Report can provide analysis and performance of:

- Individual Projects
- External Contractors
- External Designers
- Client Project Managers
- Client Procurement Officers
- Other Internal Staff (Codes/Permitting)
- Client Directors
- Selection Process (LB/BV)
- Delivery Method (DBB, DB, CMAR)
- Entire organization



Program Report



Report – Overall Program

General Overview

Total Number of Projects (Completed and In-Progress)	161
Awarded Proposal Cost:	\$ 49,178,524
Approved Value Added Options:	\$ 4,041,940
Total Awarded Cost:	\$ 50,603,783
Average Proposal Cost:	\$ 55,247,798
Percent Awarded Below Average Cost:	11%
Percent of Projects where BV had lowest cost	53%
Percent of Projects where BV was TGB Vendor	16%

Cost Increases

Overall Change Order Rate	7.0%
Client Change Order Rate	4.9%
Internal Partners Change Order Rate	1.4%
Designer Change Order Rate	0.7%
Contractor Change Order Rate	0.1%

Schedule Increases

Overall Delay Rate	45.1%
Client Delay Rate	23.8%
Internal Partners Delay Rate	12.9%
Designer Delay Rate	4.2%
Contractor Delay Rate	4.1%

Satisfaction Ratings

CPPM Post Project Evaluation of Vendor	9.6
--	-----

Report - Directors

Number of Projects		Director 1	Director 2
1	Total Number of Projects (Completed & In Progress)	40	121
2	Total Number of In Progress Projects	8	24
3	Total Number of Completed Projects	31	95
4	Total Number of Projects on Hold	1	2
5	Weekly Reports Submitted On Time	78%	97%

Cost Analysis

6	Total Awarded Cost:	\$14,669,944	\$35,933,839
7	Overall Change Order Rate	5.7%	7.5%
8	Client Change Order Rate	4.2%	5.1%
9	Internal Partners Change Order Rate	0.8%	1.6%
10	Designer Change Order Rate	0.6%	0.7%
11	Contractor Change Order Rate	0.1%	0.0%

Schedule Analysis

12	Overall Delay Rate	48.0%	44.2%
13	Client Delay Rate	21.6%	24.5%
14	Internal Partners Delay Rate	19.6%	10.8%
15	Designer Delay Rate	2.7%	4.7%
16	Contractor Delay Rate	4.0%	4.1%

Report - End Users

General Overview		TEAM 1 (President / University / Admin)	TEAM 2 Academic Health Center	TEAM 3 Provost College
1	Total Number of Projects	19	14	5
2	Percent of Projects Procured Using PIPS	79%	86%	80%
3	Total Awarded Cost:	\$5,359,995	\$2,821,005	\$2,353,761
4	Average Number of Risks per Project	3	8	12
Owner Impacts				
5	Overall Owner Impacts (Time & Cost)	7.7%	41.3%	41.1%
6	Owner Change Order Rate	0.6%	3.4%	20.0%
7	Owner Delay Rate	7.2%	37.8%	21.1%
8	Percent of Projects without Owner Cost Changes	63%	36%	80%
9	Percent of Projects without Owner Delays	68%	50%	80%
Contractor Impacts				
10	Overall Contractor Impacts (Time & Cost)	8.1%	19.6%	14.8%
11	Contractor Change Order Rate	0.1%	0.1%	-0.8%
12	Contractor Delay Rate	8.0%	19.6%	15.6%
13	Percent of Projects without Contractor Cost Changes	95%	93%	100%
14	Percent of Projects without Contractor Delays	79%	79%	60%
Satisfaction Ratings				
15	Total Number of Completed Projects	4	2	1
16	Total Number of Client Surveys Returned	3	2	1
17	Percent of Projects Evaluated by Client	75%	100%	100%
18	Average PM Post Project Rating of Contractor	6.75	10	10
19	Average Client Post Project Rating of Contractor	7.7	8.5	8.0
20	Average Client Post Project Rating of CPPM	10.7	8.5	7.0

Report – Internal PM's

		AVERAGE	PM 1	PM 2	PM 3	PM 4	PM 5	PM 6	PM 7
General Overview									
	Total Number of Projects (Completed, On Hold & In Progress)	12	4	1	19	53	24	1	2
	Total Number of In Progress Projects	2	3	1	7	4	4	0	0
	Total Number of Projects on Hold	0	0	0	0	0	0	0	2
	Total Awarded Cost:	\$ 3.9 M	\$ 1.2 M	\$ 0.0 M	\$ 11.5 M	\$ 15.0 M	\$ 3.1 M	\$ 1.6 M	\$ 0.3 M
	Weekly Reports Submitted On Time	42.6%	77.8%	89.7%	55.2%	59.4%	100.0%	0.0%	33.3%

Cost Analysis

	Overall Change Order Rate	6.6%	1.7%	0.0%	9.1%	3.5%	4.6%	28.4%	0.0%
	Client Change Order Rate	4.4%	0.2%	0.0%	5.0%	2.0%	3.9%	20.1%	0.0%
	Unforeseen Change Order Rate	0.8%	0.0%	0.0%	1.9%	0.4%	0.2%	4.0%	0.0%
	Internal Partners Change Order Rate	0.7%	0.9%	0.0%	1.9%	0.3%	0.2%	0.8%	0.0%
	Designer Change Order Rate	0.7%	0.6%	0.0%	0.3%	0.8%	0.3%	3.5%	0.0%
	Contractor Change Order Rate	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%

Schedule Analysis

	Overall Delay Rate	22.5%	0.0%	0.0%	46.8%	26.2%	15.9%	35.4%	0.0%
	Client Change Order Rate	10.8%	0.0%	0.0%	25.1%	11.9%	4.0%	35.4%	0.0%
	Unforeseen Change Order Rate	1.1%	0.0%	0.0%	1.5%	0.7%	0.9%	0.0%	0.0%
	Internal Partners Delay Rate	6.4%	0.0%	0.0%	13.5%	5.0%	8.8%	0.0%	0.0%
	Designer Change Order Rate	1.9%	0.0%	0.0%	2.9%	5.1%	0.1%	0.0%	0.0%
	Contractor Change Order Rate	2.2%	0.0%	0.0%	3.7%	3.6%	2.2%	0.0%	0.0%

Report - Contractors

No	Contractor	Total Number of Projects	Total Awarded Cost:	Owner Change Order Rate	Owner Delay Rate	Vendor Change Order Rate	Vendor Delay Rate	Percent of Late Reports	Vendor Performance
1	Contractor 118	3	\$ 721,965	0.3%	18.1%	0.2%	66.8%	53%	120%
2	Contractor 119	3	\$ 220,002	0.7%	10.4%	0.0%	0.0%	69%	69%
3	Contractor 120	1	\$ 269,850	9.4%	303.0%	0.0%	18.2%	47%	65%
4	Contractor 104	3	\$ 459,225	1.6%	2.7%	0.0%	18.8%	37%	56%
5	Contractor 121	1	\$ 241,575	0.0%	21.9%	2.7%	50.0%	0%	53%
6	Contractor 105	8	\$ 1,611,015	0.3%	32.9%	0.0%	16.3%	32%	49%
7	Contractor 106	9	\$ 1,280,362	2.2%	31.1%	0.7%	3.2%	35%	39%
8	Contractor 122	3	\$ 367,650	0.0%	79.1%	0.0%	1.4%	37%	38%
9	Contractor 107	1	\$ 178,440	0.0%	0.0%	0.6%	11.4%	25%	37%
10	Contractor 123	2	\$ 3,227,182	14.9%	0.0%	-0.6%	5.4%	30%	35%
11	Contractor 108	2	\$ 327,295	0.0%	135.4%	0.0%	0.0%	32%	32%
12	Contractor 124	1	\$ 69,218	3.5%	0.0%	0.0%	0.0%	31%	31%
13	Contractor 125	3	\$ 1,150,738	1.9%	7.3%	0.0%	4.2%	26%	30%
14	Contractor 109	5	\$ 534,095	2.0%	23.2%	0.0%	0.0%	29%	29%
15	Contractor 126	1	\$ 323,000	3.3%	3.4%	0.0%	6.8%	22%	29%
16	Contractor 110	1	\$ 308,882	1.2%	24.8%	0.0%	0.0%	27%	27%
17	Contractor 127	7	\$ 1,793,355	3.8%	13.6%	0.0%	0.0%	26%	26%
18	Contractor 128	4	\$ 2,956,800	1.3%	1.7%	0.0%	12.2%	11%	23%
19	Contractor 129	6	\$ 1,319,789	2.2%	16.2%	0.0%	11.0%	9%	21%
20	Contractor 111	4	\$ 1,096,707	0.1%	0.0%	0.0%	9.8%	10%	19%
21	Contractor 112	1	\$ 446,100	0.0%	6.9%	0.0%	0.0%	15%	15%
22	Contractor 113	3	\$ 552,815	5.1%	29.4%	0.0%	7.0%	8%	15%
23	Contractor 114	2	\$ 1,841,157	13.0%	215.8%	0.0%	0.0%	13%	13%



Report – Yearly Analysis

UMN YEAR TO YEAR PIPS PERFORMANCE							
NO	CRITERIA	OVERALL	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
1	Number of Best-Value Procurements	161	8	26	37	58	31
2	Completed Projects	126	8	26	37	47	8
3	Average Proposal Cost (Million)	\$55,247,797.5	\$3,559,703	\$7,157,304	\$7,800,961	\$21,406,067	\$15,198,841
4	Awarded Cost (Million)	\$49,178,524.0	\$3,077,177	\$6,803,515	\$7,379,659	\$19,011,784	\$12,784,389
5	Percent Awarded Below Average Cost	11.0%	13.6%	4.9%	5.4%	11.2%	15.9%
6	Average Number of Proposals	4.0	3.6	3.3	3.1	4.4	4.7
7	Percentage of Jobs Awarded to TGB vendors	16%	0%	15%	30%	14%	10%
8	Projects Where Best-Value was also Lowest Cost	53%	50.0%	46.2%	54.1%	58.6%	51.6%
9	% projects on budget	43%	50.0%	53.8%	40.5%	32.8%	54.8%
10	Overall Cost Increases:	7.0%	8.2%	2.2%	8.6%	12.6%	1.5%
11	Cost Increases (Client):	4.9%	7.4%	1.2%	7.0%	8.3%	1.1%
12	Cost Increases (CPPM)	1.4%	0.4%	0.5%	0.4%	3.3%	0.2%
13	Cost Increases (Designer):	0.7%	0.0%	0.5%	1.3%	0.9%	0.2%
14	Cost Increases (Contractor):	0.1%	0.4%	0.0%	0.0%	0.1%	0.0%
15	% projects on time	45%	25.0%	42.3%	37.8%	39.7%	71.0%
16	Overall Schedule Increase:	45.1%	98.5%	34.5%	69.4%	50.0%	12.9%
17	Schedule Increases (Client):	23.8%	74.1%	15.7%	40.8%	25.4%	3.3%
18	Schedule Increases (CPPM):	12.9%	100.0%	100.0%	100.0%	100.0%	100.0%
19	Schedule Increases (Designer):	4.2%	0.0%	4.3%	8.3%	3.5%	2.5%
20	Schedule Increases (Contractor):	4.1%	0.9%	6.1%	5.3%	5.0%	0.7%

Report – Top 10 Riskiest Projects

No	Project	Awarded Cost	Awarded Duration	Overall Change Order Rate	Overall Delay Rate	Percent of Late Reports	Risk Analysis Factor	PM	Director
1	Mayo Remodel Suite A652	\$ 269,850	66	9%	321%	47%	377%	Wycliffe Waganda	Gary Summerville
2	Barn Clean Renovations	\$ 269,000	80	2%	166%	60%	229%	Wycliffe Waganda	Justin Grussing
3	WBOB Remodel Suite 150	\$ 273,100	99	1%	96%	37%	134%	Pete Nickel	Gary Summerville
4	Vet Sciences Third Floor	\$ 96,930	49	3%	86%	28%	116%	Pete Nickel	Gary Summerville
5	Weaver Densford College of Pharmacy	\$ 90,862	28	2%	25%	80%	107%	Pete Nickel	Gary Summerville
6	PWB Remodel Suite 6-240	\$ 127,338	82	17%	23%	64%	104%	Steve Bailey	Gary Summerville
7	PWB Room 7-158B	\$ 46,504	30	0%	0%	100%	100%	Pete Nickel	Gary Summerville
8	Oak Street Parking Surveillance	\$ 246,802	74	0%	0%	100%	100%	George Mahowald	Justin Grussing
9	Snyder Bldg Exterior Door	\$ 219,000	121	-4%	81%	22%	100%	Wycliffe Waganda	Justin Grussing
10	Heller Hall Renovation	\$ 1,593,561	254	29%	0%	50%	79%	Matt Stringfellow	Justin Grussing

Report – Analysis of Risks

Risk Category	Number of Risks	Impact to Cost	Impact to Schedule	Percent Impact to Cost	Percent Impact to Schedule
1) Client Impacts	114	\$660,369	1,200	59%	46%
Client Scope Change / Decision	111	\$ 660,369	976	59%	37%
Client Requested Delay	3	\$ -	224	0%	9%
2) CPPM Impacts	135	\$329,425	885	30%	34%
Design Issue	48	\$ 189,876	230	17%	9%
CPPM Issue (Codes / Permits)	36	\$ 46,140	170	4%	7%
CPPM Issue (Energy Mgmt)	2	\$ 47,533	30	4%	1%
CPPM Issue (Hazardous / Health & Safety)	8	\$ 35,407	118	3%	5%
CPPM Issue (NTS)	8	\$ 10,018	64	1%	2%
CPPM Issue (Contract / Payment)	11	\$ -	132	0%	5%
CPPM Issue (Other)	22	\$ 451	141	0%	5%
3) Contractor Impacts	43	\$21,005	411	2%	16%
Contractor Issue	11	\$ -	101	0%	4%
Contractor Oversight of Design	9	\$ 21,005	38	2%	1%
Contractor Issue with Supplier / Sub	23	\$ -	272	0%	10%
4) Unforeseen Impacts	19	\$102,544	111	9%	4%
	311	\$ 1,113,343	2,607		

Education Opportunities

- Conferences, Seminars, on-site training
- MS Program – online or in-person
- 200+ hr Certificate Program (Spring 2014)
- Online Certification prep
 - FMP, SFP (Spring 2014)

ssebe.engineering.asu.edu/fm-ms

The screenshot shows a web browser window with the URL `ssebe.engineering.asu.edu/prospective-students/facility-management.html`. The page header includes the ASU logo and navigation links such as "ASU Home", "My ASU", "Colleges & Schools", "A-Z Index", "Directory", "Map", and "SIGN IN". A search bar is also present.

The main content area features a banner for the "SCHOOL OF sustainable engineering and the built environment". Below this is a navigation menu with options: "home", "prospective students", "current students", "research", "people", "alumni and friends", "industry outreach", and "about".

The "prospective students" section is highlighted, showing the "facility management concentration" under the "del e. webb school of construction". It includes an "overview" section with the following text:

The Facility Management M.S. concentration is **IFMA Accredited**, and supports the needs of **students desiring a career in the maintenance, operation, renovation, or decommissioning of existing facilities.**

SPECIFICS OF THE PROGRAM INCLUDE:

- **Thesis and Non-Thesis options** available (chat with an **advisor** to discuss the best option for you)
- **30 credits** (10 classes or 8 classes with a Thesis)
- Can be taken **Online or In person**
- Courses **taught by academic and industry professionals**

Below the text is a video player with the title "What do others have to say about the program?" and a duration of 2:45. The video thumbnail shows a woman speaking in front of a "DIABLO CONC" sign.

At the bottom of the page, a yellow box contains the text: "Beyond a cutting-edge FM education, students will also learn".

The browser's taskbar at the bottom shows various application icons and the system clock indicating 7:04 AM on 11/8/2013.

requirements

- ▶ Undergraduate degree*
- ▶ No GRE or placement tests

courses*

- ▶ Operations & Maintenance
- ▶ Facilities Administration
- ▶ Building Energy Management
- ▶ Facilities Project Management
- ▶ Sustainable Facilities
- ▶ Advanced Business Processes
- ▶ Leadership Principles
- ▶ Applied project
- ▶ Numerous electives offered
- ▶ Internships available

**Can be adjusted to each student's needs*

Apply Now!

(Must apply by March 1 for fall semester and October

Comments / Questions



For more information: please leave a business card

WWW.PBSRG.COM