COGENCE Alliance

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Communicate Your Way to Desired Outcomes.

13 July 2016

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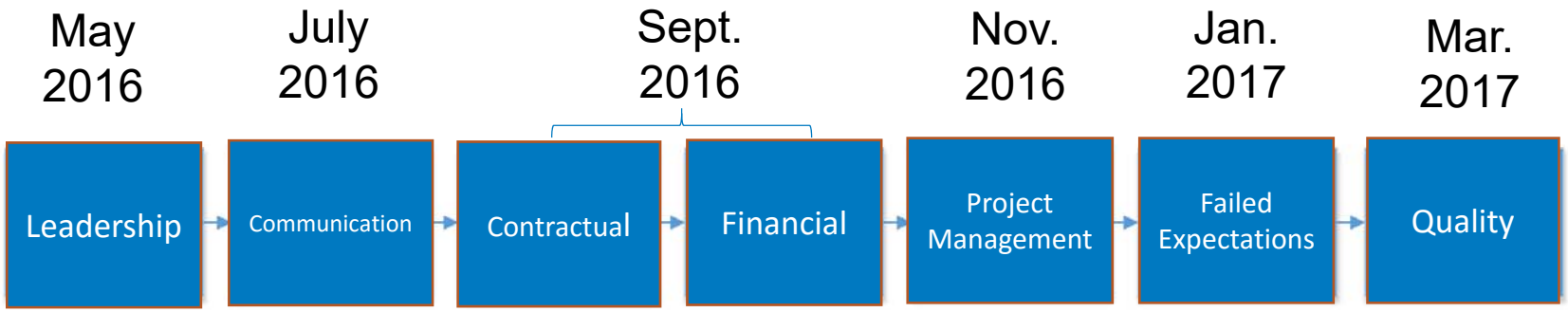
Collective Risks We Face

Leadership	Communication
Change within Project Timeframe	Lack of Transparency
Lack of Engagement	Not Open, Honest, Timely
Misalignment of Personalities	Fails to Clarify Intent
Not Involved Early Enough to Affect Outcome	Does Not Happen

Failed Expectations	Contract Issues
Schedule / Budget Not Realistic	Scope Not Detailed
Overcommitting	Shift Risk to Inappropriate Party
Forced to Accept Deficiencies	Not Negotiable
Assumptions Made on Incomplete Information	Not Properly Coordinated with Team

Financial	Project Management	Quality
Schedule Delays Business Operations	Inexperience	Poor Craftsmanship
Effort Exceeds Budget	Not Being Clear with Performance Expectations	Incomplete / Conflicting Docs.
Pricing Assumptions	Scope Creep / Scope Change	Constructablility Issues
Cash Flow	Reliance on Consultant / Sub Performance	Poor Performance
Estimates Based on Incomplete Info.	Overextended Workload	Drawings Never Perfect / E&O
Aligning pricing structure to compete with market	Not Involved Early Enough to Affect Outcome	Changes in Scope Without Change to Schedule; Quality Suffers

2016 - 2017 Program Timeline



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Agenda

- Project Delivery Leadership Essentials (15 Min)
- Communication Measurement (30 Min)
- Communication Development (50 Min)
- Housekeeping (5 Min)
- Plus/Delta (10 Min)

Effective Leadership Mitigates Risk

Leaders are:

- Engaged and have a positive project impact
- Maintain consistent personnel throughout project timeline
- Proactively engage key players to a project
- Create opportunity through clarity in roles and responsibilities
- Foster productivity and quality with forward-thinking actions

Leadership Traits for Effective Project Performance

Project Delivery Leadership Traits			
Respectful	Creates Vision	Honest	Prepared
Decisive	Inspiring	Honorable	Organized
Solution Minded	Motivating	Trustworthy	Proactive
Informed	Empowering	Emotionally Stable	Forward looking
Factual	Enabling	Resilient	Fair
Logical	Creates Engagement	Confident	Cooperative
Authoritative	Effective Communicator	Consistent	Demanding
Coach	Accessible	Dependable	Responsible
Listener	Open	Supportive	
Understanding	Aware	Transparent	

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Communicate Your Way to Desired Outcomes.

Can we measure it?

Inspire. Educate. Unite.


YOU CAN'T
IMPROVE WHAT
YOU DON'T
MEASURE.

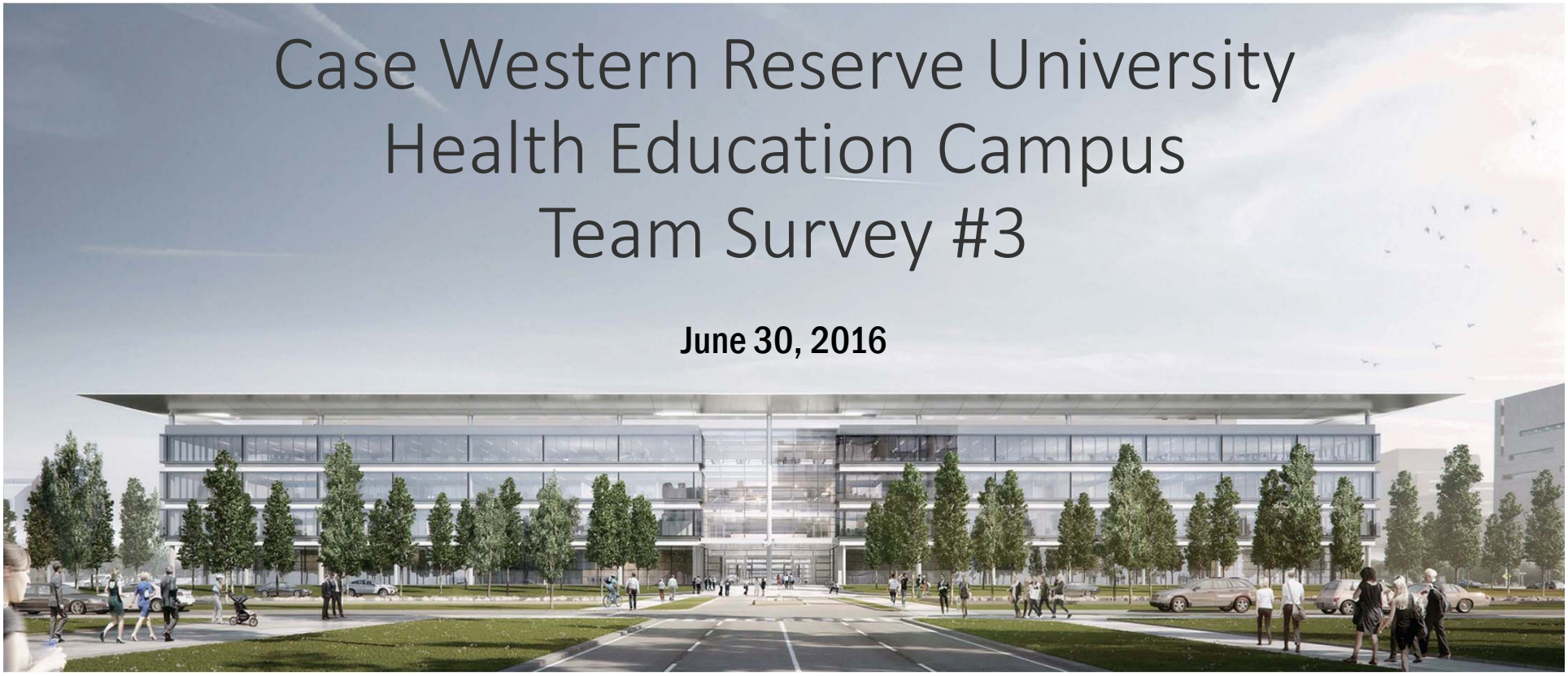
Communication Measurements

- Survey
- Goal Achievement
- Daily Huddles
- RFI Responses
- Constraints
- % Plan Complete
- Co-Location Environment
- Communication Matrix & Procedures

Donley's · Turner

Case Western Reserve University
Health Education Campus
Team Survey #3

June 30, 2016



Balfour Concord

Foster + Partners

Westlake
Reed
Leskosky

Cleveland Clinic

GS Stephens, Inc.

Case Western Reserve University EST. 1826

NV5

Donley's · Turner

Sample Survey

Project Team Survey	0	1	2	3	4	5	Jun-16 Average Score
2. **Communication** between all team members is:	0	14	43	43	0	0	2.29
3. Concerns & problems are **acknowledged**:	0	29	29	29	14	0	2.28
4. Concerns & problems are **dealt with** in a timely manner:	0	57	29	14	0	0	1.57
5. **Cooperation** between all team members is:	0	0	43	43	14	0	2.71
6. When **issues** were raised people:	0	29	29	43	0	0	2.14
7. The sense of **teamwork** between everyone is:	0	14	43	29	14	0	2.43
8. The level of **trust** between team members is:	0	29	29	29	14	0	2.28
9. The Team Member's **respect** of each other is:	0	0	29	71	0	0	2.71
							2.30

Survey Samples

Trust Matrix							
	-3	-2	-1	0	1	2	Score
Environment	Toxic	Stressful	Worry	No worries	Positive	Uplifting	
Focus	Escalation	Pre-emption	Process	Scope	Outcome	Mutual success	
Relationships	Hostile	Disrespect	Indifferent	Cordial	Cooperative	Collaborative	
Process	Sabotage	Hidden Agendas	Chain of command	Task at hand	Keeping promises	Making it easier for others	
Behavior	Micromanage	CYA	Do my job	Respect	Partnering	Transparency	
Outcomes	Gotcha	Politics	Slow	Efficient	Learn from mistakes	Improve	
Systems	Dysfunctioal	Distracting	Hassle	Does not get in the way	Supportive	Adaptive	
Ethics	Your Harm	Self-interest	Compliance	What is expected	What is right	What is good	

Survey Samples

Snapshot: 4 Questions out of a Total of 33

9.	Donley's senior executives (including the Project Executive) have maintained ongoing communication throughout construction, providing on-site presence when necessary.	Strongly Disagree ○	Disagree ○	Neutral ○	Agree ○	Strongly Agree ○	NA ○
10.	In relation to overall communication during the construction process, how would you rate Donley's performance in comparison to your expectations?			Less than ○	Met ○	Exceeded ○	
11.	In relation to overall communication during the construction process, how would you rate Donley's performance in comparison to your experience with other construction firms?	Worse ○	Same ○	Better ○	NA ○		
12.	What could Donley's do to improve its communication process during construction?						

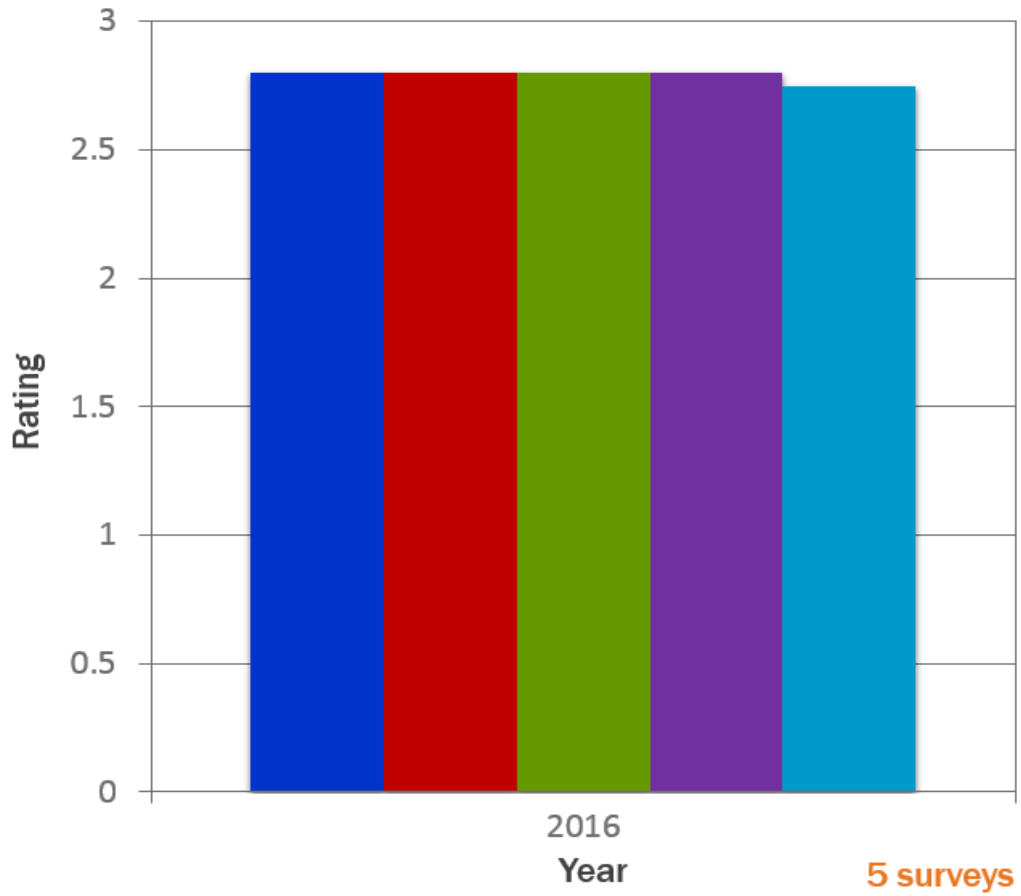
Survey Samples

Champion: Don Dreier

Client Survey Summary: Construction GC/CM

STATUS

Goal 2.75



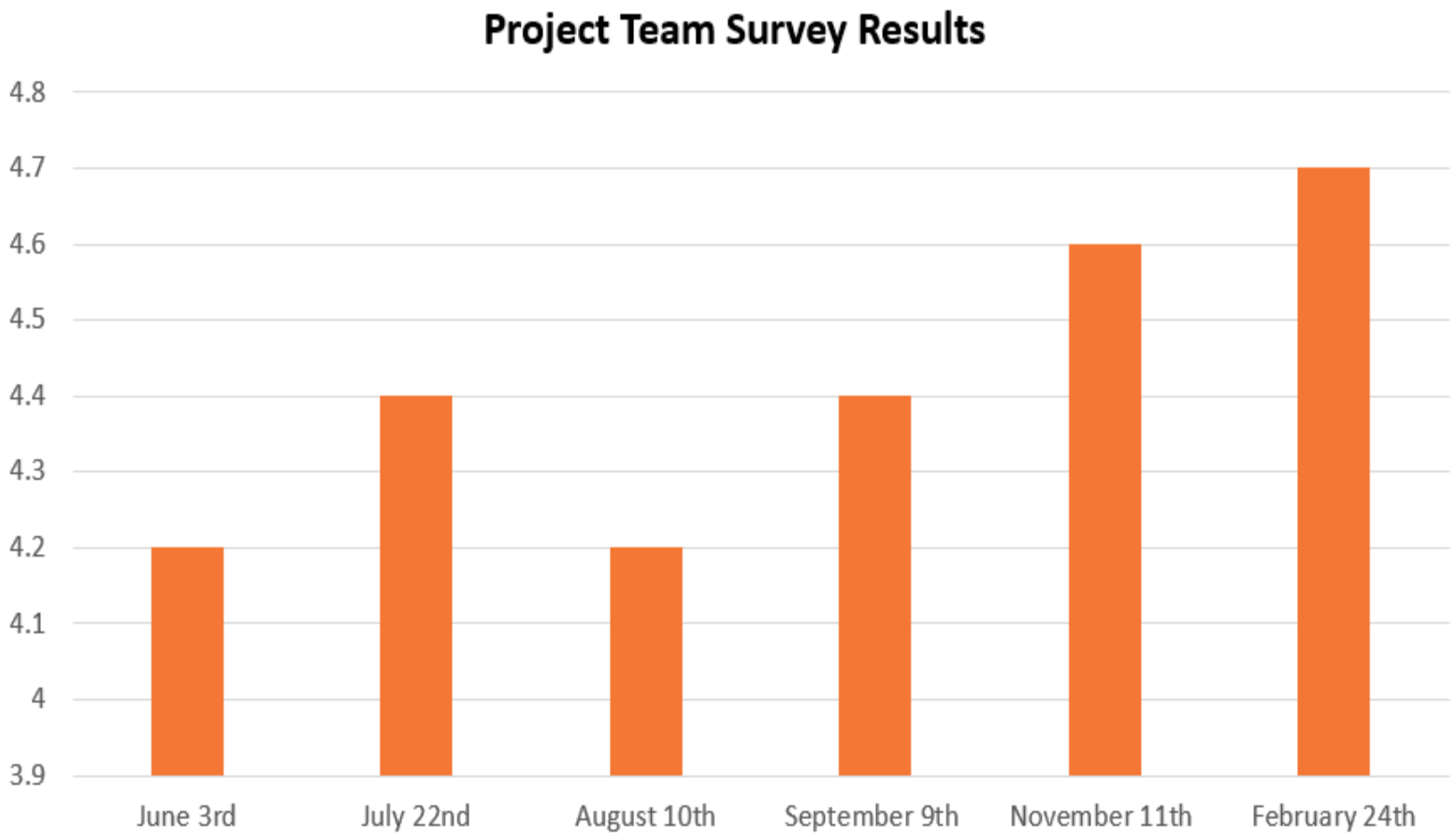
1 = Less than expected/Worse

2 = Met expectations/Same

3 = Exceeded expectations/Better

5 surveys completed; 100% of surveys returned

Survey Result Trends



Survey Methods

iPhone Responder

Accessing Responseware on your Smart Phone

- Go to www.rwpoll.com
- Enter Session ID
- Join Session
- Based on your current project experience, rate your "perceptions" of this project.
- Select the number that most closely reflects your opinion from a scale of 0 – 5, as described in the following questions

Developing Relational Coordination

Prepared by John Paul Stephens, Ph.D.
Associate Professor
Dept. of Organizational Behavior
Weatherhead School of Management
Case Western Reserve University

The challenge for today's organizations

- Pressure to deliver better outcomes at lower cost
- Learning to do *more* with *less*
- Are these goals possible to achieve?
- Can relational coordination help organizations to achieve these goals?

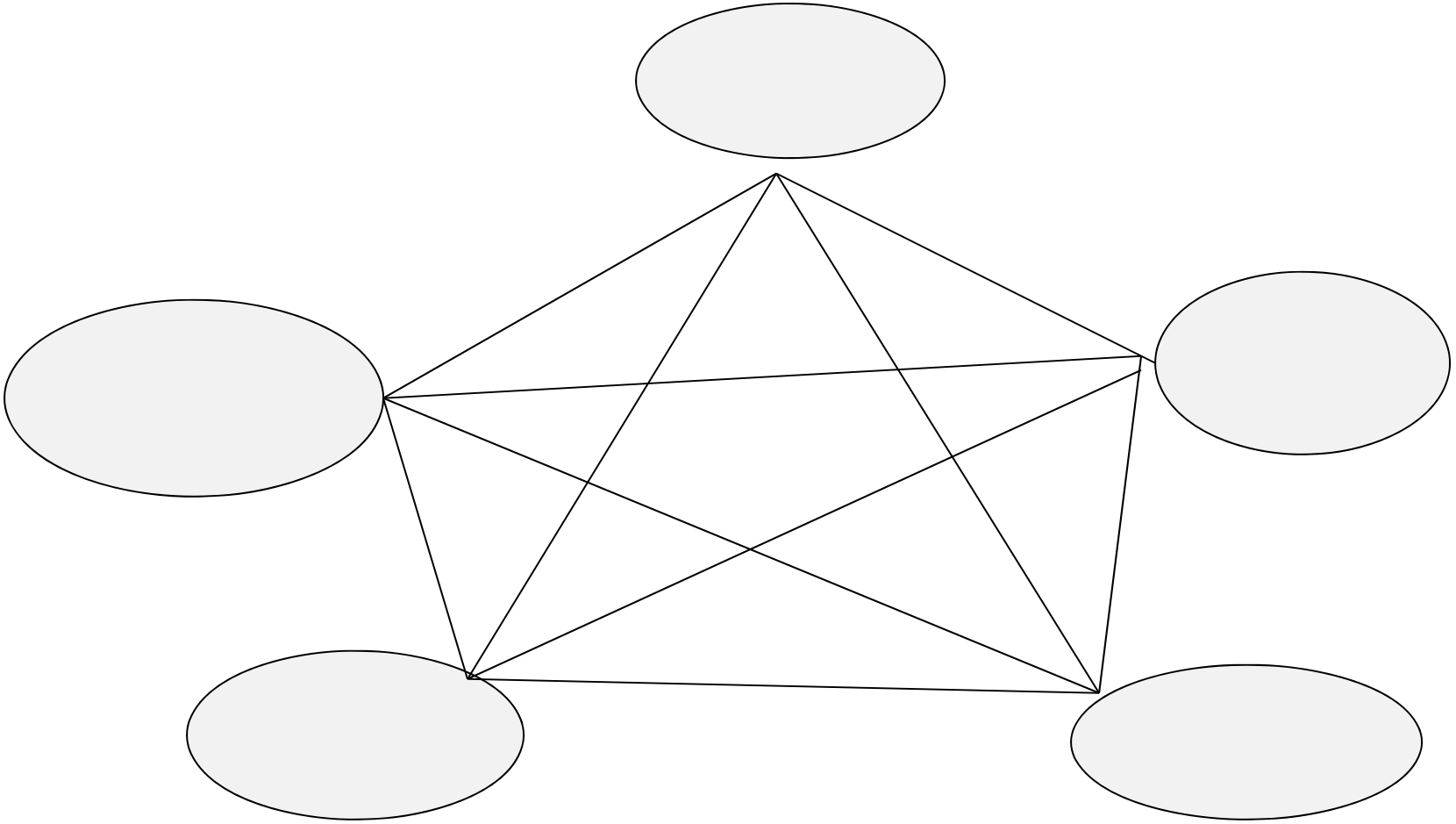
Relational coordination…

- …Focuses on the quality of communication among interdependent stakeholders
- This matters because…
- "An organization comes into being when (1) there are persons able to communicate with each other (2) who are willing to contribute to action (3) to accomplish a common purpose. These elements are necessary and sufficient conditions initially, and they are found in all such organizations" (Barnard, 1938, p. 82).

Measuring relational coordination

RC dimensions	Survey questions
1. Frequent communication	How *frequently* do people in each of these groups communicate with you about [focal work process]?
2. Timely communication	How *timely* is their communication with you about [focal work process]?
3. Accurate communication	How *accurate* is their communication with you about [focal work process]?
4. Problem solving communication	When there is a problem in [focal work process], do people in these groups blame others or try to *solve the problem*?
5. Shared goals	How much do people in these groups *share your goals* for [focal work process]?
6. Shared knowledge	How much do people in these groups *know* about the work you do with [focal work process]?
7. Mutual respect	How much do people in these groups *respect* the work you do with [focal work process]?

Mapping relational coordination



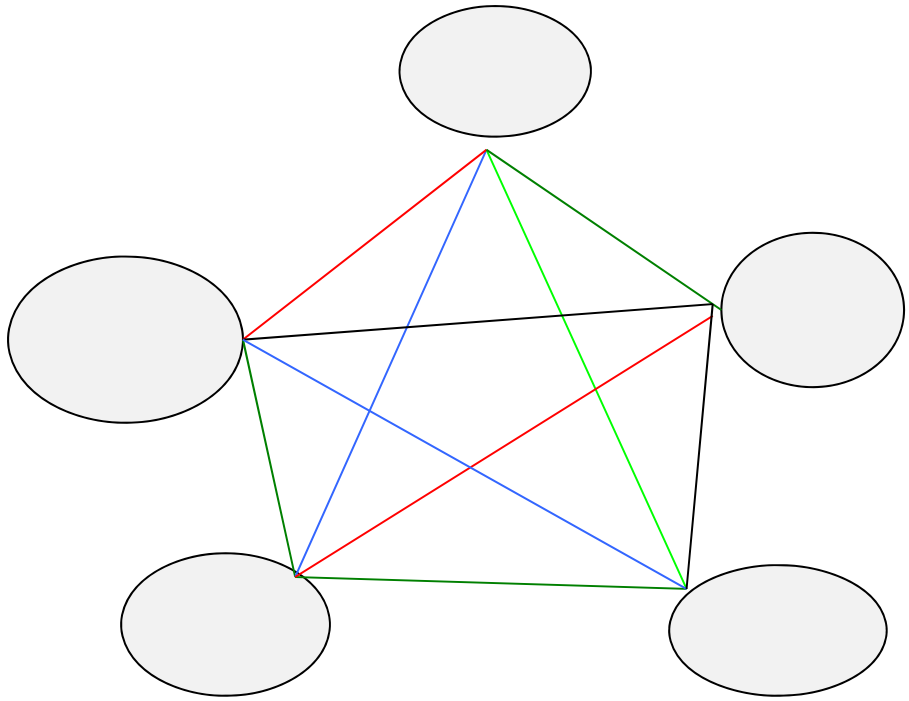
RELATIONAL COORDINATION
RESEARCH COLLABORATIVE

Relational Mapping to Identify and Change Communication Patterns

- What is the interdependent work process?
- What is the overall goal of the activity in the case?
- Which groups/actors were involved?
- Put each actor in a circle, and for each relationship between two actors, consider how strong it is in the 7 dimensions of RC
- Color the lines between each actor, indicating strength of RC
  - RED = LOW RC
  - BLUE = MEDIUM RC
  - GREEN = HIGH RC

How did Relational Coordination apply here?

- Relational Coordination
  - Frequency of communication?
  - Timeliness of communication
  - Problem-solving nature of communication?
  - Accuracy of communication?
  - Sharedness of goals?
  - Sharedness of knowledge?
  - Amount of mutual respect?



Learning Takeaways

- Relational coordination helps us figure out not just *whether* a system of relationships works, but also *why*
- Relational coordination surveying and mapping can be an analytic tool as well as intervention
- Delivering feedback involves timely, constructive, and respectful communication from you too!

Barriers to Communication

- Unfamiliar Team Players
- Lack of Trust
- Cultural Differences
- Geographical Distance
- Egos
- Improper Delivery System

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Communicate Your Way to Desired Outcomes.

How do we develop it?

Inspire. Educate. Unite.

Co-location/ Big Room

- Co-Location
- Education & Continuous Improvement
- Pull Planning
- Reliable Promising - LRM
- communication through structured and improvised meetings
- Report Outs – Allows all partners to see where we are on the Schedule, Scope and Target Budget
- Transparent Decision Making – A3
- Video Conferencing
- WebEx & Join.Me

Pull Planning – Design, Construction & Transition /Activation

Education – Standard Work

Obtain Construction Estimate

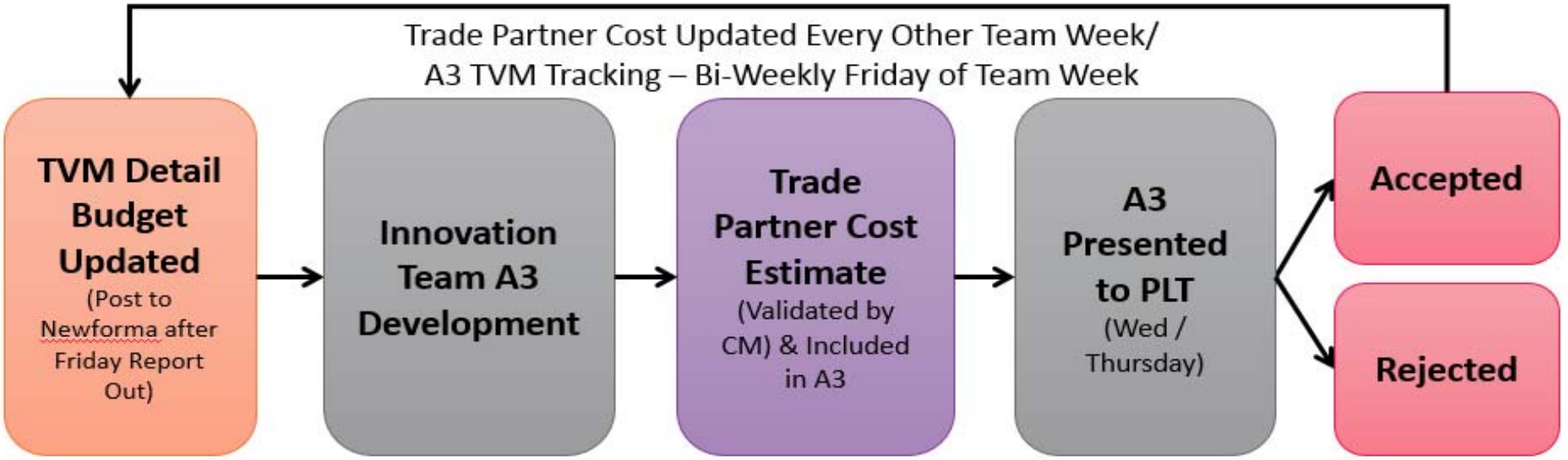
Moves Standard Work Instructions

Author:	Marge Zezulewicz
Process:	Obtain Construction Estimate
Attachments:	Preliminary Construction Estimate Sample
Access:	KidsNet/MyCompany/Construction Department

What to Do	How to Do It
1. Review project scope	Governance Team representative or Move Champion communicates with Department Manager to confirm project scope and details
2. Identify new for project scope	Department Manager and Governance Team representative or Move Champion discuss new furniture, equipment or systems required for project. Preliminary Scope of Work form approved by Governance Team is used to establish rough order of magnitude costs for project.
3. Construction Estimate is developed	Governance Team representative or Move Champion develops order of magnitude construction estimate for the project.
4. Construction Estimate is reviewed	Governance Team representative or Move Champion forwards estimate to Department Manager for review and approval.
5. Construction Estimate is submitted to Director of Construction	Upon approval by Department Manager, construction estimate is forwarded to the Director of Construction for final review. Director of Construction notifies Department Manager and Move Champion of any concerns.
6. Construction Estimate is submitted in StrataJazz	At this point, the Construction Estimate Summary will include the cost for design, construction , furniture, equipment (clinical and non-clinical), IS (phones, computers, printers, etc.) and security (card readers and cameras). The project funds should be "released" in StrataJazz and this Construction Estimate Summary should be included as an attachment with any back-up quotes.

Education – Process Mapping

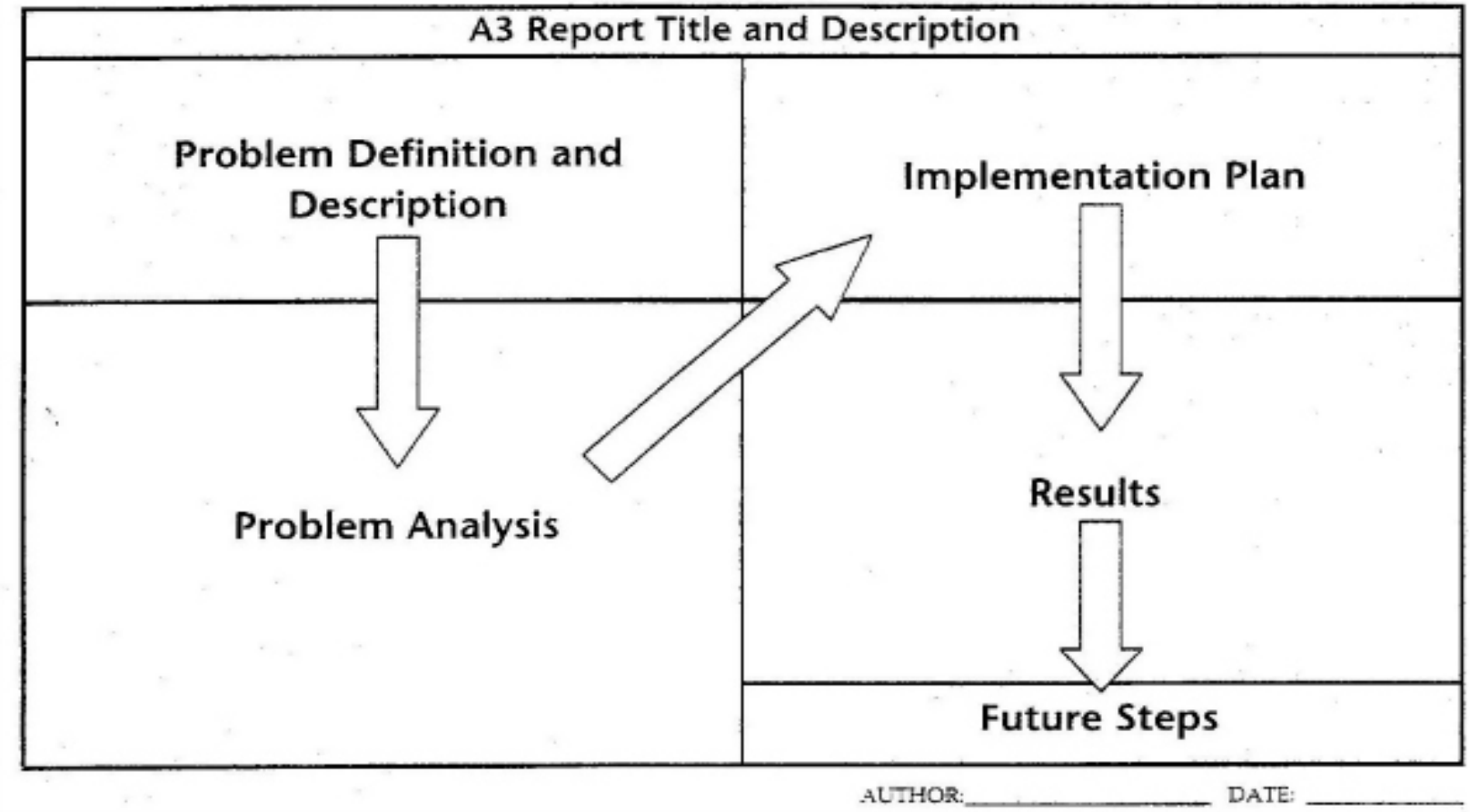
A3 Target Value Management Process



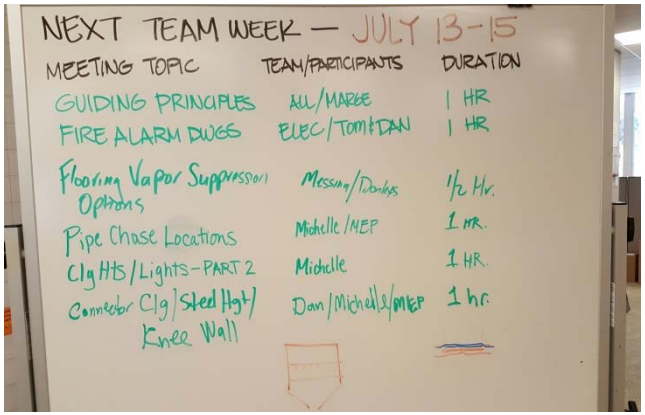
Legend

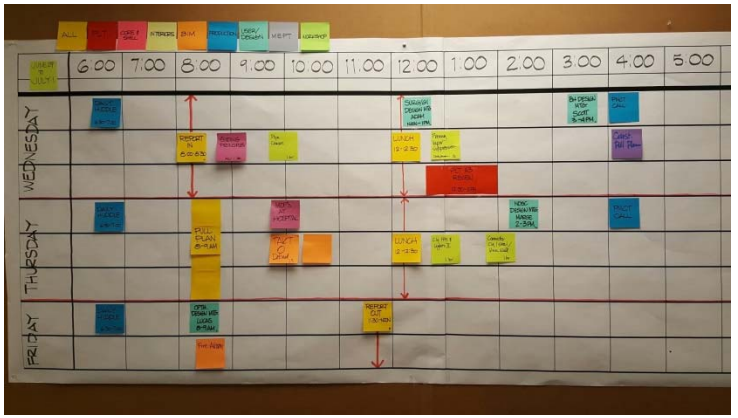
Construction Manager | Trade Partners | Innovation Team | PLT Action

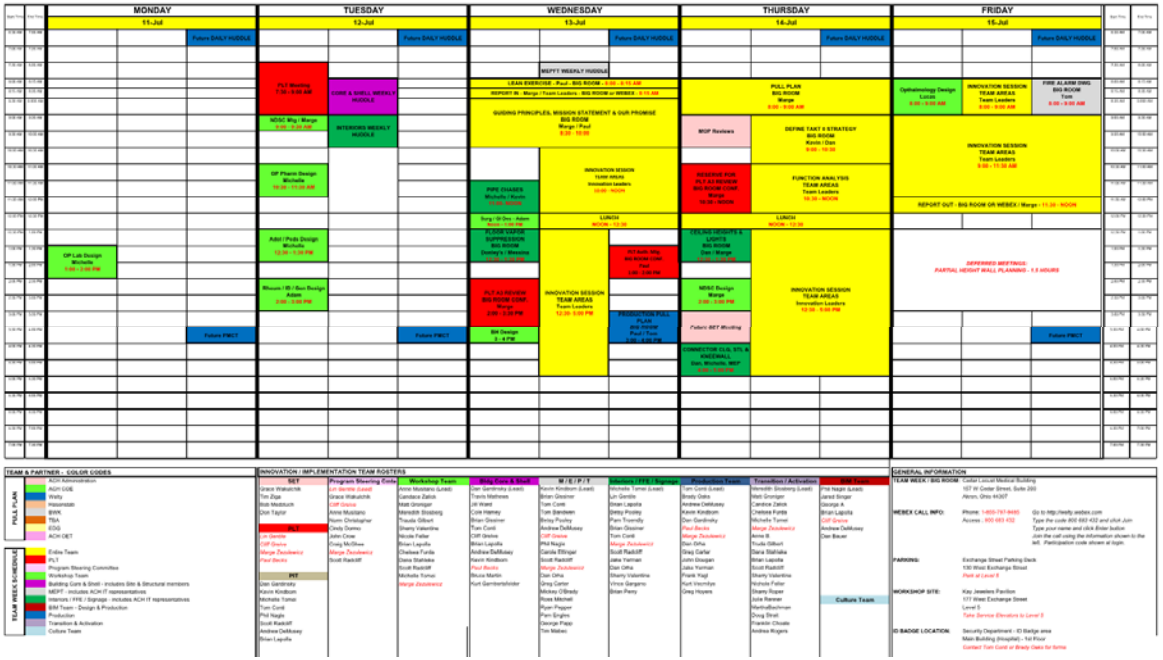
Communication Tools



Planning & Scheduling Activities







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Communication Messaging

Pritchett Tool for Creating Change Messaging

Awareness •Why are we changing?	Understanding •What is changing?	Commitment •What will inspire people to join the cause?	Appropriate Action •What are our specific goals and tasks?
What is our vision? Guiding Principles	What is going away?	How is my part important to the overall success?	What should we start doing?
What do we need to do differently?	How will my job change?	What capabilities do I currently have to contribute?	What should we stop doing?

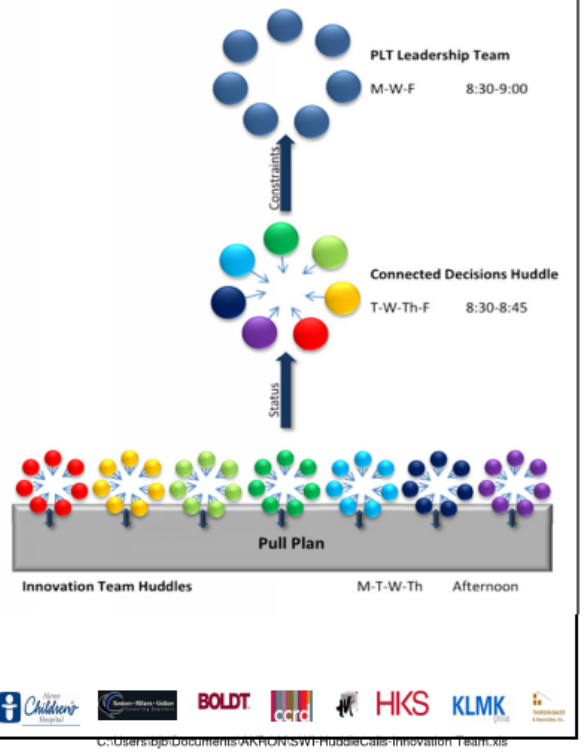
Inspire. Educate. Unite.

Huddle Format to Maintain Communication

Standard Work Instruction	Organization	List Organization	PRODUCT		APPROVED BY		STANDARD WORK INSTRUCTION
Outputs of this process : Main points can be identified Clear & detailed instructions without errors Helps to find improbable points in current operations	PROCESS	Innovation Team Communication	TYPE	Document	CHECKED BY		Are the documented best way known today to perform an activity or job and It's created by the people doing the work, facilitated by their leader.
	UNIT OP / EQUIP	Telephone			CREATED BY	Bernita Beikmann	SAFETY QUALITY
	PROCESS NAME	Akron Childrens Innovation Team Huddle Meetings	REV:	List Rev #	DATE	8/27/12	SAFETY / QUALITY PROTECTION

STEPS	MAIN STEPS	DETAIL PROCEDURE	KEY POINT
1	Team Member Prep	This will occur afternoons (time TBD) Monday-through Thursday to report status to the members of the innovation team. Team members will answer the following questions: What did I do today? What am I doing tomorrow? Is there anything standing in my way? New topics today or yesterday that should be in our plan?	This process will increase interaction with pull plan tasks from a weekly update to a daily update. This will also increase communication with the team when issues come up they can be addressed immediately
2	Call In	Every Innovation Member calls in at the designated time. Call ins should be ON TIME	If you start on time, it will end quicker and be more efficient for all members.
3	Report Out	Keep under 15 minutes. Be crisp in the report out Use the numbers from the form not the item (This is Bernita, 23 is done, 22 is in progress, I have no constraints, nothing to add) Don't wait for your name to be called: JUST GO.	This is taking responsibility for your tasks, and proving that to the group. Also, it will show constraints earlier when they are small.
4	Constraint Discussion	If constraints are quick to discuss you can discuss them in the call. If they are complicated they deserve their own discussion.	Constraints can involve other parties outside of group, or could be internal issues.
5	State New Requests	If it appears that another work request or work needs to be adjusted, adjust it. This can be stated at the end unless the timing of that work can wait until the next team pull session	Admin for the group would add item to the Last Planner/ Pull Plan

FIGURE/EXPLANATION



Printed 8/27/2012 C:\Users\bjb\Documents\AKRON\SWI-HuddleCalls-Innovation Team.xls

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Documentation of Ideas and Follow Through

High Risk OB Page Turn
January 8, 2013

High Risk OB Page Turn
January 8, 2013

Agenda Avg. (10-20 min per discipline)
~~1. Review Standard Work for submittal~~
~~2.Architectural~~
~~3.Interiors~~
~~4.Equipment~~
~~5.Technology~~
~~6.Mech.~~
~~7.Plumbing~~
~~8.Elec.~~
~~9.Fire Suppression~~
~~10.Fire Alarm~~

Page Turn Intent
1. Last chance to gather / discuss / address team comments.
2. Identify coord. items btwn disciplines
3. Owner Walk-through / review
4. Verify budgets - identify scope gaps and duplications
5. Avoid Re-work don't revisit closed items

Parking Lot

ARCHITECTURE - EXTERIOR
1. NEW ROOF PLAN IS REQUIRED FOR NEW CHILLERS - HKS

A - INTERIOR
1. FOLLOW UP WITH REFERENCE SHEETS - HA
2. FOLLOW UP ON CONSTRUCTION PROCESS IN FUTURE FRAMES - HA / ACP / KHS&S
3. SUPPORT FOR MIRROR IN LDRP ROOM - HA
4. CONFIRM DEPTH OF CASEWORK +/- 20" - HA
5. TP HOLDER LOCATION W/ PULL CORD - HA

MEDICAL EQUIPMENT
~~1. DISINFECTOR FOR US~~ - CLOSED 1/8 - CUT SHEET SENT TO HA / BWK
2. BIRTHING LIGHT SELECTION
~~3. REVIEW CENTRAL STATION INFO FROM ASC.~~ - CLOSED 1/8 - CUT SHEET SENT TO HA / BWK / DYNAMIX
4. CEILING LIFT TRANSFORMERS TO BE HARDWIRED WHEN SPECIFIED
~~5. CONFIRM REACH OF COLUMN~~ - CLOSED 1/8 - SWAPPED LOCATION OF ELECTRICAL PANEL & ALCOVE

IT
1. VERIFY SPECIFICATIONS FOR CONFERENCE ROOM (OWNER VS. PROJECT) - DYNAMIX / PARSON TECH
2. CONFIRM PLUG / HARD WIRE FOR WOW CHARGERS - DYNAMIX
3. HARMONY LOCKS ON LOCKER ROOMS - HA / PLT
4. SPECIFY PILLLOW SPEAKER WITH 2 LIGHT CONTROLS IN LDRPS - DYNAMIX

MECHANICAL
1. SEPARATE SUBMITTALS FOR AIR HANDLING UNITS, EXHUAST FANS, VAV BOXES, ETC. SPECIFIC TO THIS FLOOR. - MMC
2. ADD SHEET FOR COOLING TOWER ROOF PLAN - CCRD
3. ELECTRICAL LEVEL 0 & ROOF TO BE PICKED UP - CCRD/ BWK
4. ISSUE LEVEL 3 (DP-016) PLUMBING AS PART OF THIS PACKAGE FOR REFERENCE - CCRD/ BWK
5. CONFIRM TAPS OFF R/A & EXHAUST - PAM
6. CONFIRM IF JIM & TIM HAVE UNIT HEATERS FROM CONSIDINE - PAT
7. ADD REVISED ROOF PLAN DRAWING FOR FANS - BWK

Documentation of Ideas and Follow Through

MEPFT Decision Matrix

Revised: 06-20-16

Item No.	System	Decision to be Made	Description/Options	Space Impact	Cost Impact	Operational Impact	Additional Considerations	Key Personnel for Decision	Priority	Decision/Task	Closed?
TW1	Tower Water	Where do the cooling towers go?	Roof, Grade, Remote	Tower size similar regardless of location	Cost increases the further from the chillers the towers are. Structural costs increase on roof.	Roof - highest pumping costs Grade - lowest pumping costs	Roof - plume location near intakes, interior vs exterior, controlling the water flow from the roof is difficult and NOISY Grade - site is tight, plume	Architecture MEPFT Facilities	High	**The cooling towers will be located remotely with the generators. The preferred location is as far west on the site as reasonable.**	Yes
TW2	Tower Water	Sump Type/Location	Integral to tower, above grade, below grade	above or below grade tanks/basins require space in mechanical room	Remote sumps increase cost	Basin heaters required for integral sump, Turbine pump vs. end suction or horizontal split case	Integral tower sumps require system drain down during cold weather	Architecture MEPFT Facilities	Low	BELOW GRADE	Yes
TW3	Tower Water	Should the new tower system be isolated or cross-connected to existing?		Negligible		To be used as "back-up only" or as a single plant during low loads?	With the current plan, the existing 24" lines are to be re-routed.	MEPFT Facilities	Medium	**Do not cross-connect tower water**	Yes
CW1	Chilled Water	Redundancy Requirements	How much of building load should be maintained if one chiller fails? Pump? Tower cell?	Affects quantity/size of chillers	Generally, more redundancy is more expensive, but can be mitigated by quantity of equipment.	What happens on equipment failure? Could be substantial replacement time.	Consistency with campus standard. Is the plant to act as redundancy for existing plants? Can existing plants act as redundancy for this new plant?	MEPFT Facilities	Medium	Initial design shall be N+1. If one chiller fails, the entire design load shall be maintained.	Yes
CW2	Chilled Water	Size/quantity of Chillers	3@50%, 4@33%, etc.	More chillers = more footprint	Many variables until initial discussion	Plant needs to be able to accommodate peak and typical loading without cycling chillers.	Plants with unequal sizing can allow for better turndown, but may struggle with redundancy Leave footprint for future?	MEPFT Facilities	Medium	Initial design shall be 3 chillers at 50% of design load. Need to revisit when schematics are completed.	
CW3	Chilled Water	Pumping System	Primary/Secondary Variable Primary	Negligible	Primary/Secondary requires more pumps, but the overall cost impact is likely minimal	Primary/Secondary is "easier" to control and may be required depending on tie-in and desired operation of the cross-connect. Variable-Primary would provide lower pumping costs.	Existing building is primary/secondary.	MEPFT Facilities	Low	Prefer primary with multiple secondary	
CW4	Chilled Water	Cross connection method/location		Negligible		Is the new/existing plant "back-up only" or are the two to integrate for low load conditions?		MEPFT Facilities	Low		
						Need to be able to perform					

Communication Styles

Communication Procedures

Data Distribution Matrix

		Project Manager	Task Manager	Team Member	Department Mgr.	PIC	Subconsultants
Financial	Monthly Cost Summaries	X				X	
	Progress Reports	X	X	X		X	X
	Utilization Reports	X	X		X	X	
	Manpower Planning Report	X			X	X	
Project Reports	Site Condition Report	X					X
	Soil Borings	X	X		X		X
	Equipment Performance Study Report	X	X		X		X
	Construction Cost Estimate Update	X				X	X

Communication Procedures

Communication Matrix

XL CATLIN

COMMUNICATED TO:

	Internal					External			
	Project Mgr.	Team Mbrs.	Project Office	Dept. Head	Principal -in- Charge	Project Mgr.	Project Office	Dept. Head	Exec.
Project Mgr.		★	◆	★	★	◆	◆	►	Δ
Team Mbrs.	►		◆	★	Δ	⊙	★	⊙	⊙
Project Office	★	►		◆	⊙	⊙	★	★	⊙
Dept. Head	Δ	★	★		►	Δ	Δ	⊙	⊙
Principal -in- Charge	o	★	★	o		o	★	Δ	o

DIRECTION OF COMMUNICATION →

Legend

◆ Daily ★ Weekly o Monthly

Δ Informal ► As needed ⊙ Never

Managing Conflict

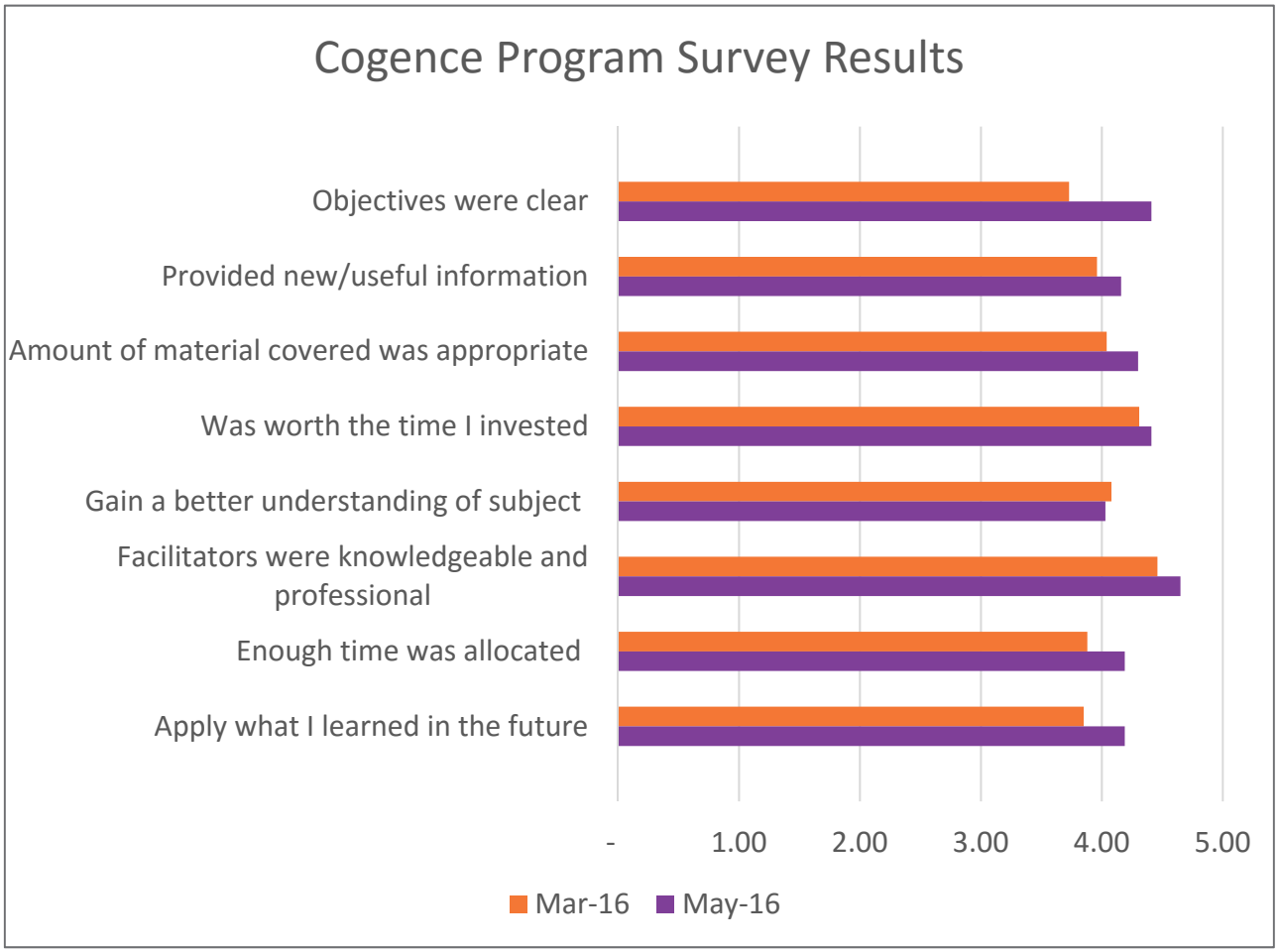
How Management Teams Can Have a Good Fight

by Kathleen M. Eisenhardt, Jean L. Kahwajy, and L.J. Bourgeois III

"Tactics to separate substantive issues from personalities:

- **Focus on the facts**
- **Multiply the alternatives**
- **Create common goals**
- **Use humor**
- **Balance the power structure**
- **Seek consensus with qualification."**

May 2016 Program Recap



March 2016 Program: Attendees 43, Survey Responses 26
May 2016 Program: Attendees 41, Survey Responses 37

May 2016 Program Recap

Plus

- Welty's recap of Risks
- Everyone participated
- New members
- Future roadmap helpful
- Time management
- Room temperature controlled
- Toolbox discussion good
- Program set up for discussion

Delta

- More specific toolbox ideas
- Late arrivals
- Need understanding of how this information will be disseminated
- Continue to work on creating value
- Share Cogence global strategy

Partners - COGENCE Alliance

COGENCE Alliance | Owners + Architects + Engineers + Contractors

All Partners | Charter Partners | Owners | Architects | Engineers | Contractors

Cleveland Clinic

- Charter Partner
- Owner

Bostwick Design Partnership

- Charter Partner
- Architect

Lake Erie Electric

- Charter Partner
- Contractor

Donley's

- Charter Partner
- Contractor

COGENCE Alliance

Owners+Architects+Engineers+Contractors

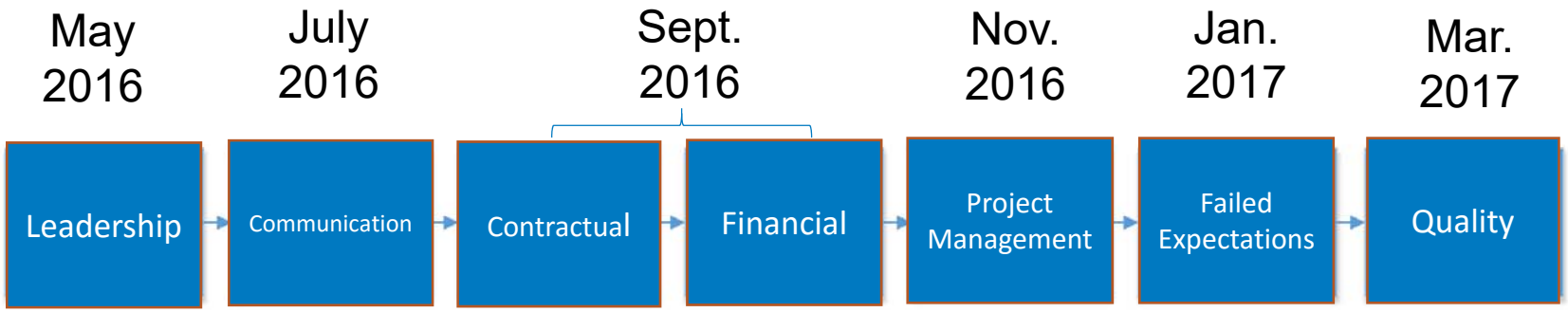
Strategic Plan Review

3 August 2016 | 12:00

@ Karpinski Engineering

Inspire. Educate. Unite.

2016 - 2017 Program Timeline



July 2016 Program Recap

Plus

» Organized event – effort and preparation was evident

» Great participation

» Practical solutions

» New ideas learned

Delta

» Make information available

» Make solutions/tools practical to “resource limited” projects

» Get information out to industry

» Ask for feedback to shape discussion when invitation goes out

COGENCE Alliance

Owners+Architects+Engineers+Contractors

Next Meeting

14 September 2016 | 4:30

Inspire. Educate. Unite.