COGENCE Alliance

Owners + Architects + Engineers + Contractors

Inspire. Educate. Unite.

Celebration to Connect

8 January 2020

Agenda

- Mission

- The best of the past 4 years

- Value realized

- The collective future

- Opportunities for engagement
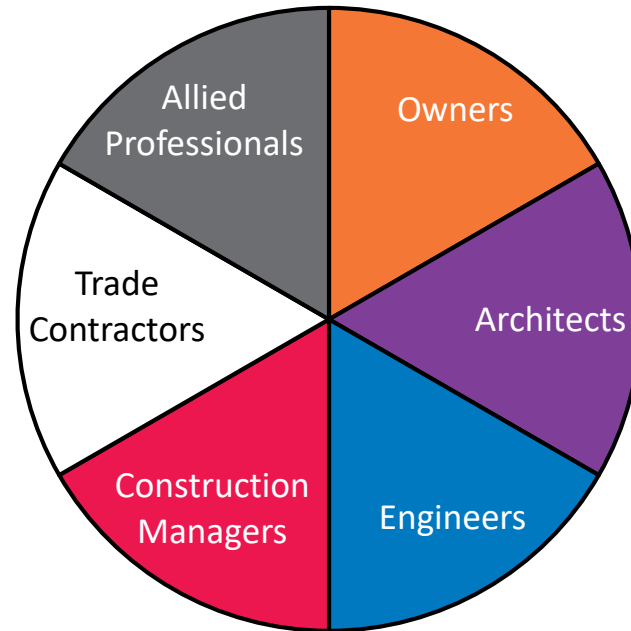
Mission + Purpose

Cogence *(Latin)*

"To drive together" or "Thinking that is well organized"

The purpose of the Alliance is to bring Owners and Developers, Architects and Engineers, Construction Managers and Contractors, and Allied Industry Professionals together to advocate and be a resource for improved project delivery.

For more information visit us at www.cogence.org
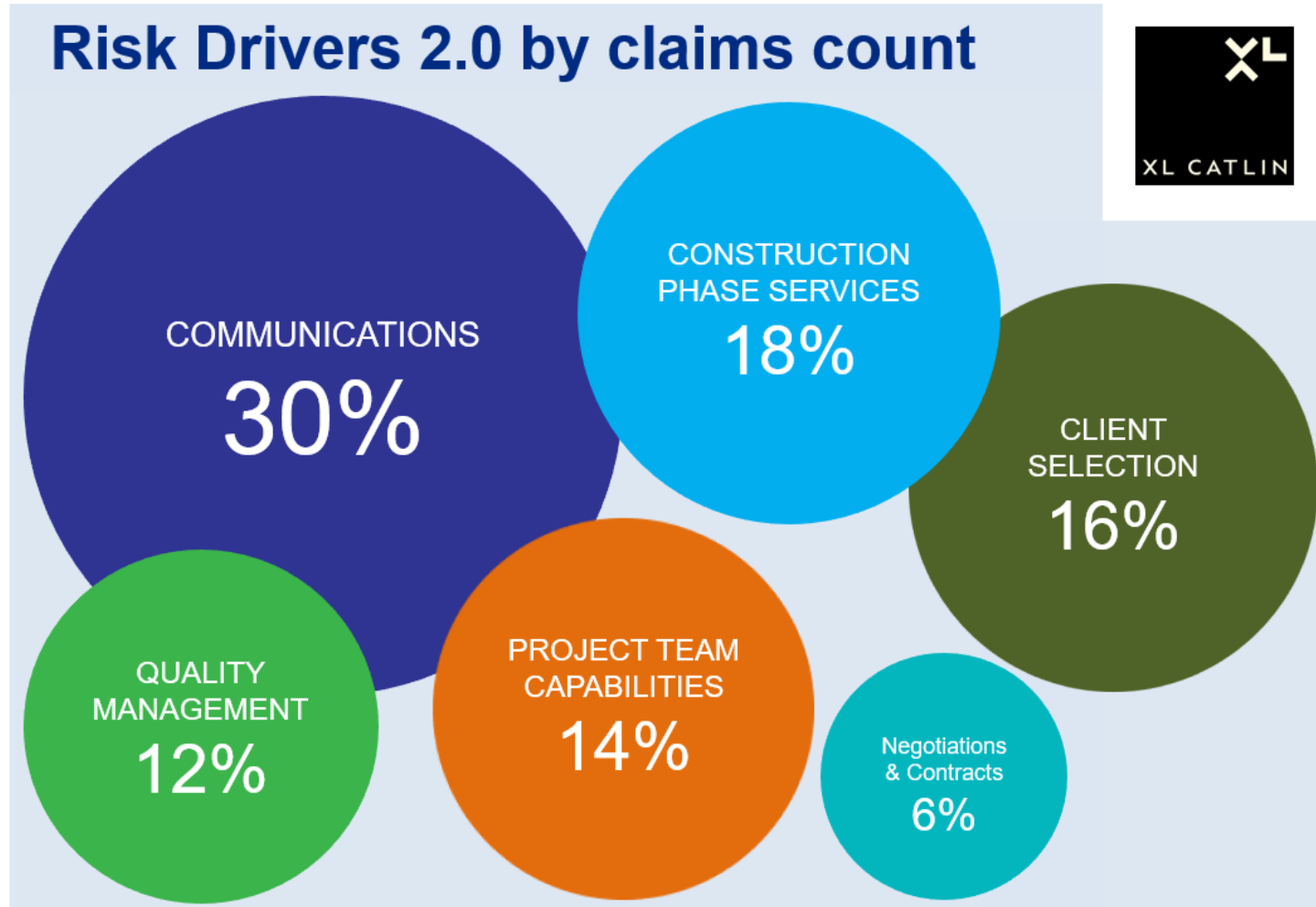
Past Programs

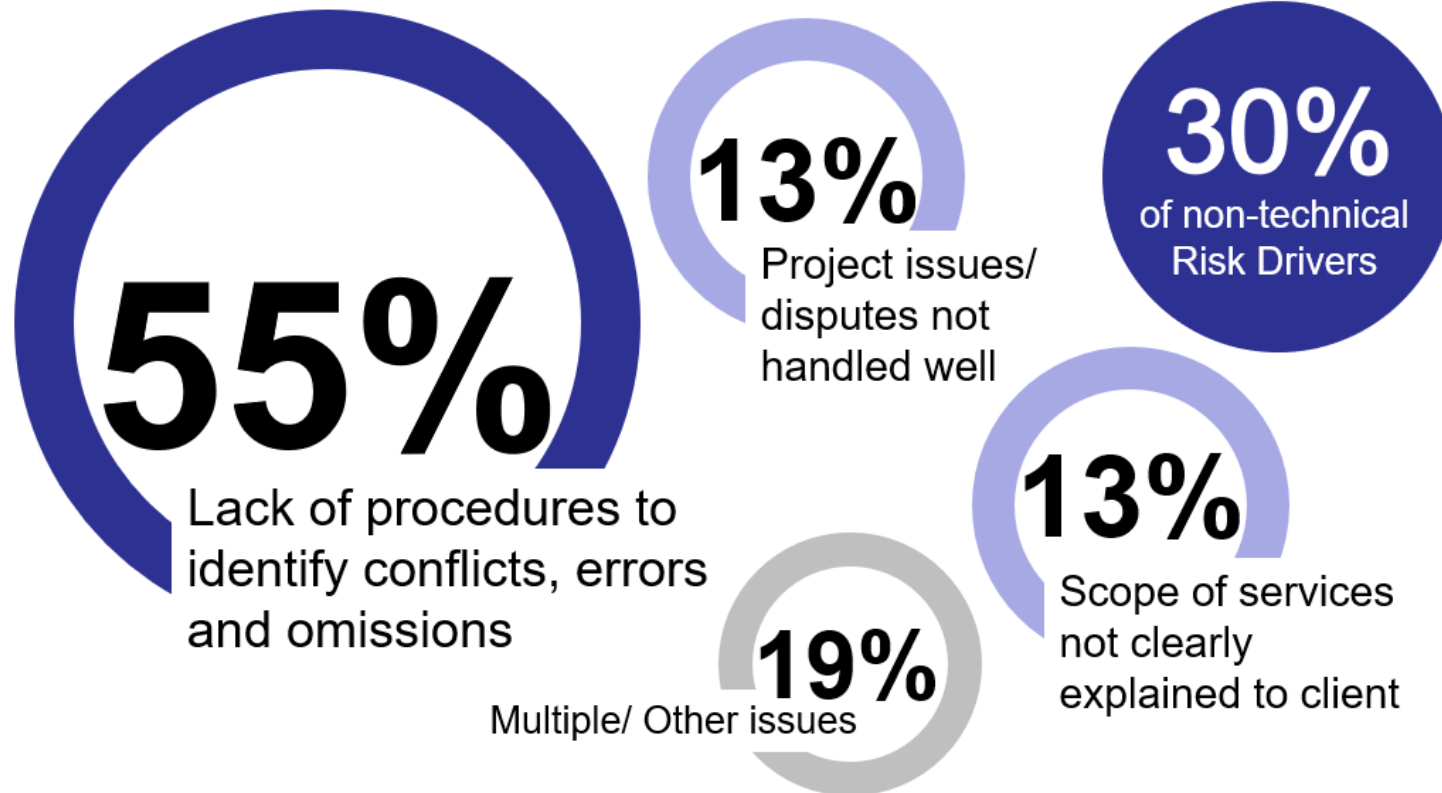| 2016	2017	2018	2019
Risk, Part 1	Financial Management	Team, Ellen Burts-Cooper	*Leadership: 4 Generations in the Workforce, Kelly Riggs
Risk, Part 2	Project Management	Quality, Part 1	Remove Waste, Innovate
Communication	Cogent Project Management	Quality, Part 2	Collaborative Scheduling
Leadership	Cogence GMP, Part 1	Planning to Fail	Waste Free, Part 2
Contracts, Part 1	Cogence GMP, Part 2	Town Hall	Integrating Technology
Contracts, Part 2	Town Hall	Early Engagement	Waste Free, Part 3
	Town Hall: Mike Isaacon, Producer Transformational Teams, Ellen Burts-Cooper Cogence GMP Successful Case Studies Owner Panel	Town Hall: Appreciative Inquiry, David Cooperrider Progressive Design Build, Beck Group Digital Future of CA Augmented Reality Cogence Quality	*Partnership with SMPS

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National Risk Drivers

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National Risk Drivers

Risk Drivers (No. 1 by claims count)
Communications

55%
Lack of procedures to identify conflicts, errors and omissions

13%
Project issues/ disputes not handled well

30%
of non-technical Risk Drivers

13%
Scope of services not clearly explained to client

19%
Multiple/ Other issues

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Collective Risks

Collective Risks

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

Collective Risks

Whole Team Timeline of Peak Risk Perception

Earliest Peak ⟶ Latest Peak

| Leadership (Peaks in Early Schematic) | Communication (Peaks in Schematic) | Contractual (Peaks in Late Schematic) | Financial (Peaks in Early Construction Documents) | Project Management (Peaks in Late Construction Documents) | Failed Expectations (Peaks at end of Bidding) | Quality (Peaks at 50% Construction) |
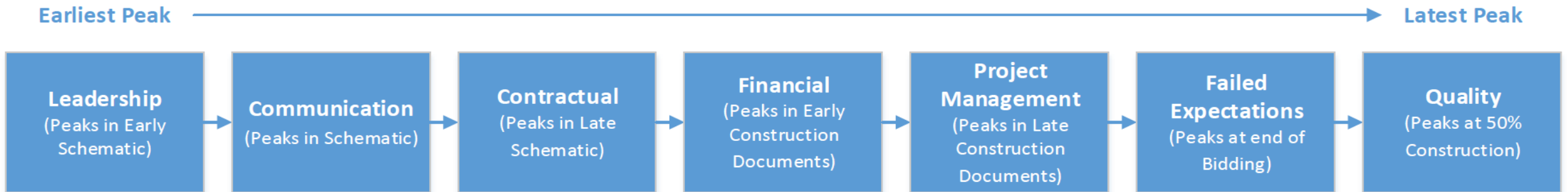
- The highest level of felt risk is associated with risks that the experiencer has little ability to control at the time they are experienced.

Central Ohio – 8 Part Series on Risk

- Central Ohio Partners generated Risk Rankings through a 3 Part Roundtable

- Partners in the final meeting worked together across industries to develop habits to mitigate risk

RISK RANKING

ARCHITECT	OWNERS	CM'S	TRADES	ENGINEERS	AFFILIATES
COMMUNICATION	BUDGET	TEAM MEMBERS	TEAM MEMBERS	COMMUNICATION	COMMUNICATION
BUDGET	COMMUNICATION	CONTRACTS	SCHEDULE	CHANGES	LEADERSHIP
CONTRACTS	LEADERSHIP	BUDGET	COMMUNICATION	CONTRACTS	CONTRACTS
SCHEDULE	FINANCIAL	COMMUNICATION	LEADERSHIP	SCHEDULE	DUE DILIGENCE
LEADERSHIP	QUALITY	SCHEDULE	CONTRACTS	BUDGET	SCHEDULE
FINANCIAL	SCHEDULE	LEADERSHIP	CHANGES	QUALITY	CHANGES
TEAM MEMBERS	CONTRACTS	QUALITY	FINANCIAL	LEADERSHIP	TEAM MEMBERS
QUALITY	TEAM MEMBERS	FINANCIAL	QUALITY	DUE DILIGENCE	QUALITY
CHANGES	CHANGES	CHANGES	BUDGET	TEAM MEMBERS	FINANCIAL
DUE DILIGENCE	DUE DILIGENCE	DUE DILIGENCE	DUE DILIGENCE	FINANCIAL	BUDGET

FINAL RANKED RESULTS

- COMMUNICATION
- CONTRACTS
- LEADERSHIP
- SCHEDULE
- BUDGET
- TEAM MEMBERS
- CHANGES
- FINANCIAL
- QUALITY
- DUE DILIGENCE

Central Ohio – 8 Part Series on Risk

- The 8 Part Series title "6 Degrees of Design and Construction Risk" presents the Risks and Solutions developed at those roundtables

- **COMMUNICATION** was the leading risk for all partners on a project

Central Ohio – 8 Part Series on Risk

- Subsequent releases showcased "deep dives" for each partner's risks and their solutions

- Final release will be a tool kit

- Common Themes to Mitigating Risk:
  - » Communication
  - » Leveraging Expertise Early in a Project
  - » Fostering Early Team Relationships
  - » Conducting Due Diligence

Aggregate

Owners

Affiliates

CMs
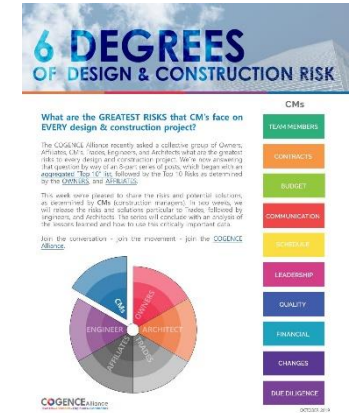
Trades
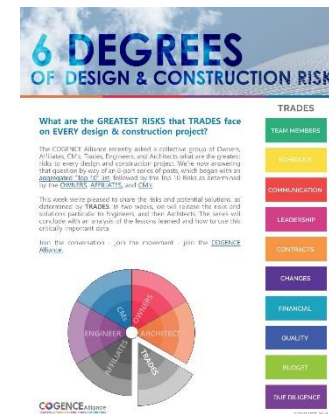
Engineers

Architects

Mid January

Tools

Late January

Central Ohio – 8 Part Series on Risk

- The 8 Part Series is currently being released on LinkedIn and the Cogence Website

- To view the current series, go to the Cogence Toolbox under your account

www.cogence.org/cogence-toolbox

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What are the greatest risks facing every construction project?

Published on September 16, 2019

1 article   ✓ Following

Fascinating data on the greatest risks facing every design/construction project -- courtesy of the COGENCE Alliance: https://cogence.org/wp-content/uploads/2019/09/Cogence-Central-OH_6DegreesofRisk_Part1.pdf

ADVOCACY

Current hits to LinkedIn posts:

13,200 +
Nationally

Additional Member Opportunities:

4+

Industry Involvement:

BX

(Builders Exchange) Presentation

COGENCEAlliance

Owners+Architects+Engineers+Contractors

"The task of Leadership is to create an alignment of strengths... making a system's weaknesses irrelevant." - Peter Drucker

Collaborative Contracting

Who warrants the adequacy of the plans & specificiations?
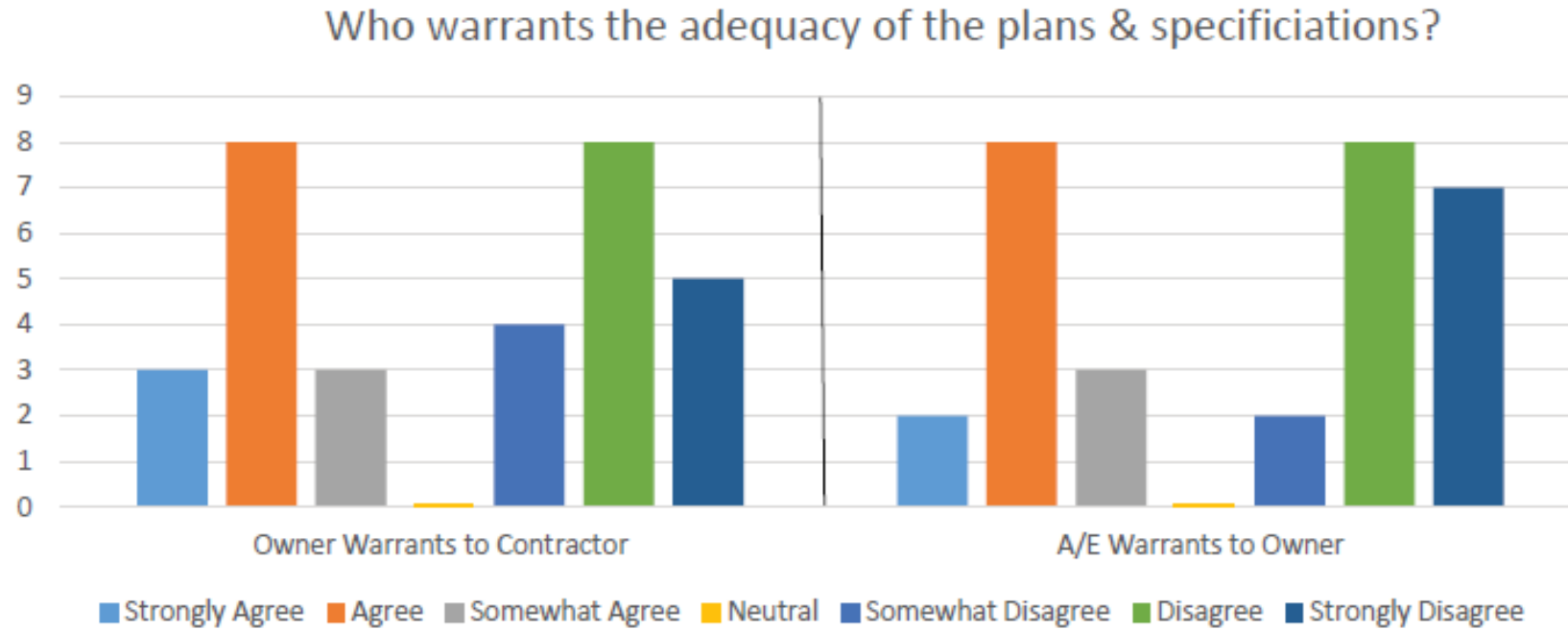
The Situation

The Owner is implementing a key strategic business initiative which requires a new facility. The Board of Directors has approved a $45M construc
cost budget (with 20% soft budget added for overall project budget) for this project. The budget and schedule were established based on histo
references to a similar project with generic price per square foot information gathered from friends of the Board, based on a "similar" project completed
7 years ago. A preliminary program has been developed, but all aspects of the program have not been defined.

The organization is relying on the revenue from this initiative in 2019, two years from today. The organization has secured a loan to finance this project,
and no additional funds are available.

To achieve competitive pricing from the start, the Owner solicits design proposals from a prequalified list of Architects. The Architect must submit a
fixed fee for traditional basic services, committing to standard contractual terms and conditions of the Owner including "a design to budget clause."
The Owner received four proposals and selected the Architect with the lowest total fee. The selected Architect agrees to the contractual terms, and
the project begins.

The Owner allows the Architect to select the Engineering team. The Architect selects the Engineer who has the most history with the Owner. Their
fee is based on an assumption of approach and scope given past experiences with the Owner and a conversation with the Architect. The Architect
and Engineer agree to the standard terms and conditions of an AIA contract, tying the Engineer to the terms and conditions to which the Owner and
Architect agreed.

The project delivery method selected is Construction Manager at Risk. Prior to the completion of Schematic Design, two Construction Managers
were interviewed. The selected Firm indicated that the project could be built within the Owners parameters. Their scope included pre-construction
estimating services, in addition to Construction Manager at Risk. A guaranteed maximum price (GMP) would be established at 75% Construction
Documents.   Upon completion of Schematic Design, the construction estimate was 15% high. At that time a redesign was not requested because the
Team felt that once they had more detailed drawing they could work with the Trade Contractors and issue a GMP within the project parameters.

Upon completion of Design Development, the Construction Manager issues an estimate with Trade Contractor input that is still significantly over
the project budget. The Owner forces the Architect and Engineer to redesign, at their expense, and the Construction Manager to quickly redo their
estimate.

The design and engineering team completes the redesign while the Construction Manager and the Trades use hand sketches and notes to develop
GMP while the redesign is being completed. The Construction Manager issues a GMP.

Trade Contractors are asked to provide a number and schedule based on the revised drawings. Initially, Trade numbers were high across the board.
Given pressure from the Construction Manager and the historic volume of work key Trades performed for the Construction Manager and the Owner,

Project Management: the Linchpin to Collaboration

Empower Team

1. Owner establishes culture
2. Use your entire team as a resource
3. Lead by example
4. Include strongest person at the right time

Make Decisions

1. Allow direct connection to the source
2. Entrust your team
3. Respect "the why," understand the impact
4. Include appropriate person at the right time
5. Know your team

Create Work Flow

1. Understand your contribution and respect its impact *(Owners too)*
2. Routinely evaluate progress
3. Share resources
4. Plan for change
5. Plan/Do/Check/Act

PM Challenge Solutions – CMR

Advantages

Owner: early understanding that the project will be successful – reduction of risk to the owner – clear path of direction for the project

Public Owner: eliminate bid day risk – Disadvantage: Trade contractors take on all the risk and they have not been exposed to the Vision of the project

A/E: Constructability & cost information to inform drawings during design, eliminating rework due to "value engineering" – opportunity to improve quality

CM: Opportunity to create clarity on the reality of the project – reduce surprises facilitate project reality – allowing the Owner's Project Vision to inform the GMP

Trade: create opportunity for collaboration - help the CM to get the project to go – create work

What is wrong with the current GMP development process?

- Communication between owner and contractor
- **Clear definition/distinction between "project dev't" and "scope addition"**
- Is risk transfer really there - same fights over changer orders
- Free estimating - often times labeled as a bid opportunity but not
- Owner's don't allow CM's to engage design assist subcontractors early enough
- **End user requests later in the process**
- GMP dev't process is often disjointed and siloed
- Value engineering / over-budget / savings dynamic
- Time to complete the design documenting the Owner's desires
- Client understanding on timing and lockdown of the GMP

- CMr taking on early bid risks in significant volatile construction market
- **Designers (and sometimes the owner) want GMP to be more aggressive to allow more flexibility of scope and design money**
- Tension, when items (design time or budget pressure) become overly compressed
- Lack of proper definition of scope and quality during late design stages when GMP is being constructed without drawing support
- CMs burying profits/fees/costs in other categories
- Design assist partners are not fully aware of the savings or budget status
- GMP's are often developed without a full understanding of the scope of work
- Not a good process to track evolution / so it gets confusing

- **Starts late and not enough time to resolve and vet**
- Current process doesn't include the design team
- Some subs and suppliers don't get enough input in the process
- Clients don't want to pay for risk
- CMR provides inflated estimates
- Clear, concise, and complete design intent statements when not drawn are lacking
- **The original conceptual "budget" was flawed**
- Upfront CM and trade collaboration with the architect
- Transparency in CMR GMP process
- Owner, Architects and CMs don't always agree on completeness of the docs
- Control of the Contingency - what is the risk if the documents are 100% CD's?

COGENCE GMP PROCESS
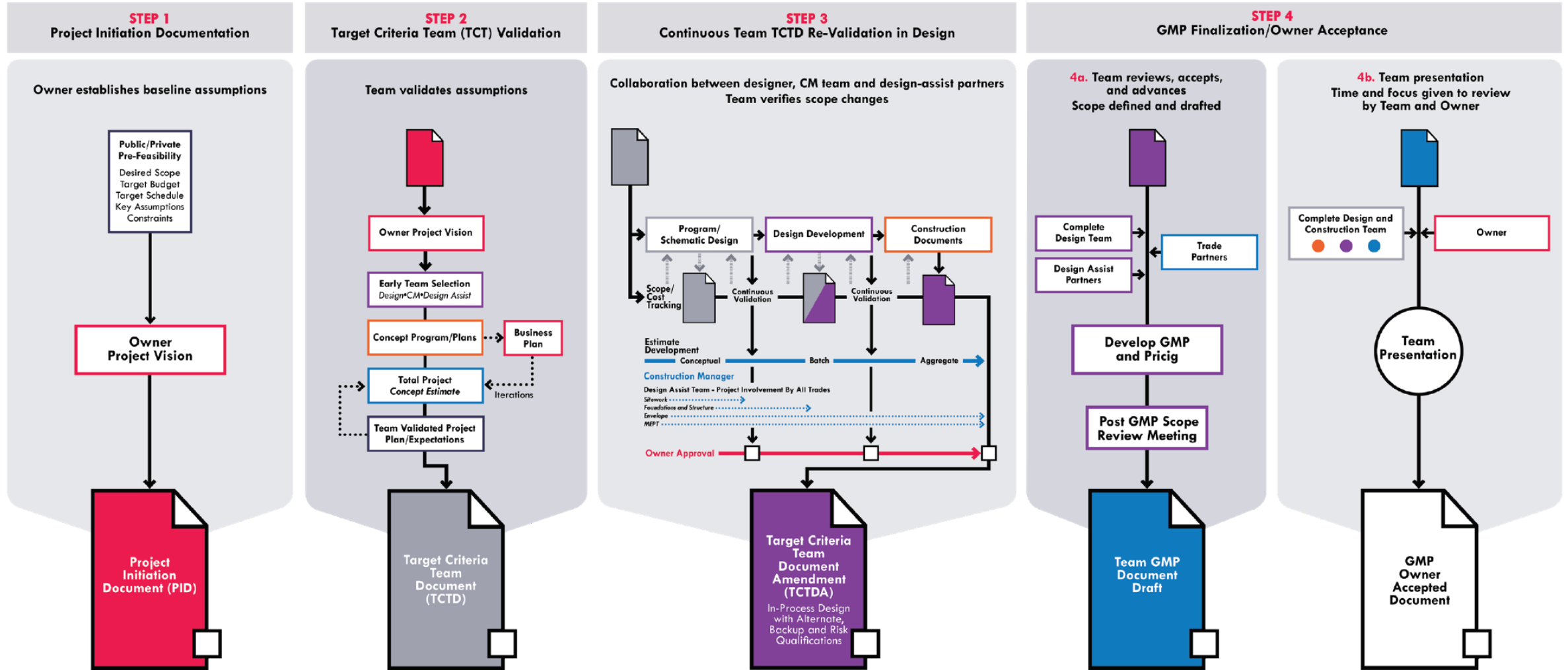
Town Hall 2017: Win Together

Quality: High Risk Moments

Typical Project - High-Risk Transition Handoffs
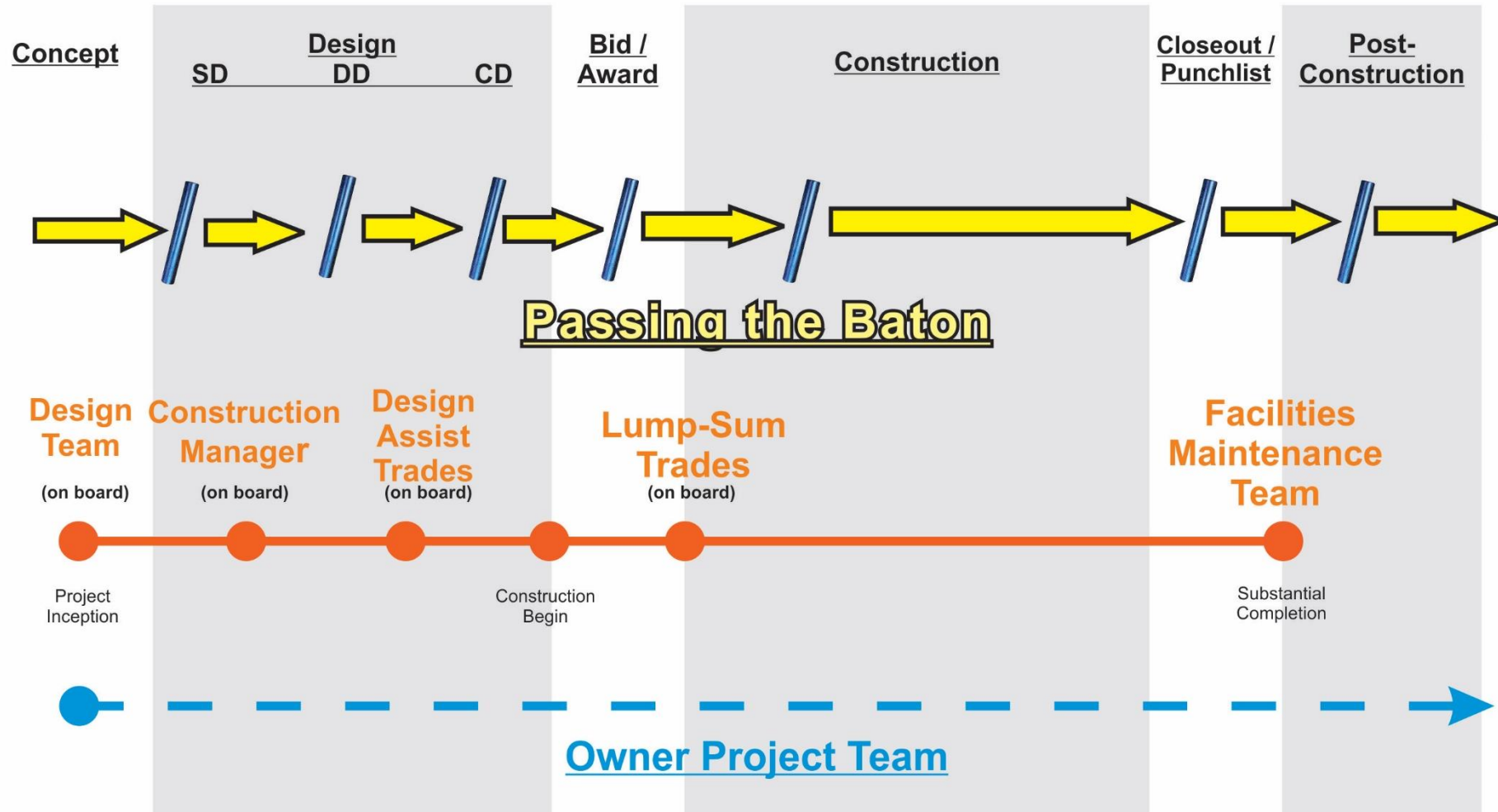
Quality: Measurement

Team Leading Indicator Checklist

1. Is the key team members fully on-board and engaged?
2. Are the key decision makers consistently at the table?
3. Is there a project schedule that the team has agreed to?
4. Quality expectations understood by the current team?
5. Is the Team communicating effectively?
6. Is the Team holding itself accountable?
7. Clear direction provided to produce a quality product?
8. - 10. Project Specific Questions TBD

Yes / Maintain	Needs Improved	High Concern

Quality: Takeaway

How to measure quality?

- Identify the high risk transition areas
- Ask the right questions at the right time
- Setup ongoing Key Performance Indicators (KPI)
- Culture of continuous improvement
- Measure on a regular basis

2018 Town Hall: Appreciative Inquiry

Waste: Our Experiences

Waste: Our Experiences

Waste Management: Appreciative Inquiry

Managing Meetings
Referenced Waste Concerns

Attendance at meetings without agenda	Timeline out a meeting
Multiple people attending when 1 is sufficient	Being on time to meeting
Meetings that are progress updates only	Excessive without goals & agenda

Discover: Gather information and stories of what is working well.

- Big Room Concept (in-person) = helps speaker/observer to facilitate flow of meeting
- Agenda – Detailed enough to get goal(s) communicated
  - Clear Objective
  - Time allocations for components of agenda
  - "Parking Lot" – Table items not part of agenda for a later time and/or more focused group.
- Recap of meeting – Read out action items: who/what/when?

Thought – Agenda out in advance
- Lists what was resolved
- Lists what action is needed
- Lists new items
- "Huddles"; not meetings.
- +/- 15 min

Dream: How do we want things to be for the future?

- Right # of people, Right People (SME + Decision Makers) @ mtg
- Seperate: Project Update/Read Out Meeting Problem Solving Meeting
- Utilize technology to better accuracy/efficiency of communicating out information
- Objectives/Goals better communicated → Simple bullets
- Thought — Amazon's method of meetings

Waste Management: Appreciative Inquiry

Develop COGENCE Project Meeting Protocol	Outline Owner's Project Requirements/Conditions of Satisfaction	Outline minimum Cogence design requirements for the development of the GMP (Supplement GMP?)
Set thoughtful agenda	OPR documents	Minimum requirements for GMP development
In-person meetings, when possible	Conditions of satisfaction	Deliverable requirements
Reduced meeting time (half hour meetings)	Time allocated early - multi-day	Focus design efforts by setting detailed expectations with estimators/trades contractors
Send out minutes from previous meeting - do not rehash minutes - assume they are read - only discuss open topics	Define project restraints (budget, schedule, occupancy)	Regular page turns with Contractors
Action items with defined date	Set incentive expectations for project team exceeding project restraints	
	Include design-assist partners	

MEETING:
DATE: Wednesday, November 13, 2019
LOCATION:

1. MEETING PURPOSE: Goal

- *Make impactful changes within our organizations to eliminate waste and set the standard to transform our industry*
- *Target key areas discussed in previous waste programs and develop guides to use within our organizations*
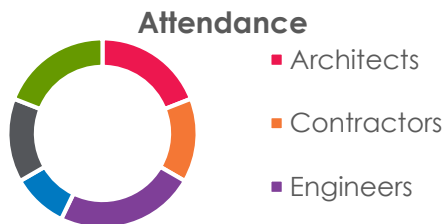
2. DISCUSSION

3. IMPLEMENTATION: Next Steps

How will we execute the countermeasures and implement the change?:

Develop COGENCE guide to use for OPR/Conditions of Satisfaction to use within our organizations

4. DISCUSSION GROUP: Names

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Attendance

- ■ Architects
- ■ Contractors
- ■ Engineers

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2. DISCUSSION: Develop Guide for OPR/Conditions of Satisfaction

A. Current State

- Expectations not defined early in projects
- This leads to mis-alignment between owners and team members
- Causes significant waste from a lack of direction

B. Desired Future State

- Extended time allocated to align expectations early in all our projects
- Work as a team to develop the OPR at the beginning of each project
- Define the conditions of satisfaction for each project

C. Root Cause

- No time allocated to thoughtfully set expectations
- Project restraints are not clearly defined
- Diving into project without setting expectations

D. Proposed Countermeasures & Standards for Measuring Performance

Step 1: Conduct assessment of Owner knowledge, experience, expertise.

- Establish importance of "team" collaboration.
- Create atmosphere for "open and honest" communications based upon mutual trust and aligned interests.
- Manage "egos."

Step 2: Confirmation of Owner Understanding of Project Requirements, Components and Risks. Educate Owner and Define Program:

- Terminology/Vernacular
- Project Delivery Models
- Establish Communication Preference and Protocols – efficient
- Appropriate Project Leadership Team
- Project Data and Reporting Requirements
- Project Risks and Mitigation Plan
- Critical Project Drivers (money, time and delivery program)
- Manage expectations of schedule tracking on monthly basis, or other periodic time frame

Step 3: Define Owner's Program Requirements ("OPR")

- Develop core team
- Engage Owner's Authorized Representatives
- Project team defines the information required from Owner and other sources
- Assessment of variables
- Transparent analysis of drivers: money, time, quality and program elements
- Define "hold points" / must haves in OPR
- Project team conducts risk assessment and mitigation requirements
- Establish defined on-boarding process for Project participants
- Clarify number, intent and timing of design deliverables
- Establish diligent scope review processes

Step 4: Draft Owner's Program Requirements Documents

- Initial draft prepared for review and analysis
- Team needs to meet and discuss OPR
- Modify OPR as needed
- Obtain Owner and Core Team written adoption of OPR

Step 5: Measurement of OPR Usage and Effectiveness

- Review ongoing basis to gauge Owner satisfaction that the Project requirements are being met.
- Periodic reporting of compliance/variations with OPR and Project performance
- Proper reactions to OPR effectiveness and/or need for modifications

Step 6: Final Assessment

- Develop written process to evaluate satisfaction of OPR
- Meet with Project Team to review, assess and evaluate OPR plan effectiveness and lessons learned

Waste: Resources

Cogence Guidance:

- **Conditions of Satisfaction**

- **Minimum Design Requirements for GMP Development**

- **Collaborative Scheduling (Design & Construction)**

Programs: Engagement

Programs: Effective Practices

- Early engagement
- Variability of structure – appropriate for topics
- The discussions
- Learning about other business models
- Putting yourself in their shoes for an answer
- Understanding other perspective
- First Risk discussion
- Ellen burts cooper – fresh ideas for team
- Technology interesting
- Outside industry practice influence
- Momentum – pulse of program frequency

Programs: Areas for Improvement

Goal: Increase Impact
- Deliverable – post program action plan
- Stronger statistics and research to support
- Take conversation to higher level with still dialogue
- Time management – when to let it go – when to follow up
- Bring in a case study from another market nationally or internationally (comparative learning)
- Live polling
- Consistency of attendees
- Collective project in action sample
- Continuing topics with new people how to introduce
- Measurement

Why is Cogence important to you?

- **Improve ability to be effective**
- Enjoyable people = creativity
- Group self reflection – collaboration
- **Understanding each other better** – help
- Career focus – close to personal mission
- **Bring service into construction** – give access to products
- Get the industry back together – stop finger pointing
- Action to change
- Owner set the stage – group focus!
- **Continuous improvement philosophy** – old habits can't continued to be accepted
- Enjoyable projects – benefited greatly – give back to
- Communications make a project
- **Maximize strengths** – Lean principles applications –
- Put self in everyone else's shoes and explain to team – put to use
- Level 3 – what's important – implement change
- Positive change – when it works its great

2020 Roundtables: Project Initiation

Kick-off to drive together
Enable success from project inception

	Topic	Lead
January 8	Cogence Recap	Pam
March 11	Project Delivery Types/ Project Initiation	Jeff A
May 13	Cogence GMP/ Project Initiation	GMP Team
July 8	Owner Request For Partnership	Sean M
September 9	Competitive Procurement	Ross M
November 11	Creating Alignment with Scope and Budget	Gary/ Aaron (Cindy L, Pat K)

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2020 Town Hall:
AI Industry Summit

Next Step: Design Committee Outreach

Inspire. Educate. Unite.

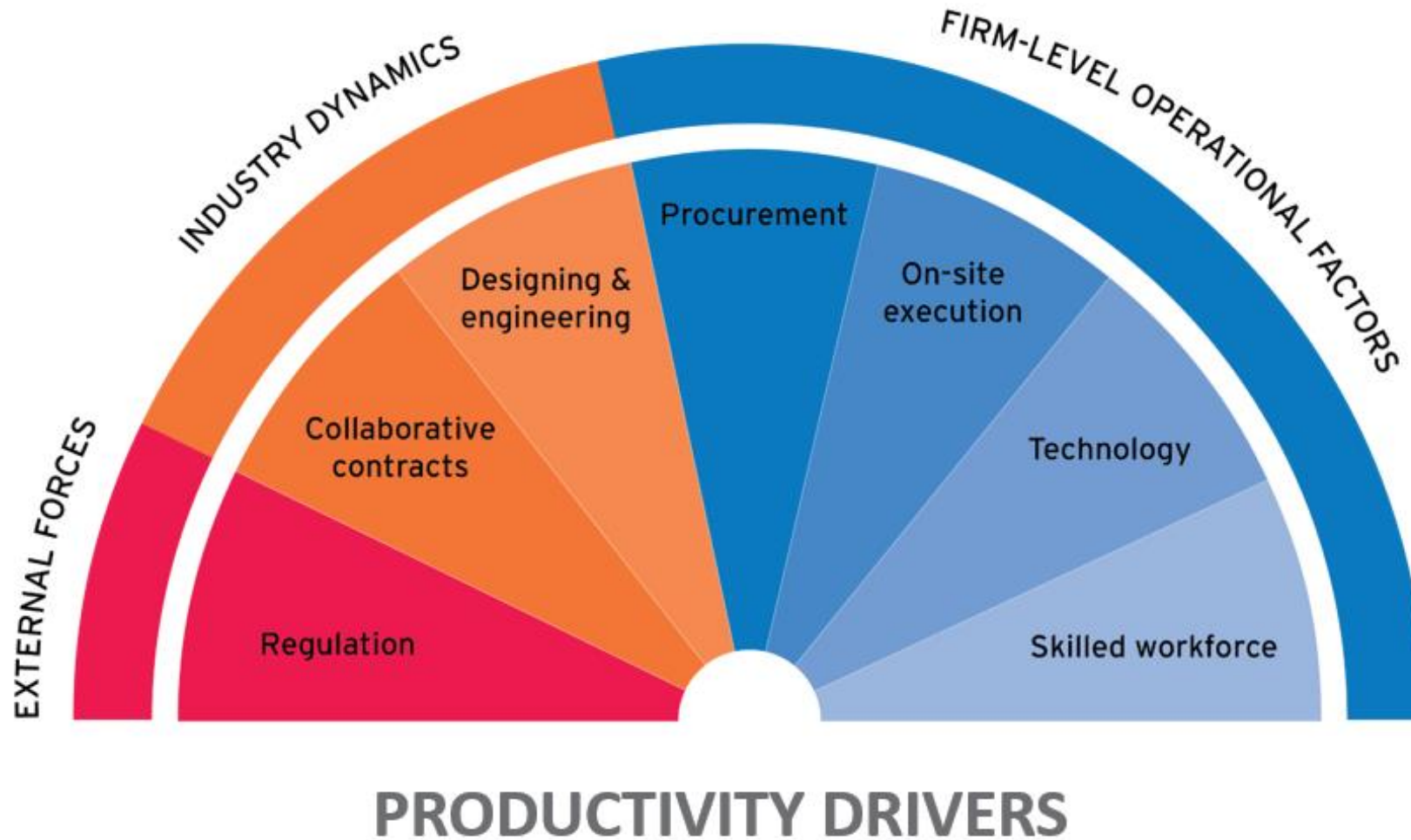# Growth Objective

Create industry wide focus on collaboration to improve project delivery.

Industry Overview

Inspire. Educate. Unite.

Outsider Influence

Others are finding a better way...
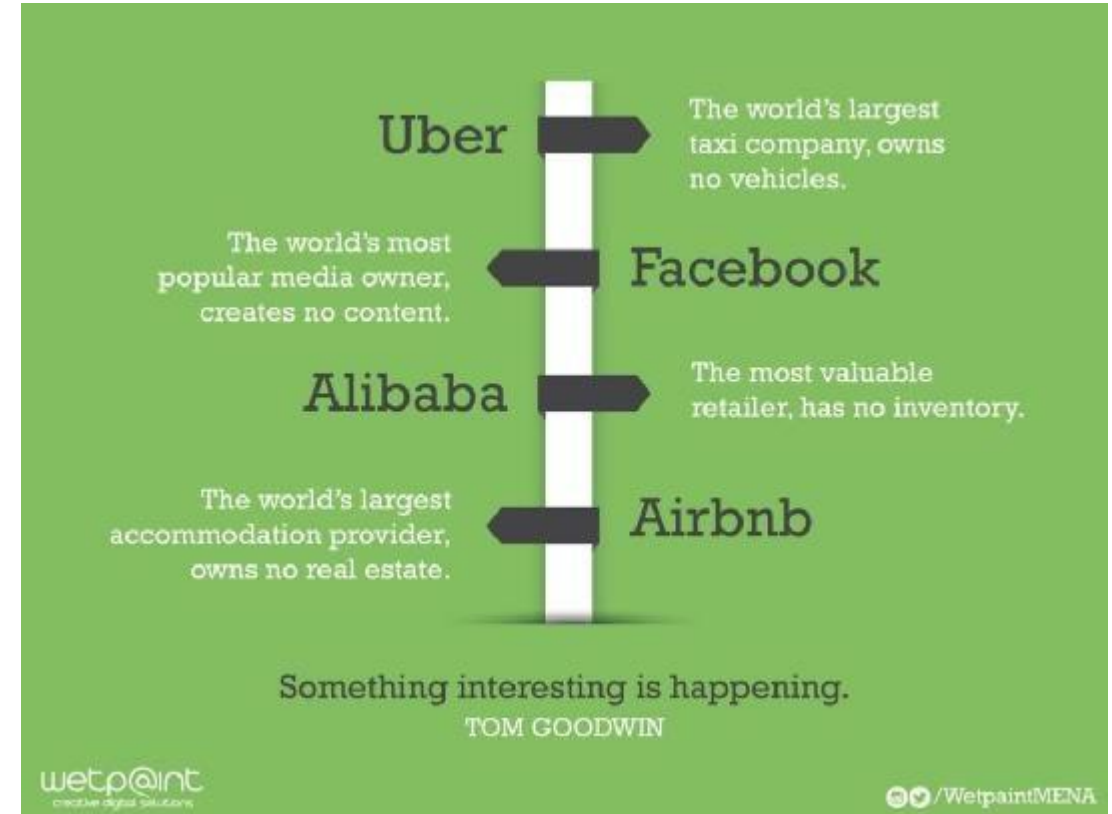
Outsider Influence

If we don't someone else will....

Amazon, Berkshire Hathaway And JPMorgan Chase Launch New Health Care Company

January 30, 2018 · 8:48 AM ET

BILL CHAPPELL   COLIN DWYER

Berkshire Hathaway Chairman and CEO Warren Buffett (left) in 2017; Jeff Bezos, CEO of Amazon, in 2013; and JP Morgan Chase Chairman and CEO Jamie Dimon in 2013. Berkshire Hathaway, Amazon and JPMorgan Chase are teaming up to create a health care company announced Tuesday that is "free from profit-making incentives and constraints."
AP
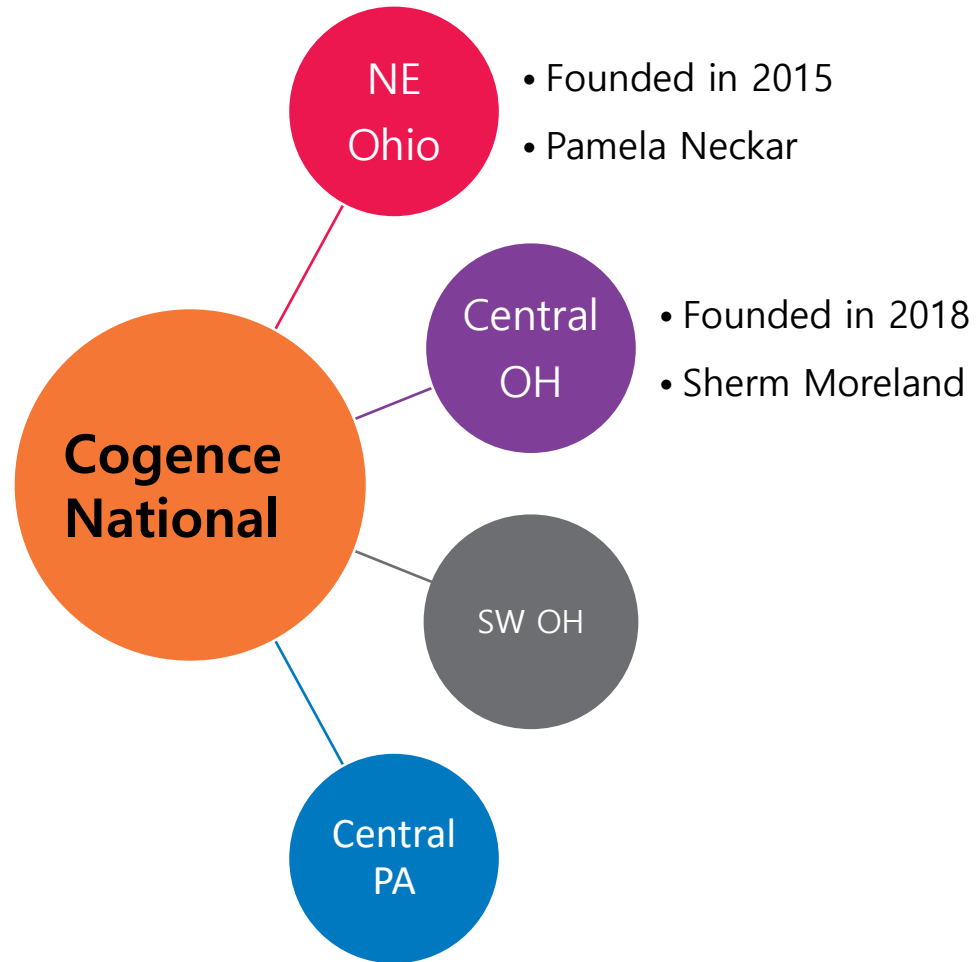
Cogence National Board Responsibilities

National Board Objectives:

- Understand the global industry needs

- Shape the industry impact and trajectory

- Lobby for regulatory change

Resource:	Advocacy:	Administration:

• Research Support
 	
 • Training/Education
 	
 • Access to:
    • Experience (Partners)
    • Digital Resources (Website)
 	
 • Chapter initiation/performance
	• Drive Regulatory Change
	
	 • Build strong relationship with "cousin" industry organizations to complement
	
	 • National Communication strategy and execution
	
	 • National Events (TownHall)
		• Brand Management
		    • Communication Standards
		    • Resource Standards
		    • Image
		
		 • Financial Management
		
		 • Contact Management

Cogence Chapter Board Responsibilities

Chapter Board Objectives:

- Understand the regional industry needs
- Shape the regional impact
- Support Regulatory Change

| Partnership:	Administration:	Program:	Resource:
- Recruiting - Orientation - Fostering Engagement - Maintaining Balance	- Logistics - Financial Management	- Develop Engaging Roundtables - Promote event	- Develop Program specific follow-up - Locate relevant "resources" supporting Cogence mission for partner access - Post event communication

Executive Director

Cogence is seeking an Executive Director to provide overall **leadership and management** in carrying out the organization's mission. The Executive Director is responsible for **managing day-to-day organizational operations** and for fueling growth consistent with the strategic plan as set by the Board.

Cogence Strategy

Project Delivery Best Practices

- Improve outcomes
- Reduce risk
- Capitalize on strengths
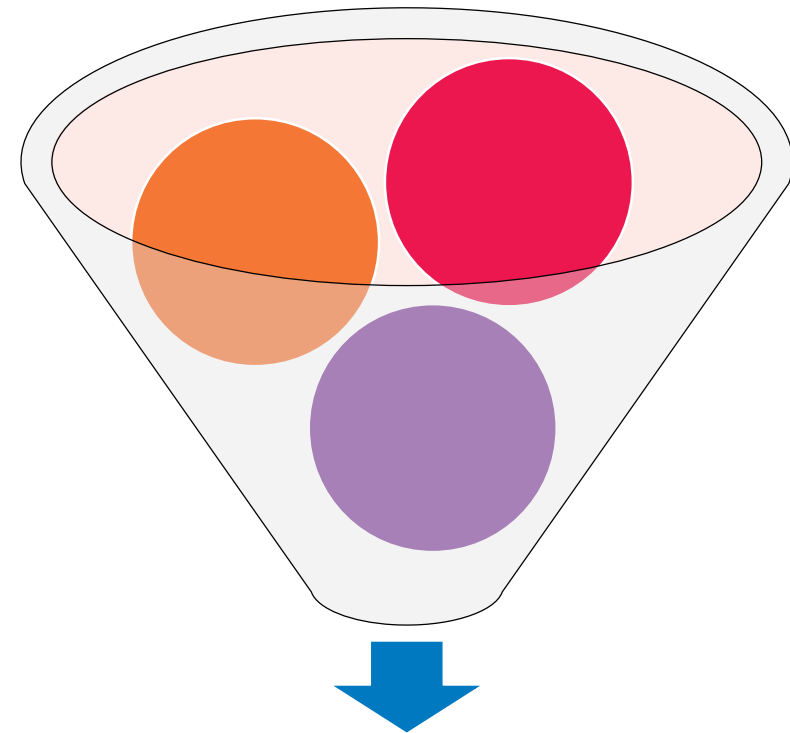
Industry Best Practice

Plus / Delta

Plus (+)   **Delta (-)**