

26<sup>TH</sup> ANNUAL



26<sup>TH</sup> LCI CONGRESS  
OCTOBER 22-25, 2024

# Demystifying the Integrated Project Delivery Contract: Risk, Reward & Partnering for Success

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Kelcey Henderson, Continuum Advisory Group

**SURFING THE WAVE OF LEAN DESIGN AND CONSTRUCTION**

October 22, 2024



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Continuum Advisory Group is a management consulting firm serving the building and construction industry. We partner strategically with our clients to solve difficult problems, bring about transformational change and guide their efforts to build a different future. Our sole focus on the building and construction industry gives us the technical expertise to provide insight from day one, while our management experience allows us to understand the cultural, political and organizational context of any engagement.

We offer a wide range of consulting services, including strategy, research, and project delivery support. With regards to Lean and Integrated Project Delivery, we work as a consultant and coach with large project teams to help implement Lean Practices and build Integrated, High Performing Teams. We also work with both owners and contractors at the organizational level to develop Lean Construction and Integrated Teams practices, with a focus on strategic and cultural fit to ensure successful adoption and implementation.



STRATEGIC PLANNING



CHANGE MANAGEMENT  
AND SYSTEM & PROCESS  
IMPLEMENTATION



BUILDING HIGH  
PERFORMING TEAMS  
THROUGH LEAN AND  
INTEGRATION



MARKET RESEARCH AND  
ANALYSIS



ACQUISITION RESEARCH  
AND GROWTH ANALYSIS



PROCESS STREAMLINING  
AND IMPROVEMENT



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**INTEGRATED FACILITIES  
SOLUTIONS, INC.**

*Owner's Representative/Program Management*

- Illinois-based Owner's Representative & Lean Coaching company
- 20-person firm
- 26 years in business
- Successfully completed over \$6.4B in work for more than 4,000 projects



# Demystifying the Integrated Project Delivery Contract

## Contract

The objectives will be based on how you gain sales by acquiring and keeping customers. A marketing strategy helps on making good messages with the right twist of marketing approaches in order to have a good outcome of your sales and marketing activities. It is a process to allow an organization to focus resources on the greatest opportunities to increase sales and achieve the company's target. Marketing strategy's goal is to increase sales and achieve advantage over other competitors. It includes short term and long term activities of marketing that has to do with the analysis of a company's situation and contribute to its objectives. Putting your strategy into action is how your marketing plan should work. Marketing budgets will be set, at the same time it will also show you how you're going to work with your targets, it maybe through networking, advertising etc.

Having the perfect timing with your activities to fit your customers buying cycles, will help you saving money and maximizing sales. The marketing plan should be innovative. It should have the details on how your sales are followed up and the activities your doing to develop your offers. Branding is defined as the process of coming up or making a unique name or design for a certain product. Having a good brand strategy allows you to have a major advantage in gaining a large increase in your market competition. Your brand tells your customers what they can have or expect from the products and services you offer. Are you innovative or are you the experienced type? or do you offer a high-cost, high-quality product, or a low-cost, high-value products? It's impossible to be both. You should consider on thinking what your customers need you to be. Your sign is them main foundation of your brand. All the promotional materials should be connected with your logo to communicate with your customers. Brand messages are delivered and planned based on the questions how, what, when, to whom and where your brand strategy is.

The strategy of branding you have should be consistent, because it leads to a strong brand equity. Branding is defined as the process of coming up or making a unique name or design for a certain product. The strategy of branding you have should be consistent, because it leads to a strong brand equity. The objectives will be based on how you gain sales by acquiring and keeping customers. A marketing strategy helps on making good messages with the right twist of marketing approaches in order to have a good outcome of your sales and marketing activities. It includes short term and long term activities of marketing that has to do with the analysis of a company's situation and contribute to its objectives. Putting your strategy into action is how your marketing plan should work. Marketing budgets will be set, at the same time it will also show you how you're going to work with your targets, it maybe through networking, advertising etc. Having the perfect timing with your activities to fit your customers buying cycles will help you saving money and maximizing sales. The marketing plan should be innovative. It should have the details on how your sales are followed up and the activities your doing to develop your offers.

(A) It is a process to allow an organization to focus resources on the greatest opportunities to increase sales and achieve the company's target. Marketing that has to do with the analysis of a company's situation and contribute to its objectives.

(B) Marketing strategy's goal is to increase sales and achieve advantage over other competitors. It includes short term and long term activities of marketing that has to do with the analysis of a company's situation and contribute to its objectives.

(C) The objectives will be based on how you gain sales by acquiring and keeping customers. A marketing strategy helps on making good messages with the right twist of marketing approaches in order to have a good outcome of your sales and marketing activities. It includes short term and long term activities of marketing that has to do with the analysis of a company's situation and contribute to its objectives.

(D) A marketing strategy helps on making good messages with the right twist of marketing approaches in order to have a good outcome of your sales and marketing activities. It includes short term and long term activities of marketing that has to do with the analysis of a company's situation and contribute to its objectives.

(E) Putting your strategy into action is how your marketing plan should work. Marketing budgets will be set, at the same time it will also show you how you're going to work with your targets, it maybe through networking, advertising etc. Having the perfect timing with your activities to fit your customers buying cycles will help you saving money and maximizing sales. The marketing plan should be innovative. It should have the details on how your sales are followed up and the activities your doing to develop your offers.

(F) Improvement should be measured regularly and assessed in order for you to know what's beneficial and what is not. This will help you set new targets.

(G) Brand messages are delivered and planned based on the questions how, what, when, to whom and where your brand strategy is. Advertisement, visual communication and distribution channels are parts of brand strategy.

Signature 1

## WORKSHOP OBJECTIVES

- How IPD Fits with Lean
- When to use the IPD Contract
- Types of IPD Contracts
- Definitions
- The IPD Team
- Conditions of Satisfaction
- Validation
- Contract Structure
- Incentives & Risk/Reward



# First concert

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# My role is:

✓ 31





WHAT  
DO YOU  
WANT TO  
LEARN?



I am an Owner interested in utilizing the Integrated Contract



9%

I am a GC/Architect/Engineer working for an Owner that is  
utilizing or interested in the Integrated Contract



25%

I have been a party to the Integrated Contract and want to  
learn more



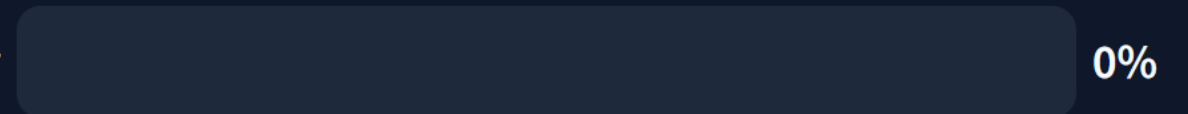
34%

I have heard of the Integrated Contract and want to learn  
more about it

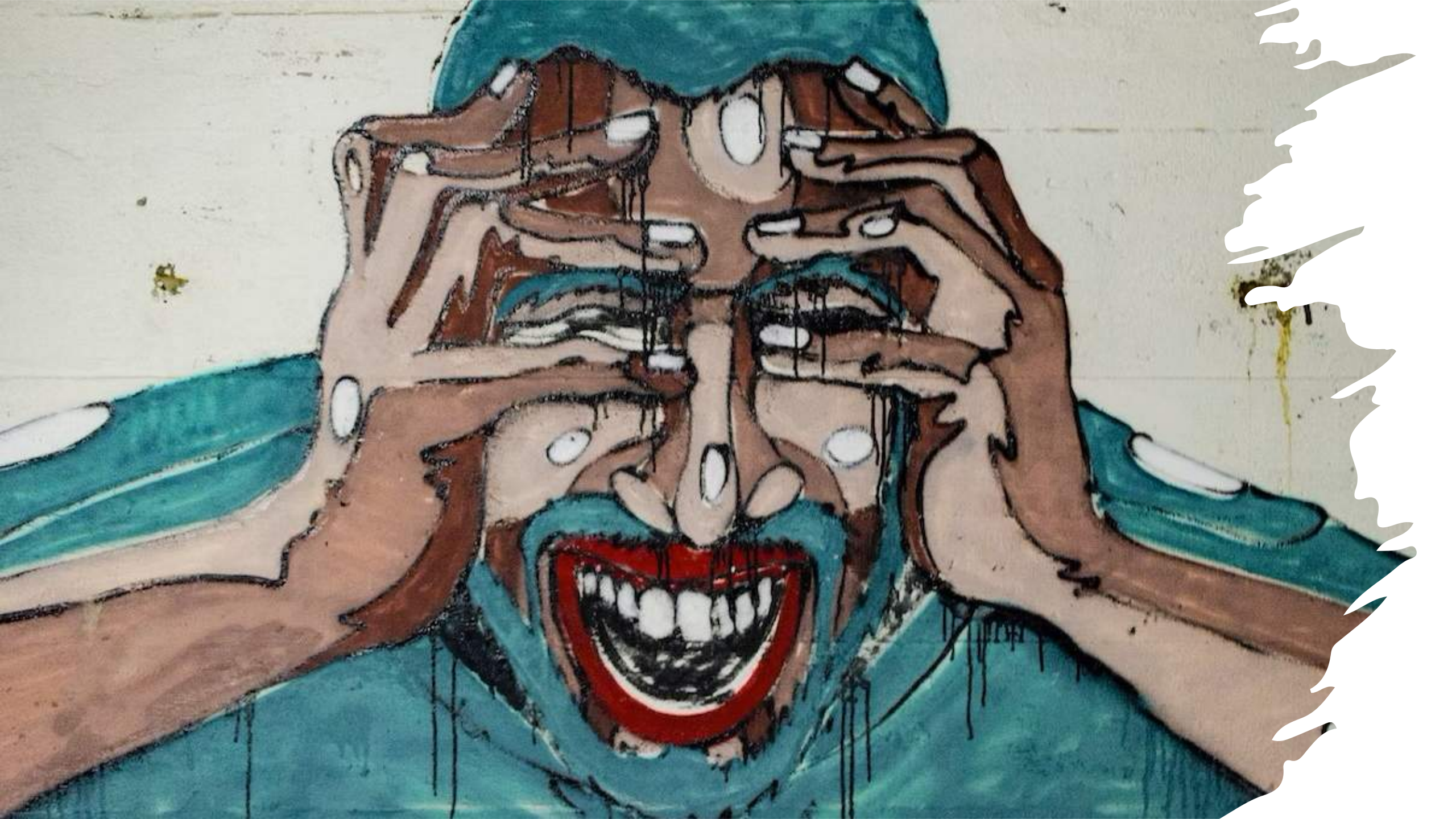


31%

Other



0%





## Contract Pain Points (one word answer)

A word cloud of terms related to the legal process of liquidation. The most prominent words are 'Scope' and 'damages'. Other significant words include 'liquidated', 'collaboration', 'changes', 'liability', 'legal', 'dysfunctional', 'frustrated', 'challenges', 'risk', 'inexperience', 'transparency', 'misalignment', 'modifications', 'process', 'alignment', 'fairness', 'resources', 'unaligned', 'legalese', 'administrative', 'separated', 'limit', 'uncertainty', 'profit', 'clarity', 'ids', 'execution', 'culture', 'miscommunication', and 'unprofitable'.

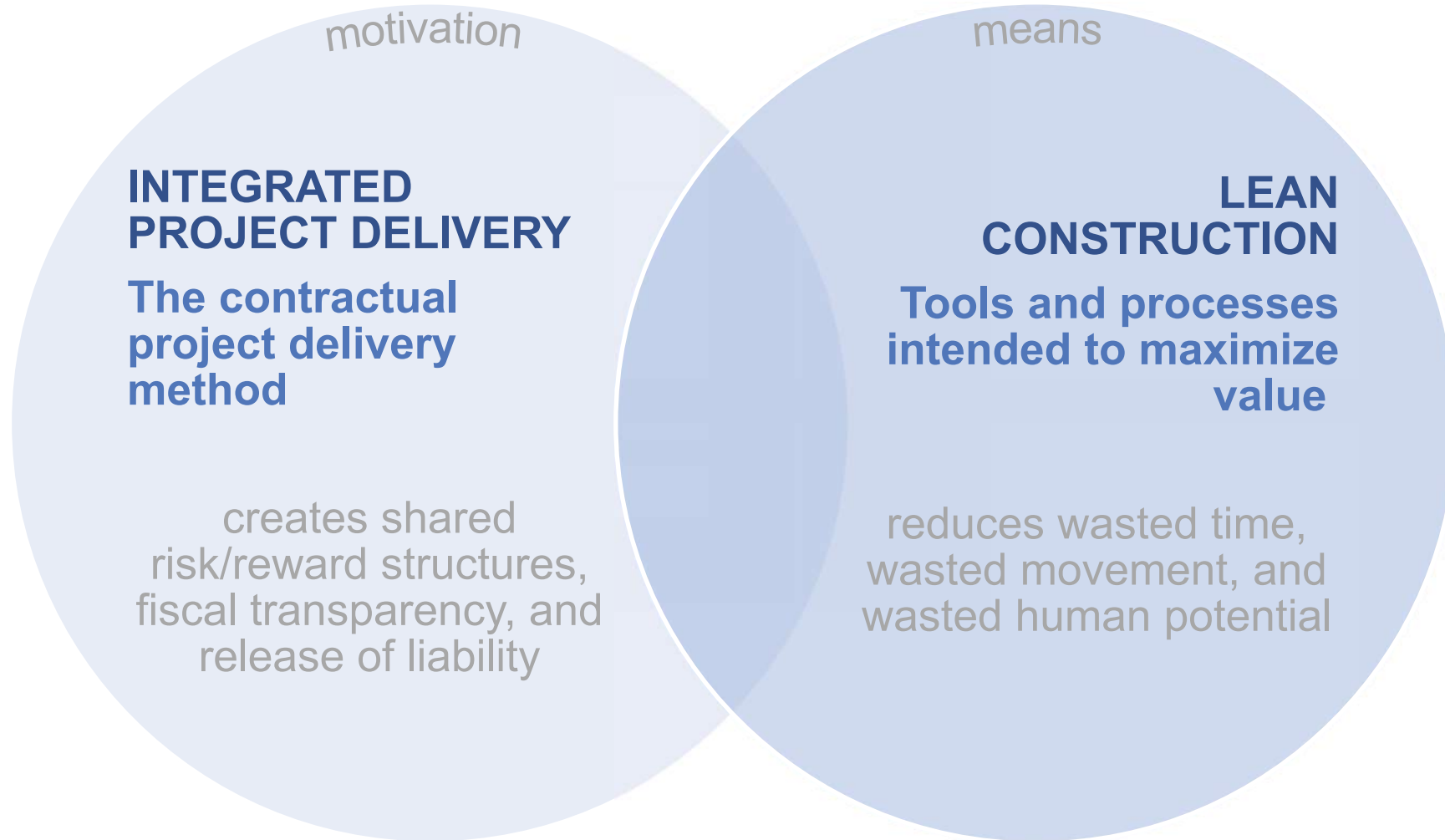


# SIX TENETS OF LEAN CONSTRUCTION

- 1 Respect for People
- 2 Optimize the Whole
- 3 Generate Value
- 4 Eliminate Waste
- 5 Focus on Flow
- 6 Continuous Improvement



# Motivation & Means



# Lean Integrated Project Delivery

Traditional Project Delivery		Integrated Project Delivery
Fragmented, assembled on “just-as-needed” or “minimum-necessary” basis, strongly hierarchical, controlled	TEAMS	An integrated team entity composes key project stakeholders, assembled early in the process, open, collaborative
Linear, distinct, segregated; knowledge gathered “just-as-needed”; information hoarded; silos of knowledge and expertise	PROCESS	Concurrent and multi-level; early contributions of knowledge and expertise; information openly shared; stakeholder trust and respect
Individually managed, transferred to the greatest extent possible	RISK	Collectively managed, appropriately shared
Individually pursued; minimum effort for maximum return; (usually) first cost based	COMPENSATION/REWARD	Team success tied to project success; value-based
Paper-based, 2 dimensional; analog	COMMUNICATION/TECHNOLOGY	Digitally based, virtual; Building Information Modeling (3, 4 and 5 dimensional)
Encourage unilateral effort; allocate and transfer risk; no sharing	AGREEMENTS	Encourage, foster, promote and support multi-lateral open sharing and collaboration; risk sharing

Source: AIA 2007

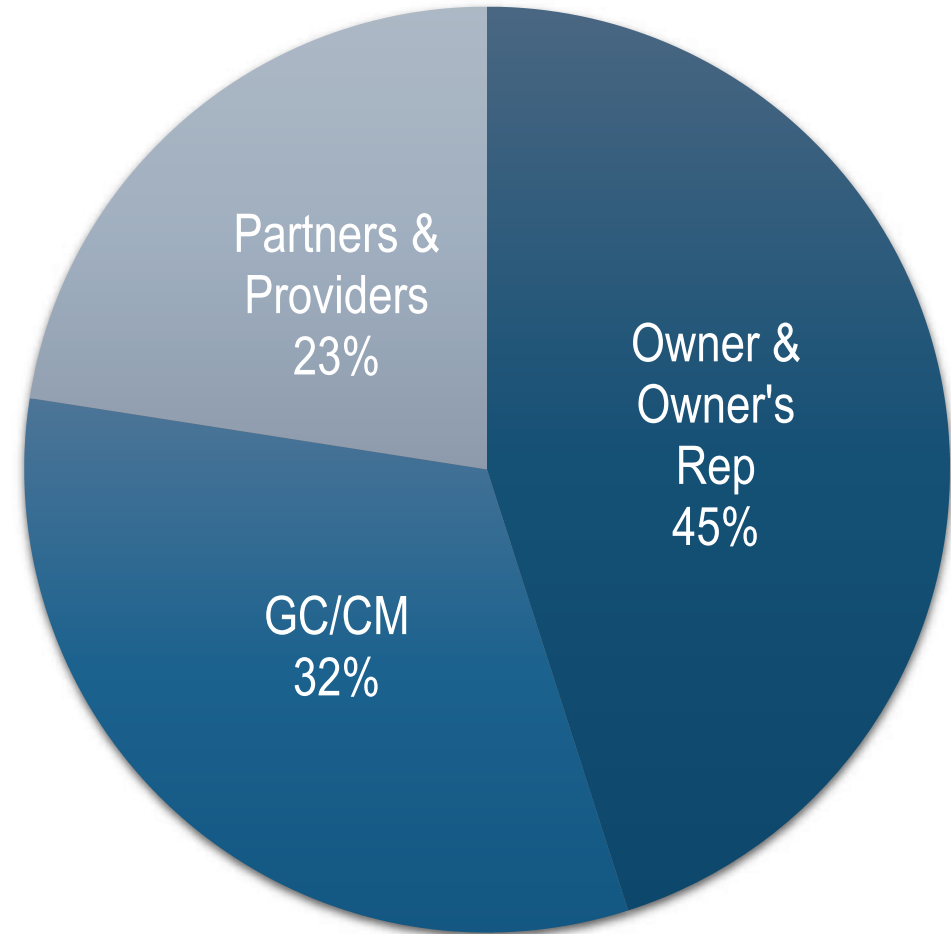




# Comparing Delivery Models

Model	Design-Bid-Build	Construction Manager at Risk	Design-Build	Integrated Project Delivery
Claims	High Likelihood	Moderate Likelihood	Low likelihood (with no major changes)	Lowest Likelihood
Open Book	No	Partially	Partially	Yes, for all major partners
Risk/Reward	No	Potentially	Potentially	Yes
Ability to Make Changes to Scope in Construction	Low	Moderate	Low	High
Reliability of Cost	Low	Medium	High	Highest
Timing of Budget Certainty	End of Project	Middle of Project	At Completion of Design	Early in Design Phase

# 2023 Broad Industry Survey: Enabling Prefab & Offsite



# Two Main Areas of Focus



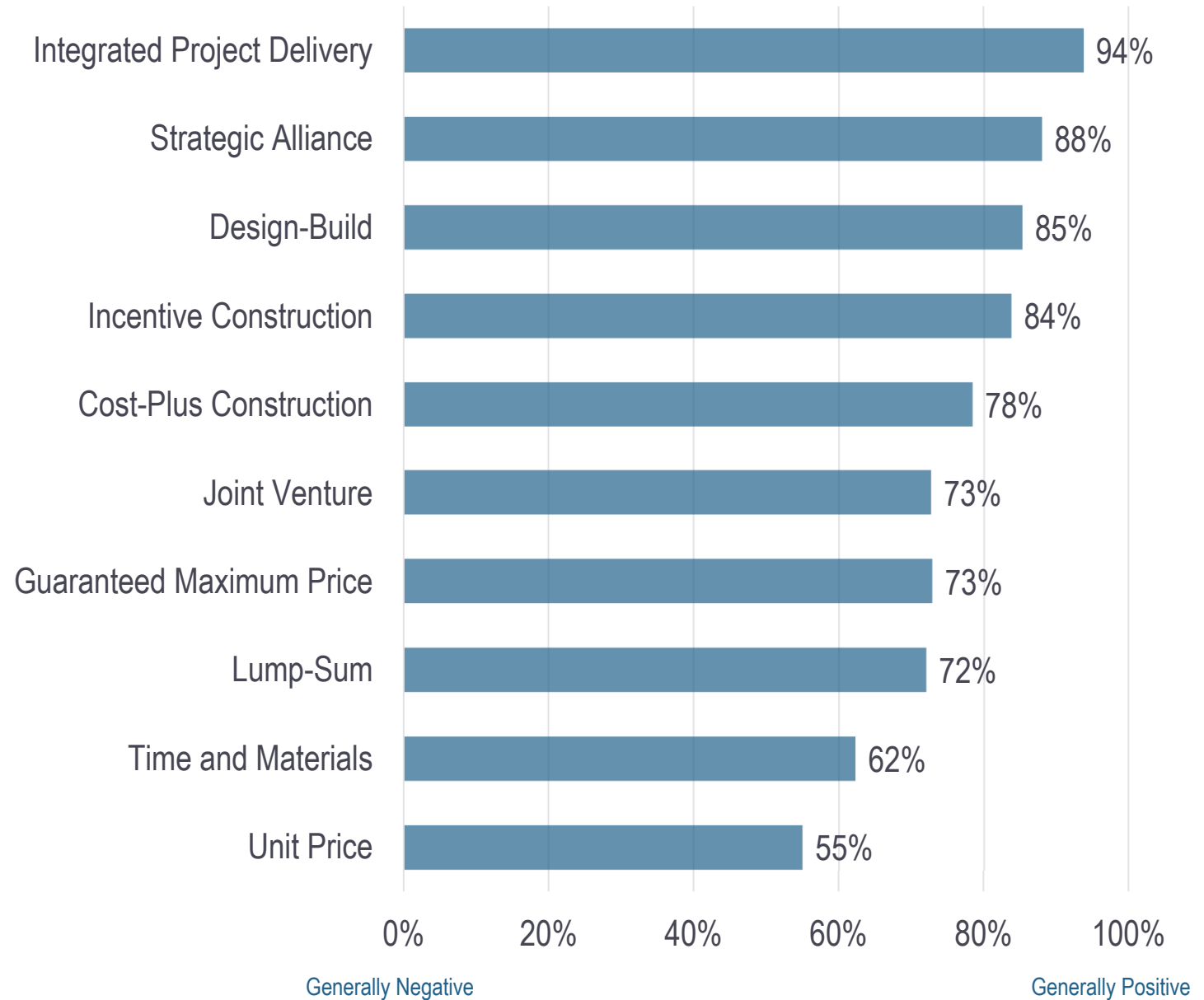
Contract Type



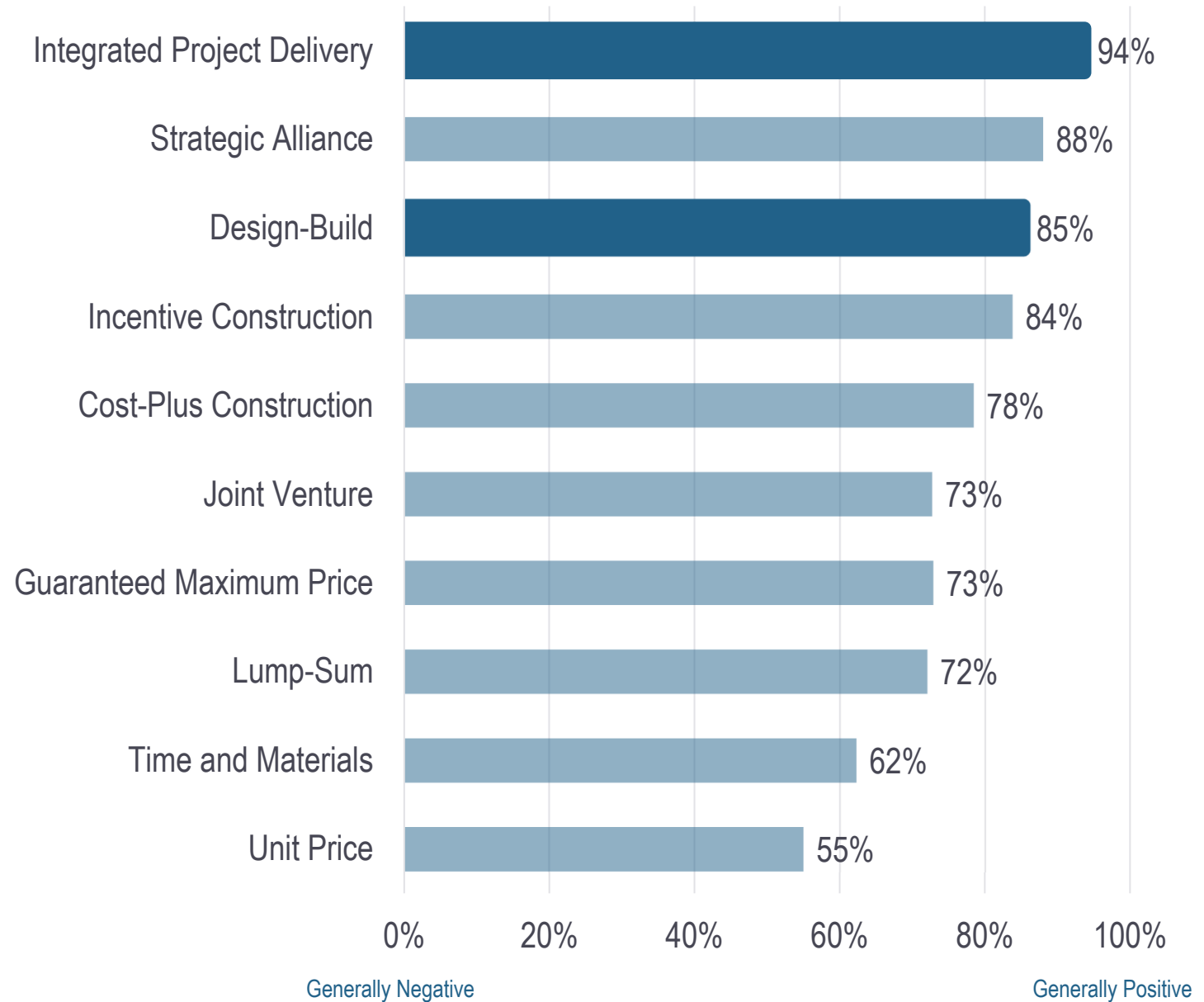
Project Delivery Method



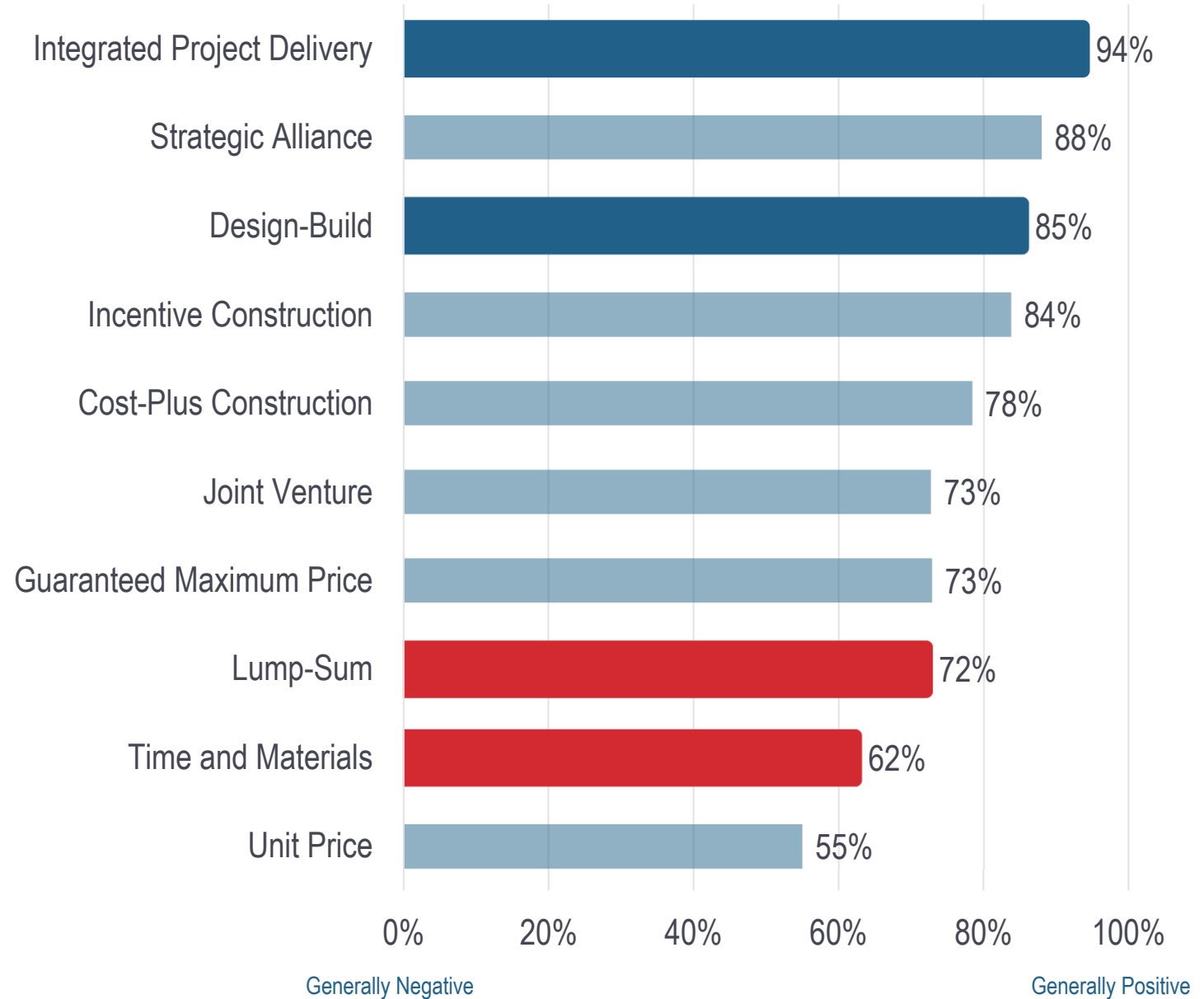
# Experience with Contract Types



# Which Contract Types Enable or Inhibit Prefab?



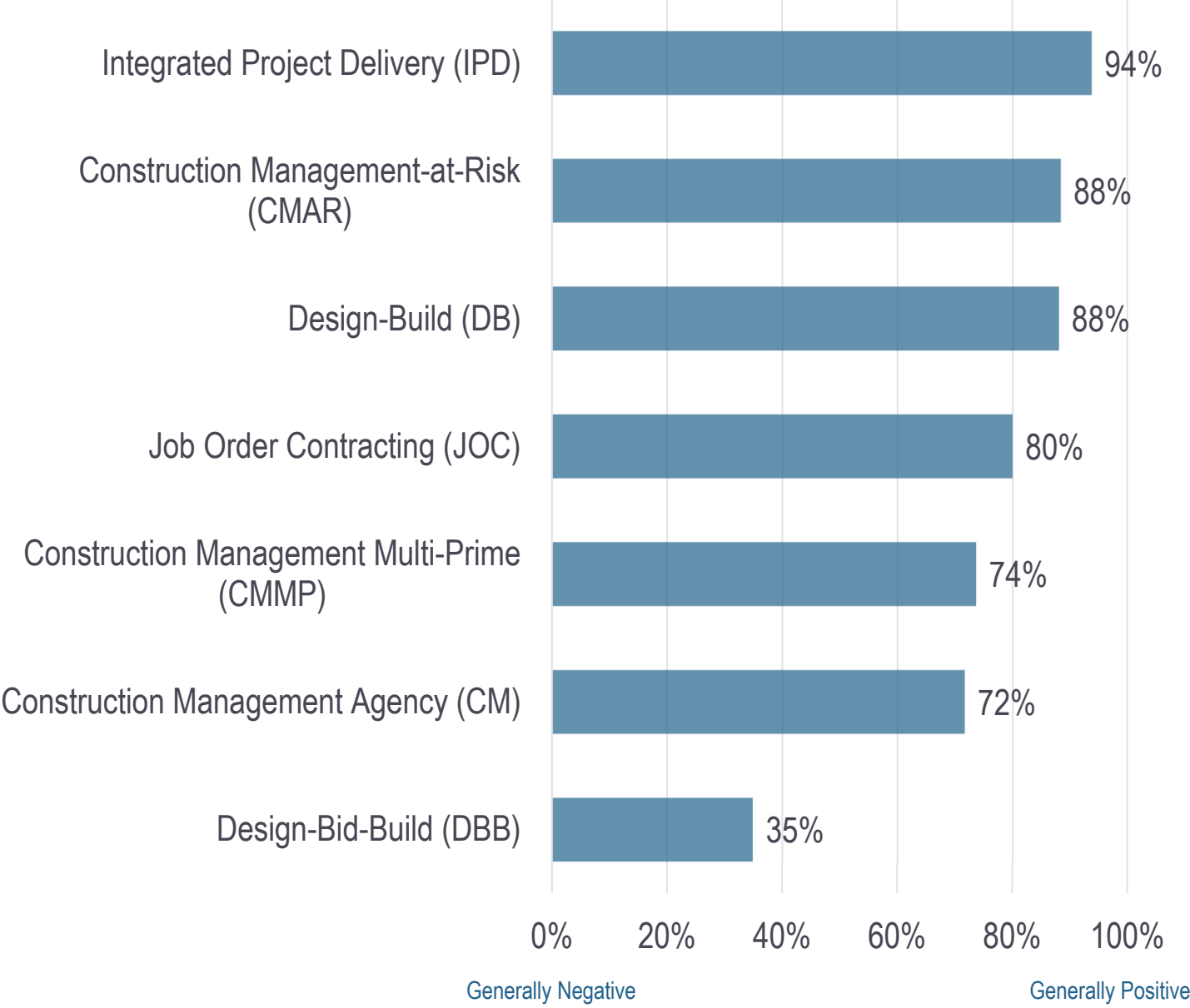
# Which Contract Types Enable or Inhibit Prefab?



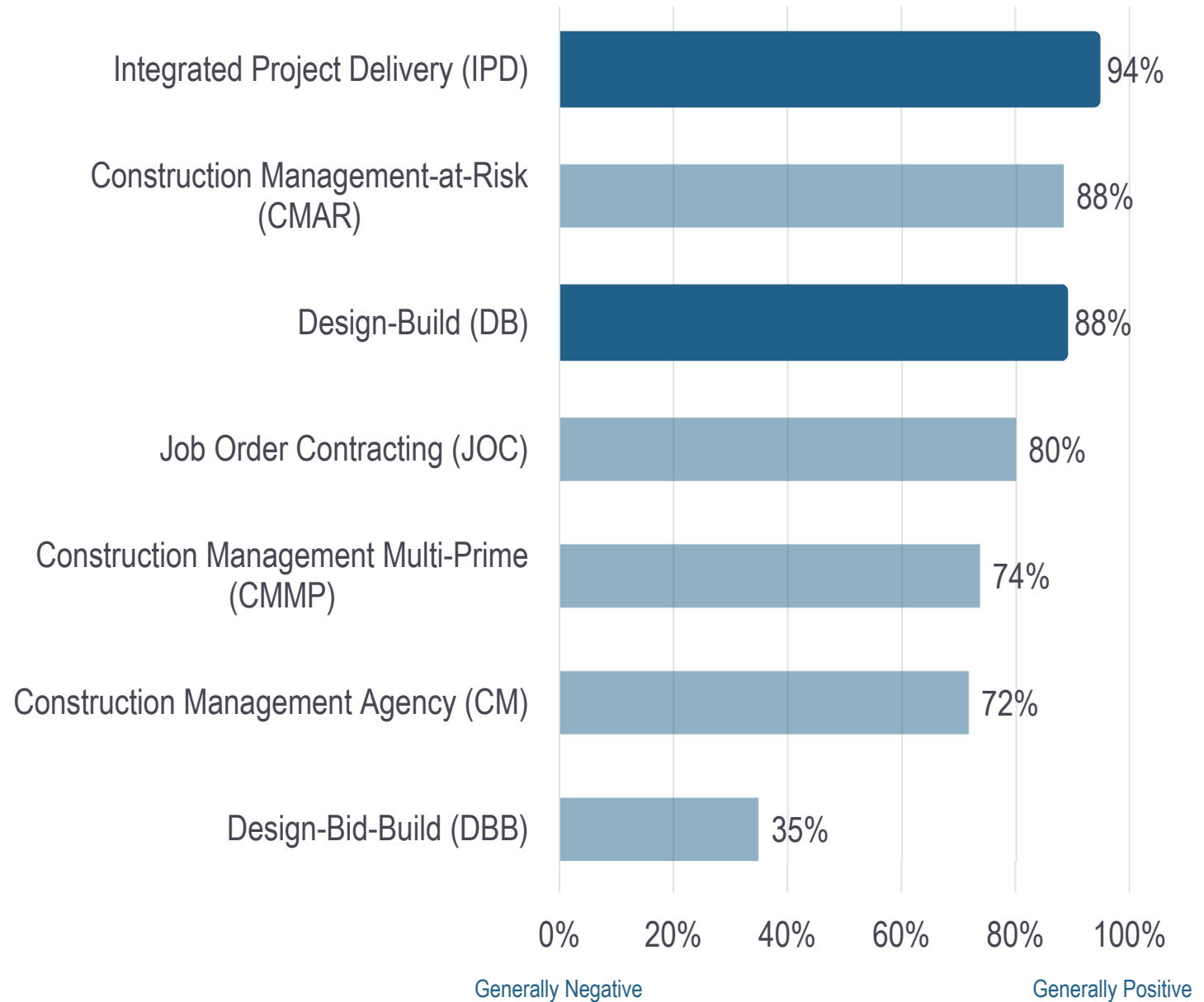




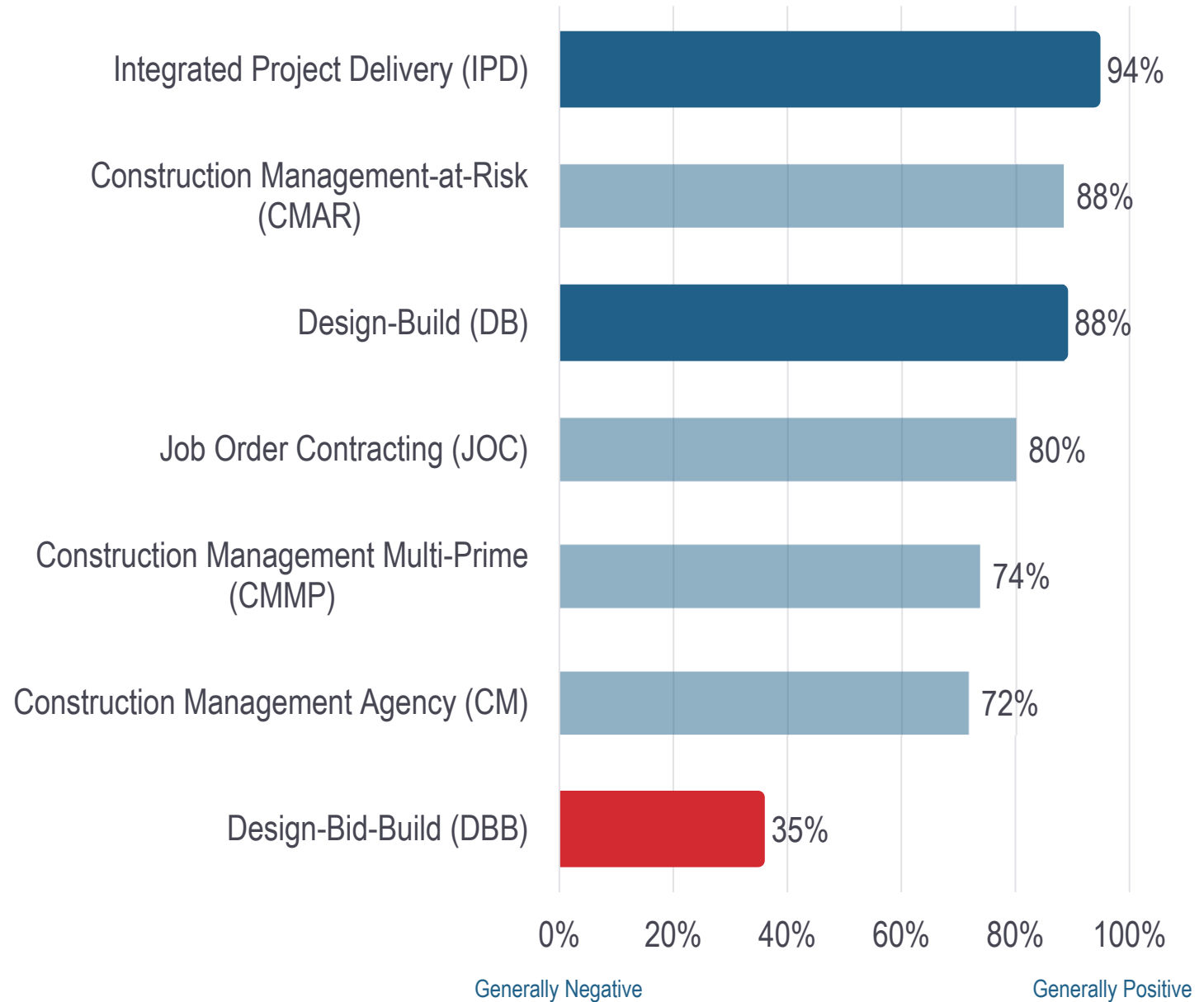
# Experience with Project Delivery Methods



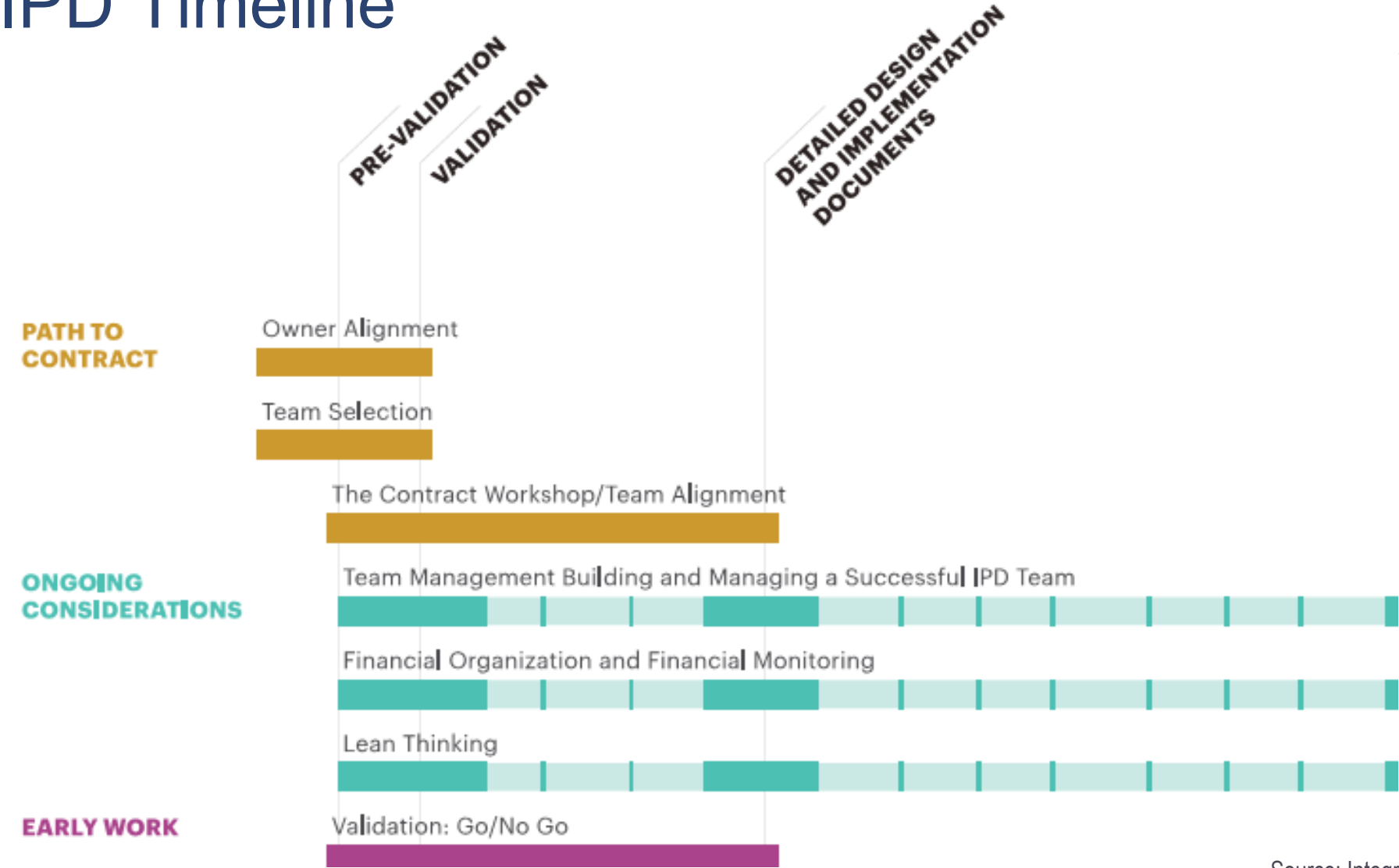
# Which Delivery Methods Enable or Inhibit Prefab?



# Which Delivery Methods Enable or Inhibit Prefab?



# IPD Timeline



Source: Integrated Project Delivery: An Action Guide for Leaders





# IPD Timeline

PATH TO  
CONTRACT

PRE-VALIDATION  
VALIDATION  
DETAILED DESIGN  
AND IMPLEMENTATION  
DOCUMENTS

Owner Alignment

Team Selection

The Contract Workshop/Team Alignment

ONGOING  
CONSIDERATIONS

Team Management Building and Managing a Successful IPD Team

Financial Organization and Financial Monitoring

Lean Thinking

EARLY WORK

Validation: Go/No Go

Source: Integrated Project Delivery: An Action Guide for Leaders



The image is a full-page background photograph. It shows a construction site at sunset or sunrise. In the foreground, two construction workers are silhouetted against the bright, orange and yellow sky. The worker on the left is holding a smartphone. In the background, a large tower crane is visible, and several building structures are under construction, covered in scaffolding. The overall mood is industrial and professional.

# When to use the IPD Contract

PROJECT CHARACTERISTIC		HIGH	LOW
<b>Level of Ambition</b>	Technical Innovation	<input type="radio"/>	<input type="radio"/>
	Creative Innovation	<input type="radio"/>	<input type="radio"/>
	Other Areas of Innovation	<input type="radio"/>	<input type="radio"/>
	High Sustainability Goals	<input type="radio"/>	<input type="radio"/>
<b>Stressors</b>	High Value to Budget	<input type="radio"/>	<input type="radio"/>
	Challenging Schedule	<input type="radio"/>	<input type="radio"/>
<b>Level of Clarity<sup>1</sup></b>	Current Scope Development	<input type="radio"/>	<input type="radio"/>
	Expected Time for Future Scope Development	<input type="radio"/>	<input type="radio"/>
<b>Probability of Change</b>	Expected Change in Building Technology	<input type="radio"/>	<input type="radio"/>
	Expected Change in Business Case	<input type="radio"/>	<input type="radio"/>
	Expected Stakeholder / Public Driven Change	<input type="radio"/>	<input type="radio"/>
<b>Complexity of Interaction</b>	Level of Interdependency of Systems	<input type="radio"/>	<input type="radio"/>
	Level of Interdependency of Participants	<input type="radio"/>	<input type="radio"/>

<sup>1</sup> IPD is a good choice when managing projects with scopes that are not initially clear, but it will require a more extended validation period before setting targets



**AIA** Contract Documents



## Common Contracts

Who has experience with any of these or others?





[PROJECT NAME]

## INTEGRATED PROJECT DELIVERY AGREEMENT

This Integrated Project Delivery Agreement ("Agreement") is entered into on [DATE] ("Effective Date") by and between:

The Owner ("Owner"):

[name]  
[entity type]  
[address]  
[city]

The Architect ("Architect")

[name]  
[entity type]  
[address]  
[city]

The Contractor ("Contractor")

[name]  
[entity type]  
[address]  
[city]

### 1. DEFINITIONS

**1.1** Defined terms will be capitalized throughout the Agreement. Most definitions for this Agreement appear in alphabetical order in **Exhibit A** and may also be bolded the first time the term is used. Other terms that are capitalized are described or defined within the Agreement or General Conditions. The Owner, Architect and Contractor may be individually referred to as the **Party** and will be collectively referred to throughout this Agreement as the **Parties**.

### 2. THE PROJECT AND RELATIONSHIP OF THE PARTIES

**2.1 The Project.** The Project consists of [insert general project description].

**2.2 Project Objective.** During the Conceptualization Phase the Parties will jointly develop the Project Objective based upon the Owner's requirements, goals and limitations. The Project Objective is comprised of the **Validated Target Program (VTP)**, **Validated Target Cost (VTC)**, and **Validated Target Schedule (VTS)**, which establishes the Project requirements and metrics for measuring the Project's success. If, after development and validation under Section 7.2.1, the Parties agree to the Project Objective it will be incorporated into this Agreement as **Exhibit B**.

# AIA Contract Documents

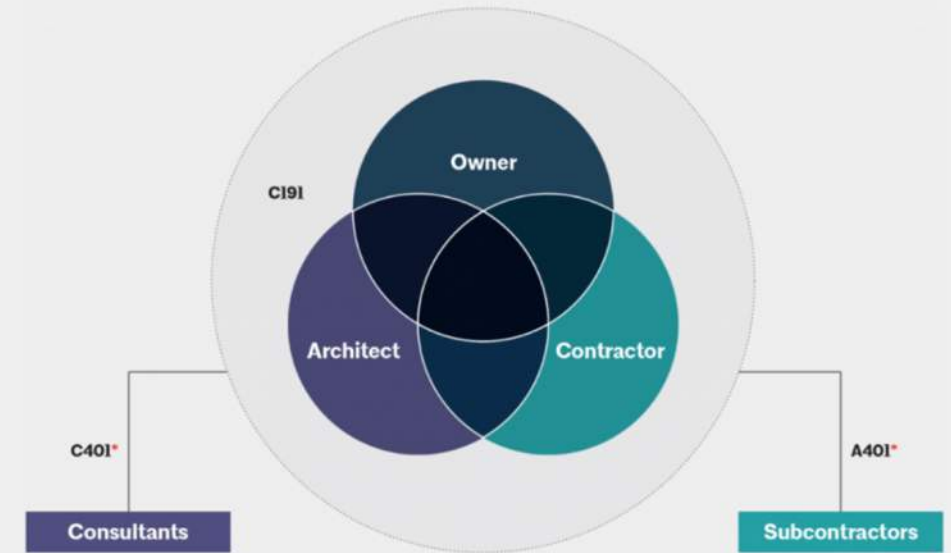
Transitional documents relationships:



Single Purpose Entity (SPE) contract relationship:



Multi-party agreement relationships:





# ConsensusDocs®

BUILDING A BETTER WAY

Multi-Party Integrated Project  
Delivery Agreement

**300**

[More Info](#)

Building Information Modeling  
(BIM) Addendum

**301**

[More Info](#)

Lean Construction Addendum

**305**

[More Info](#)

Green Building Addendum

**310**

[More Info](#)

Joining Agreement for Integrated  
Project Delivery

**396**

[More Info](#)

# Break



A black and white photograph of an open notebook. The notebook is open to two pages, and the word "Definitions" is written in a large, bold, cursive script across both pages. The paper appears slightly aged or off-white. The background is dark and out of focus, showing what might be a desk or a bookshelf. The lighting is soft, highlighting the texture of the paper and the fluidity of the handwriting.

Definitions



# Management Terminology

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## Hanson Bridgett 2024

- Senior Management Team (SMT)
- Project Management Team (PMT)
- Project Implementation Team (PIT)
- Trade Partner
- Design Partner
- Separate Contractor/Consultant

## AIA C191-2009

- Project Executive Team
- Project Management Team
- (nothing noted for cross functional teams)
- Additional Parties (not actually defined)

## ConsensusDocs® 300-2007, Rev 2015

- Senior Executive Team
- Core Group
- TVD Cluster
- Risk Pool Member
- Subcontractor

# Financial Terminology

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## Hanson Bridgett 2024

- Base Target Cost (end of Validation)
- Final Target Cost
- Estimated Final Cost
- Final Actual Cost
- Chargeable Cost (excluding profit)
- Incentive Compensation Layer (ICL)

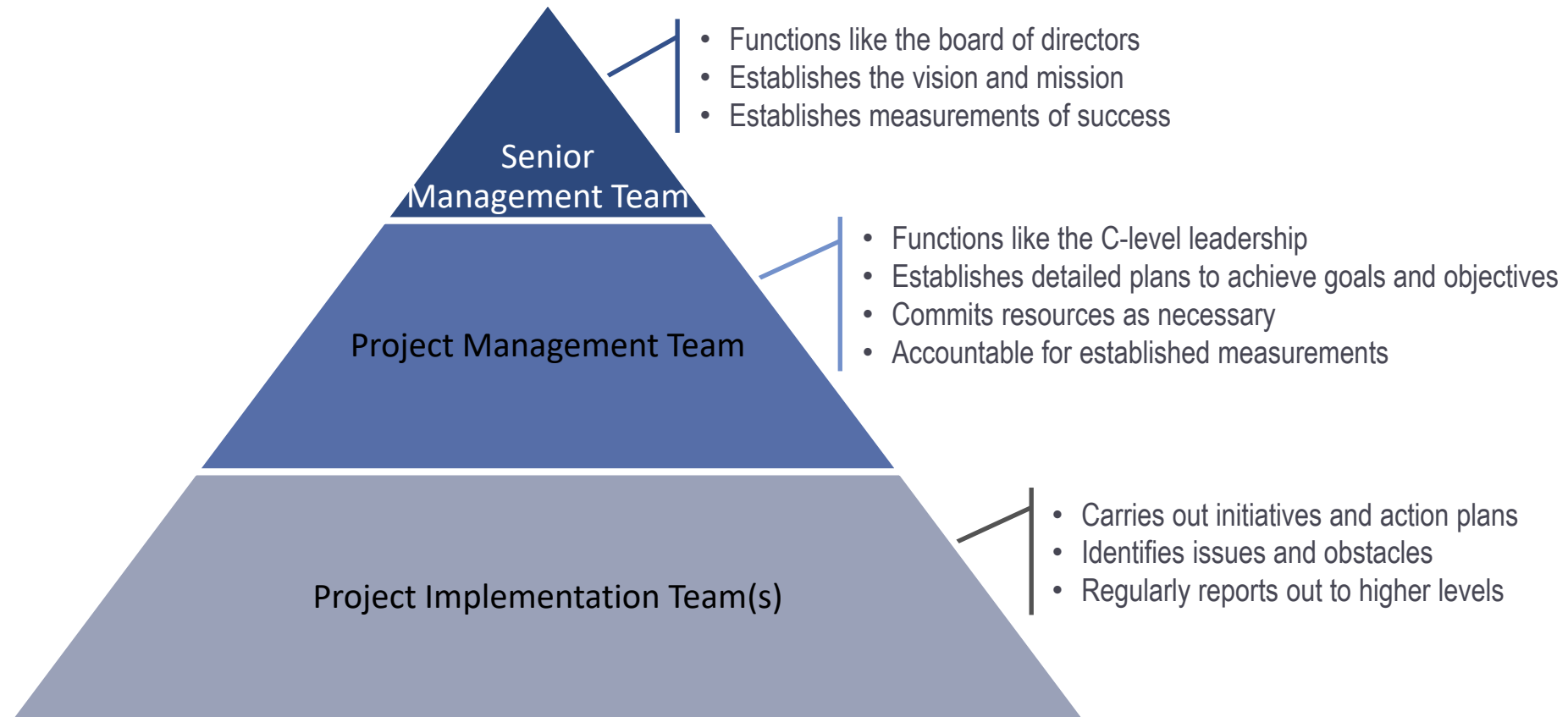
## AIA C191-2009

- Target Cost
- Target Criteria Amendment
- Actual Costs
- Incentive Compensation (portion of the difference between Actual Costs and Target Cost)

## ConsensusDocs® 300-2007, Rev 2015

- Estimated Maximum Price (EMP)
- Expected Cost
- Actual Cost (Payable Cost plus Profit)
- Payable Costs
- Risk Pool
- Profit

# Developing a “Project Organization”



# Define Teams

## **SMT: Senior Management Team**

- Provide Executive Level sponsorship for the Project Team and for the Lean IPD execution approach
- Assure the team has adequate resourcing and support
- Adjudicate decisions when the PMT cannot reach consensus
- Hold regular SMT meetings with reliable participation

## **PMT: Project Management Team**

- Overall Leadership and Guidance for the Project Team
- Assure collaboration through the planning, design and implementation phases of the Project
- Decision Making for the Project Team
- Hold regular PMT meetings with reliable participation
- Interpretation of Implementation Documents
- Responsible for Cost, Schedule and Change Management for the Project

## **PIT: Project Implementation Team(s)**

- Responsible for designing and implementing the Project consistent with the CoS
- Made up of members of owner, design, construction and other trades, vendors and suppliers
- Hold regular PIT meetings to advance TVD concepts and LPS planning for the PIT scope
- Drive innovation and creativity by harnessing the collective knowledge and experience of the team

# Key Facets of an Effective Model

## ► An agreed upon project team structure

- All parties are represented in each team
- All teams are cross functional
- All teams are peer-to-peer (decision-making authority)
- Teams are lean

## ► Effective systems of measurement and tracking, including consistent use of collective tools:

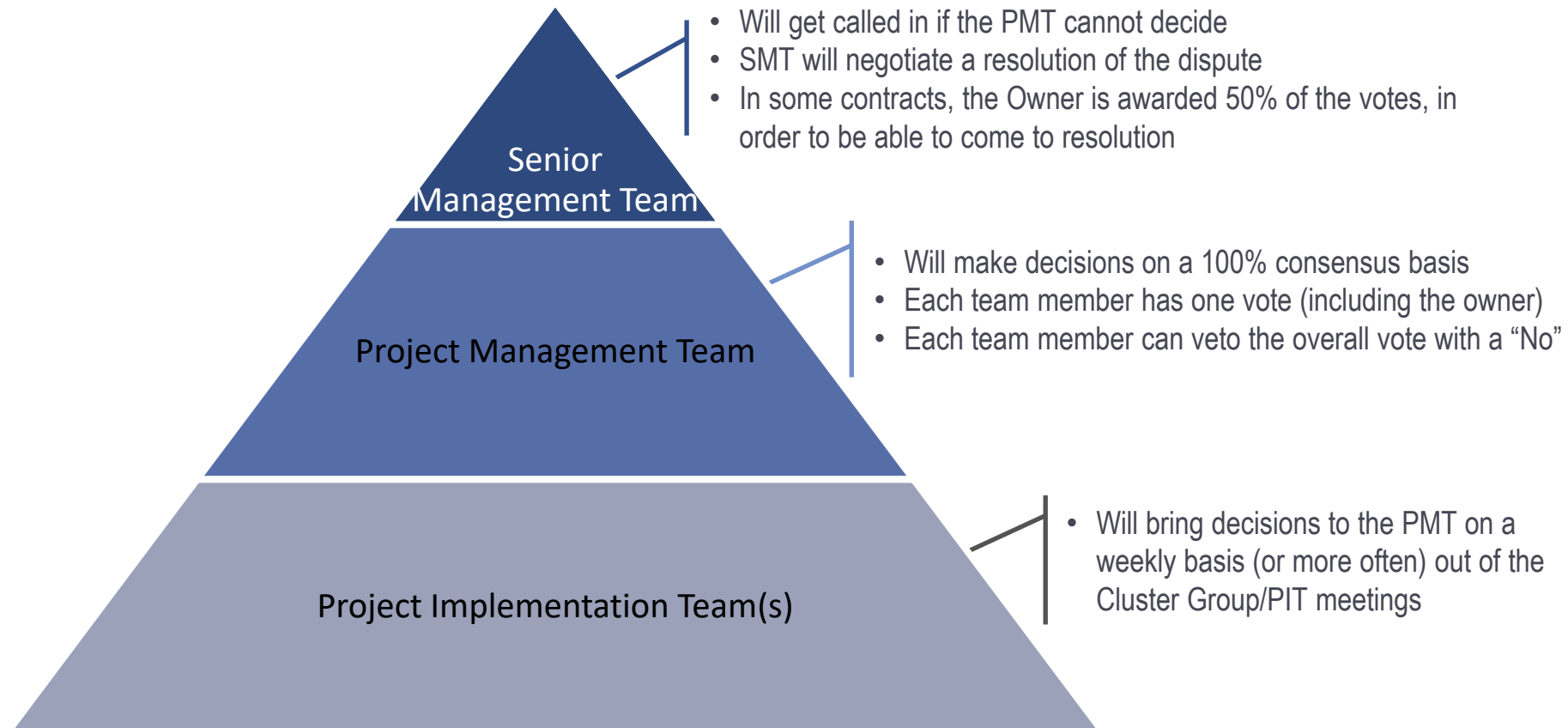
- Stand and deliver report-out
- Action plans
- Metrics and dashboards
- Regular measurement of what's important

## ► Commitment to collective culture, goals, etc.

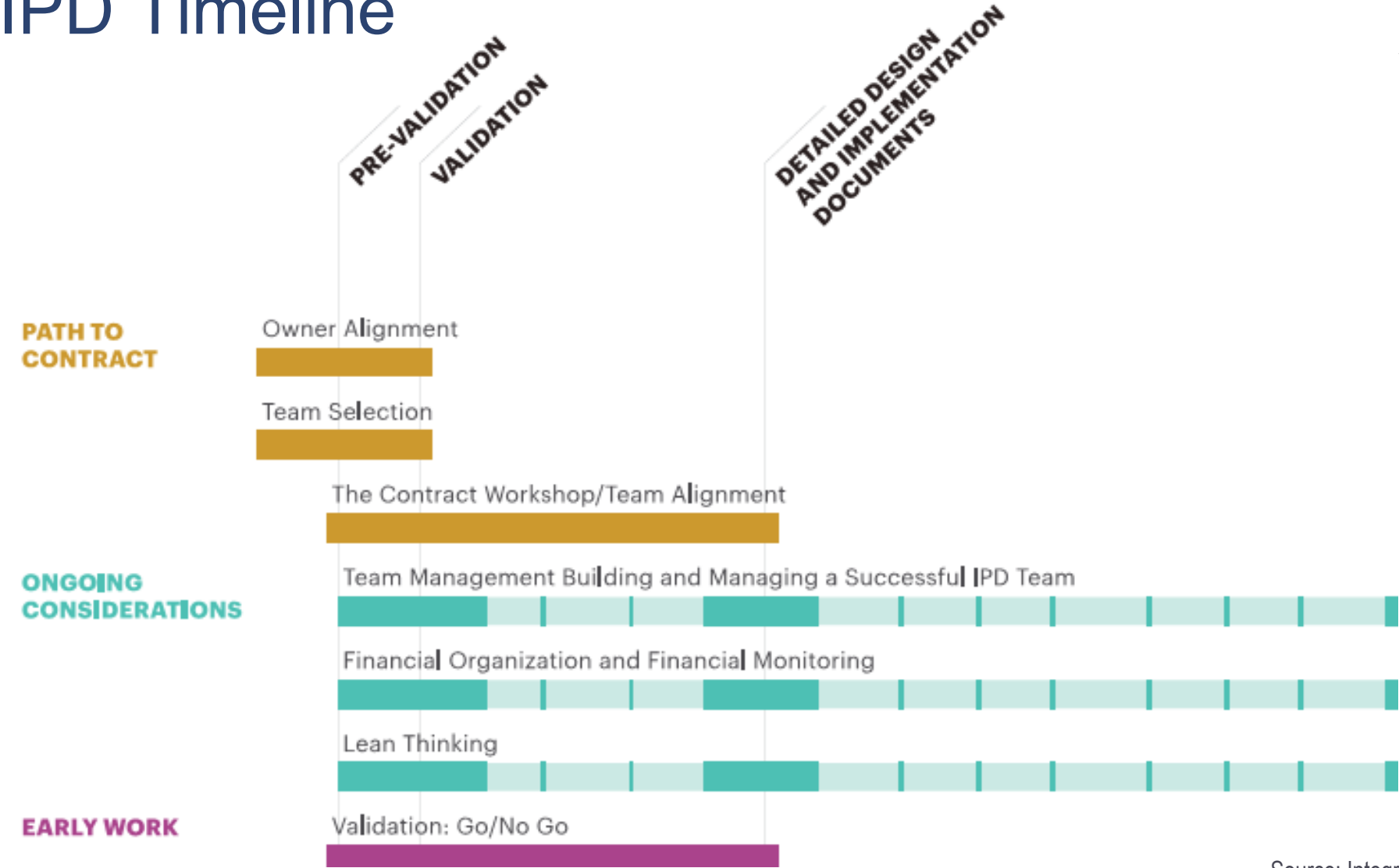
- Clearly established rules of engagement and RRAA by team
- Leadership of all parties is committed to investing in collaboration as a discipline



# Decision Making



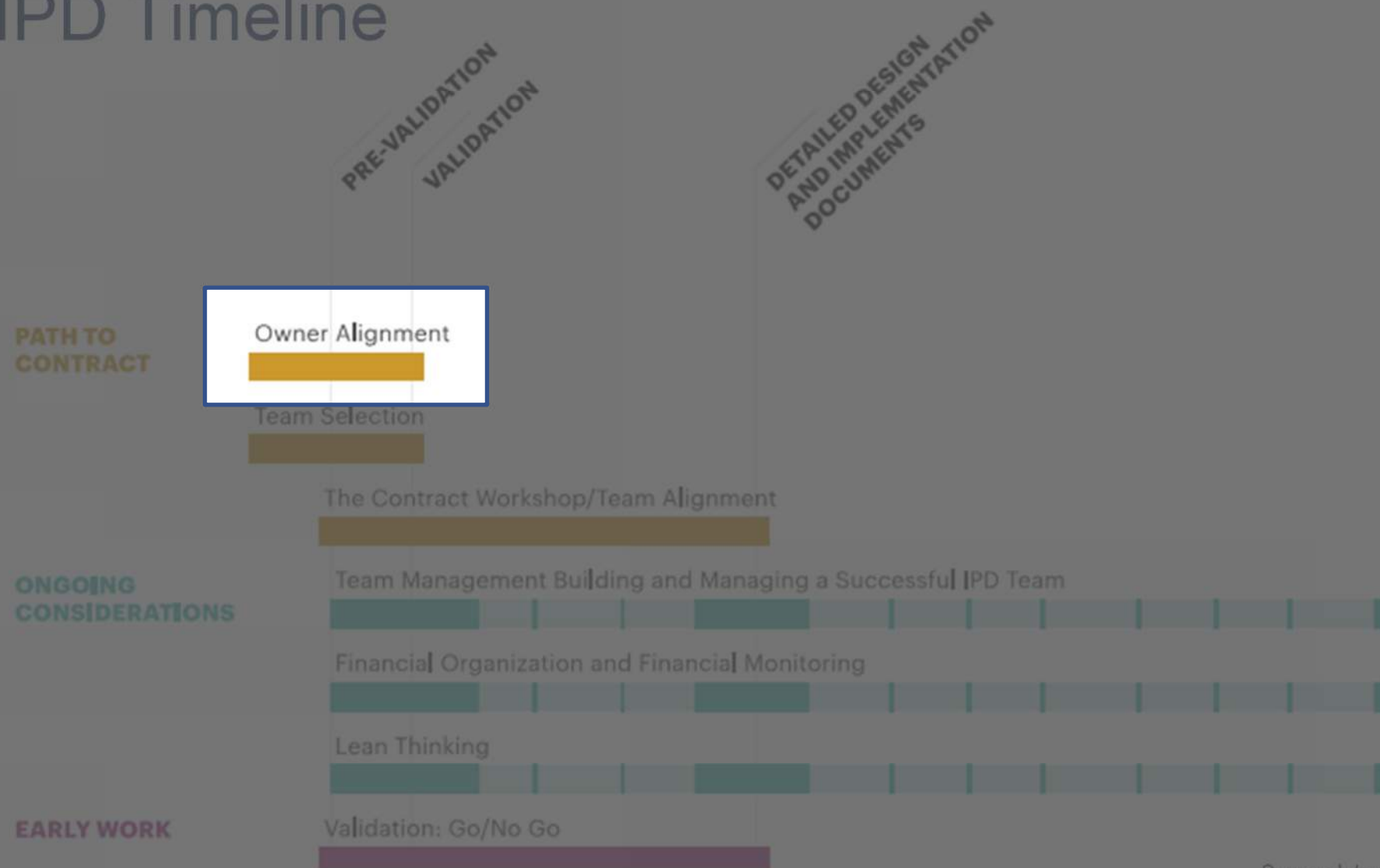
# IPD Timeline



Source: Integrated Project Delivery: An Action Guide for Leaders



# IPD Timeline



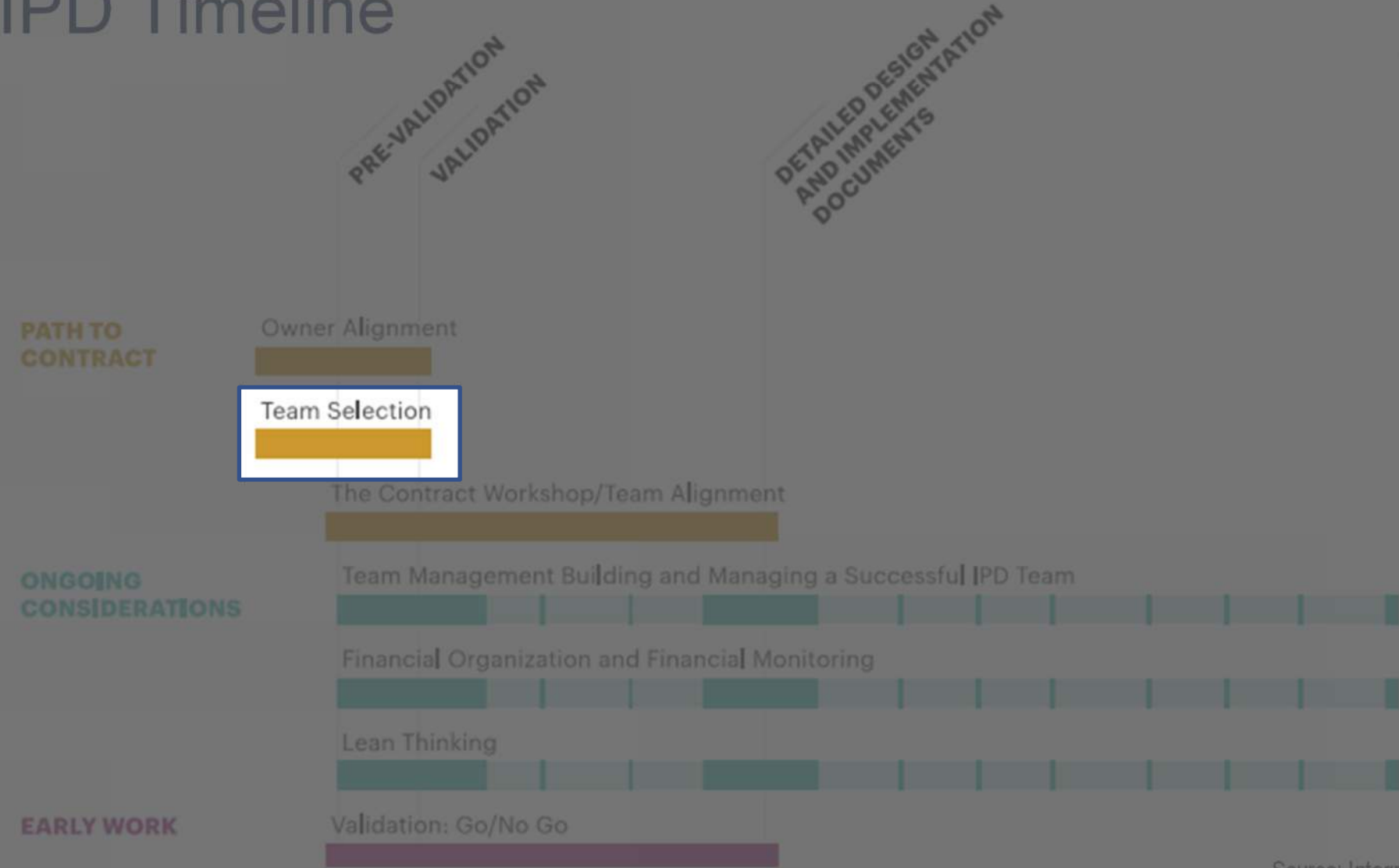
Source: Integrated Project Delivery: An Action Guide for Leaders



# The Owner

- Role Model
- Leadership
- Internal Alignment
- Model Transparency
- Upper Management Support

# IPD Timeline



Source: Integrated Project Delivery: An Action Guide for Leaders





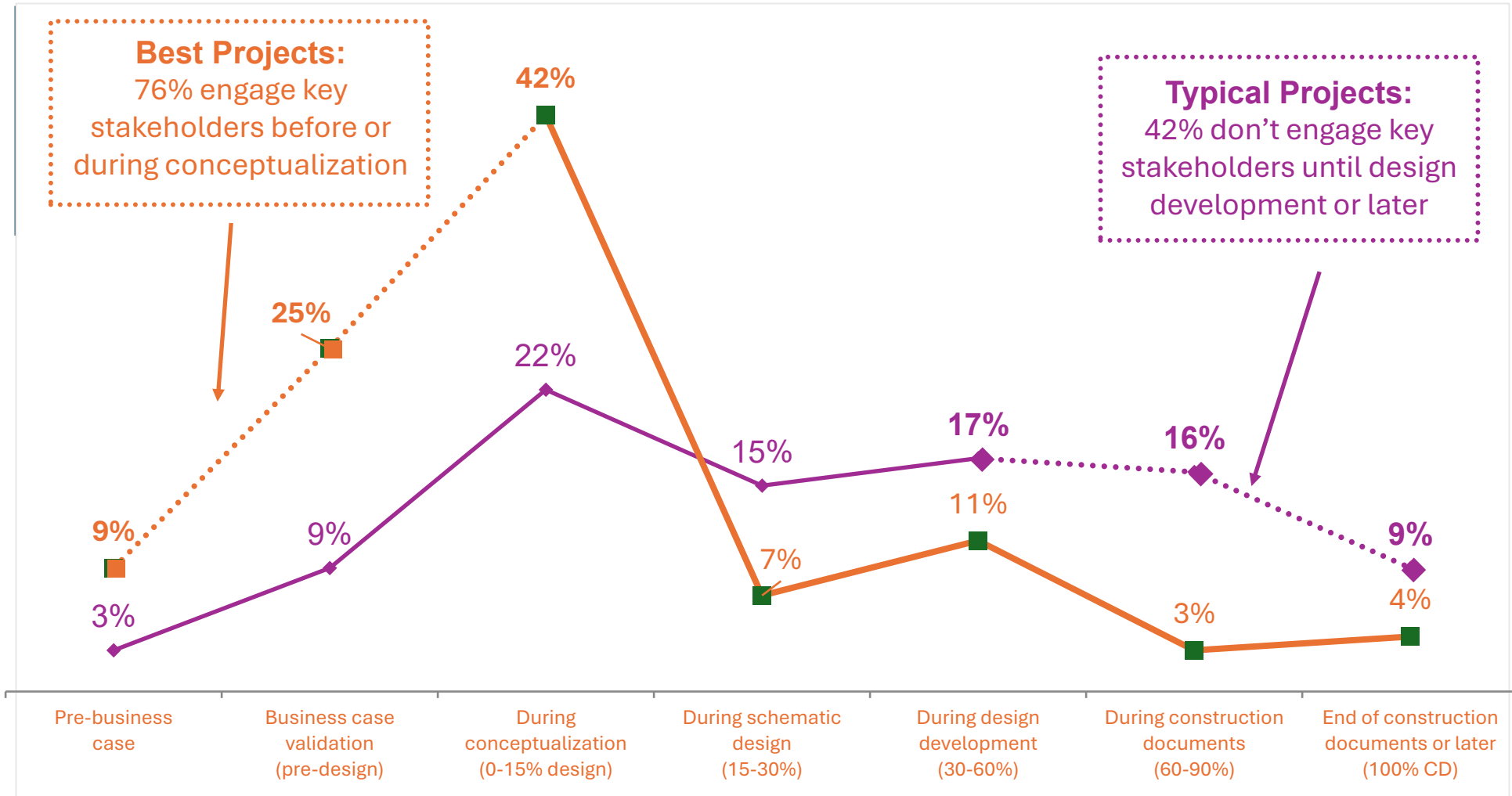
# Partner Selection

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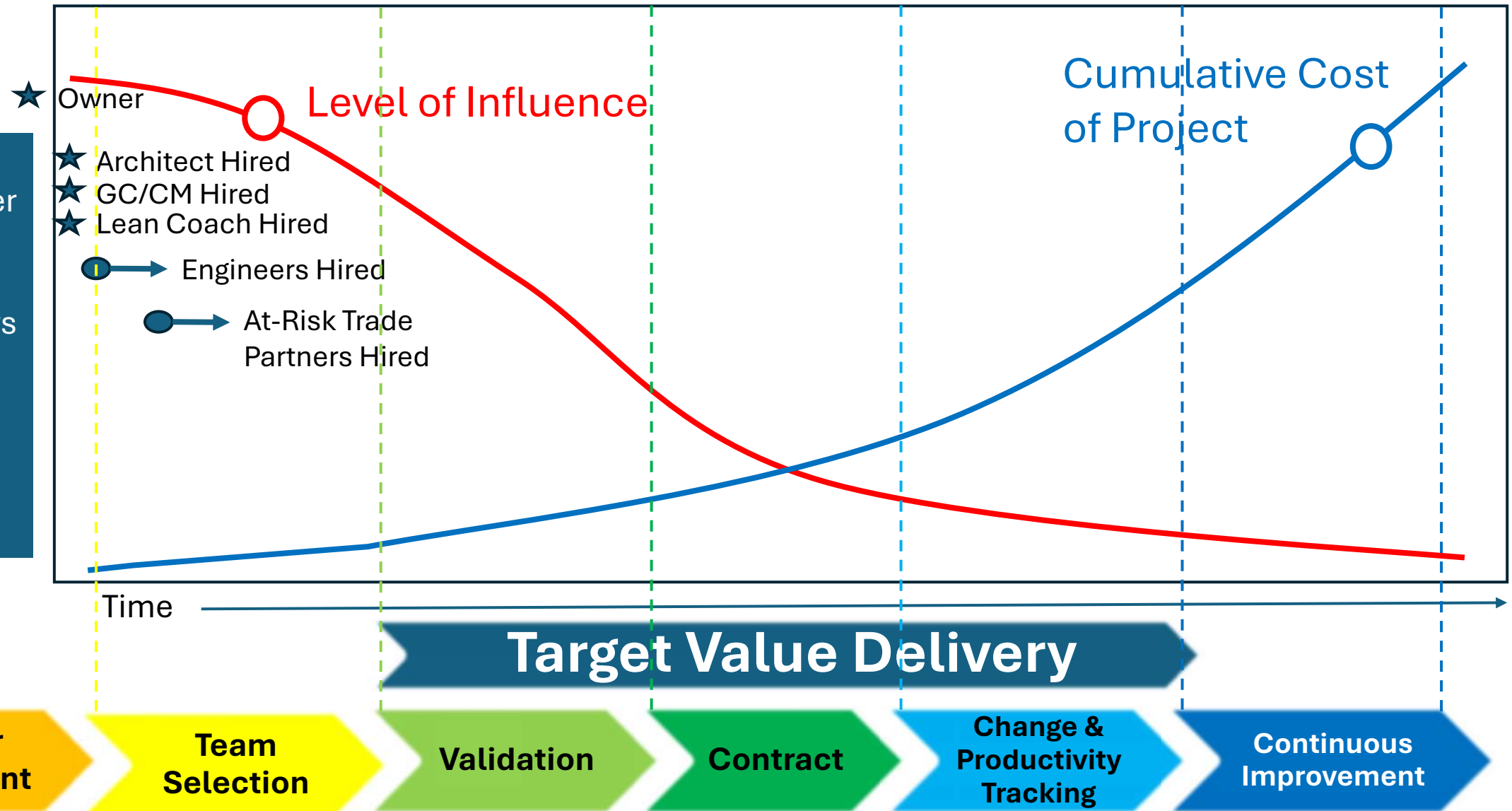
On a Lean IPD project, selecting the right partners is even more critical than in a traditional project environment.

The buy-in of team members into executing work in a Lean and integrated way, where risk and reward are shared, will be key to project success.

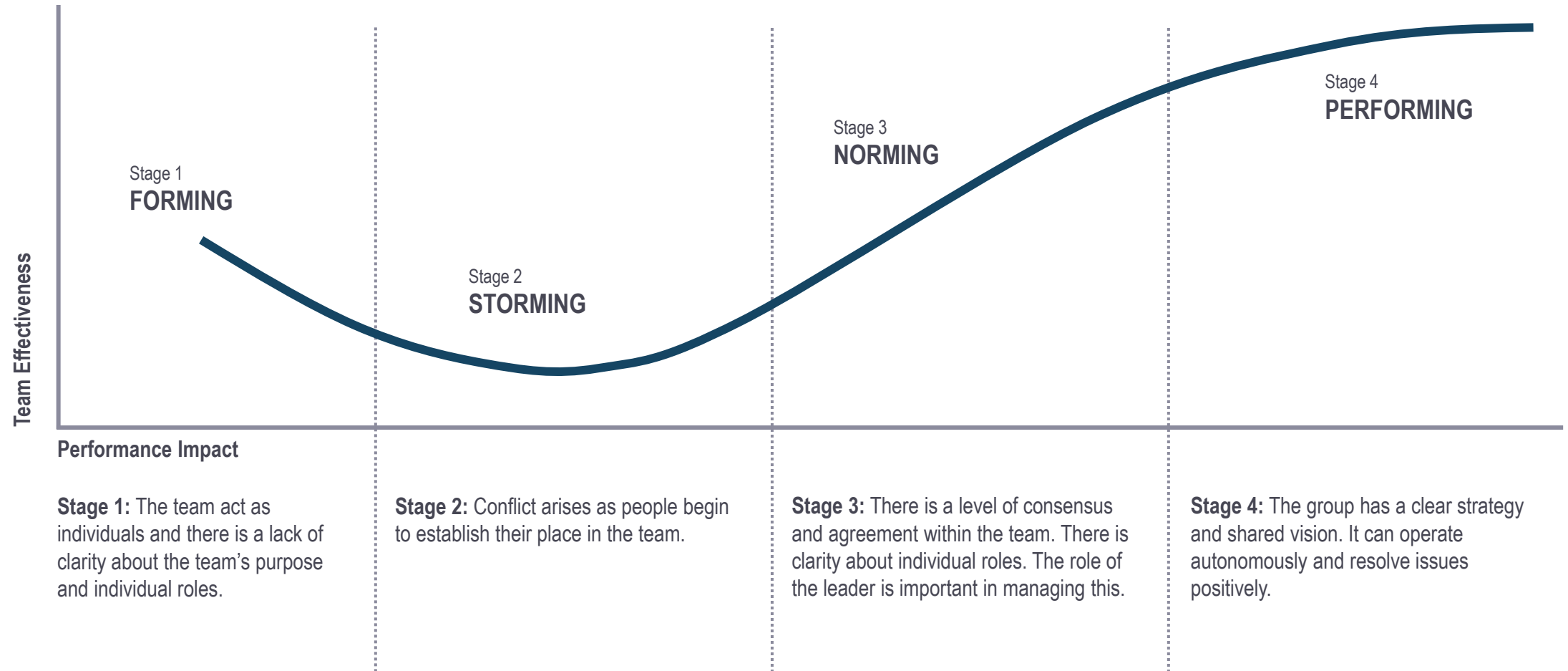
# Timing of Key Stakeholder Engagement



# Integrated Project Delivery Implementation Plan



# The Four Stages of Teaming



Adapted from Tuckman 1965

# Team Assessments (Examples)

- Communication and Work Style Assessments
  - DiSC
  - StrengthsFinders 2.0
- Team Health Assessments
  - Culture
  - Communications
  - Performance on Goals





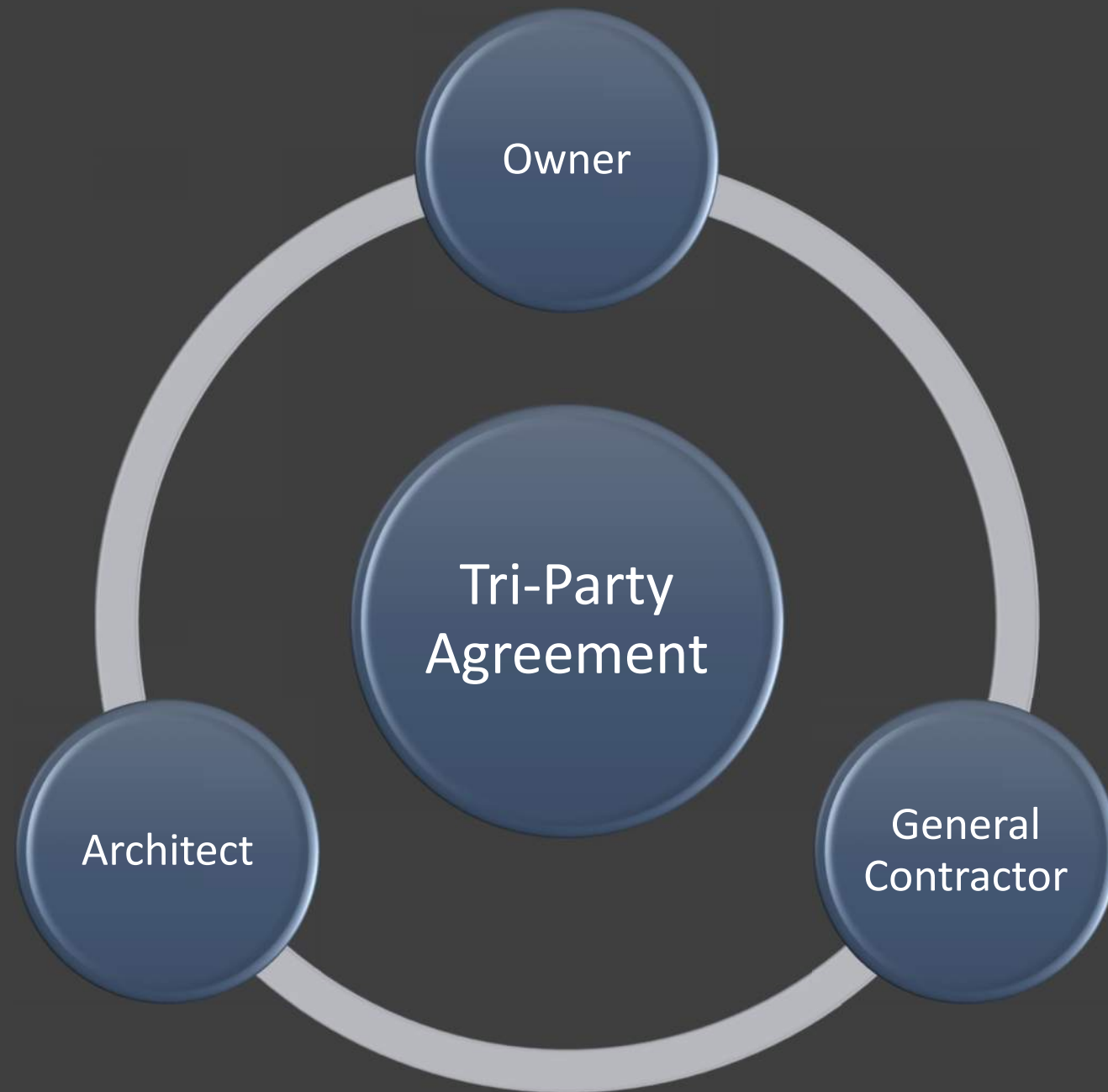
## Slide 48

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**KH0**

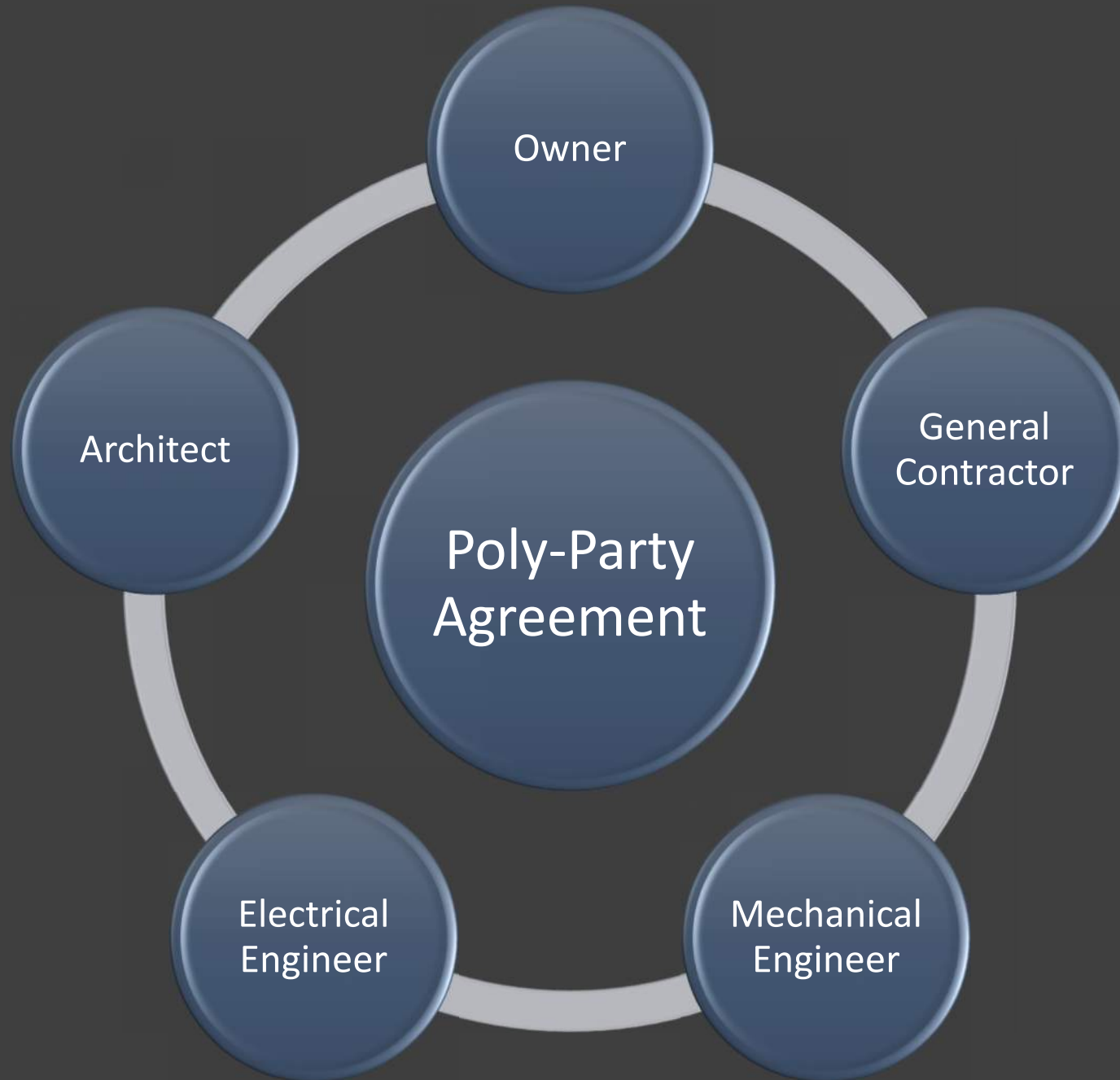
**Feel free to add on**

Kelcey Henderson, 2024-10-16T20:42:22.332

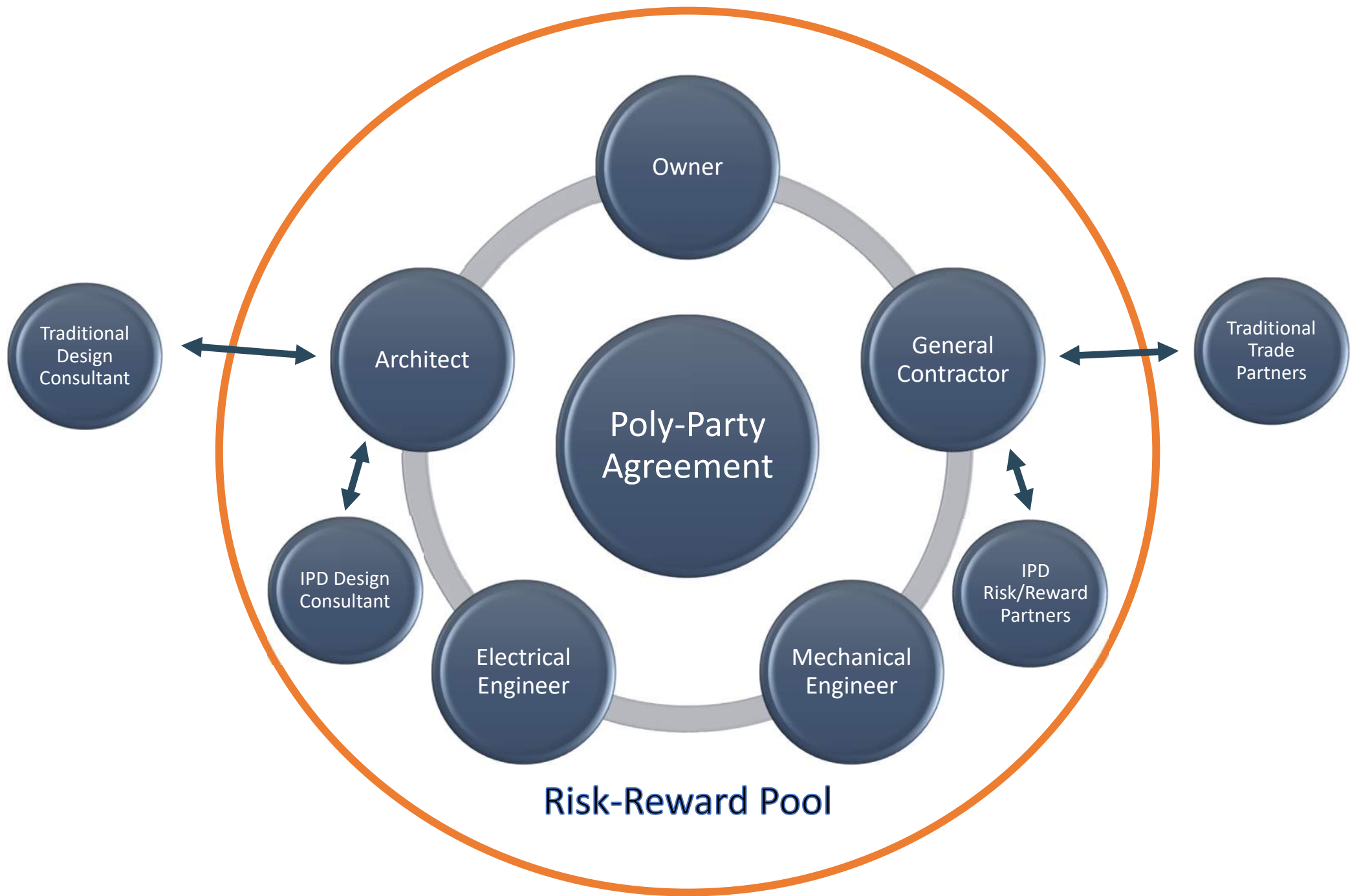


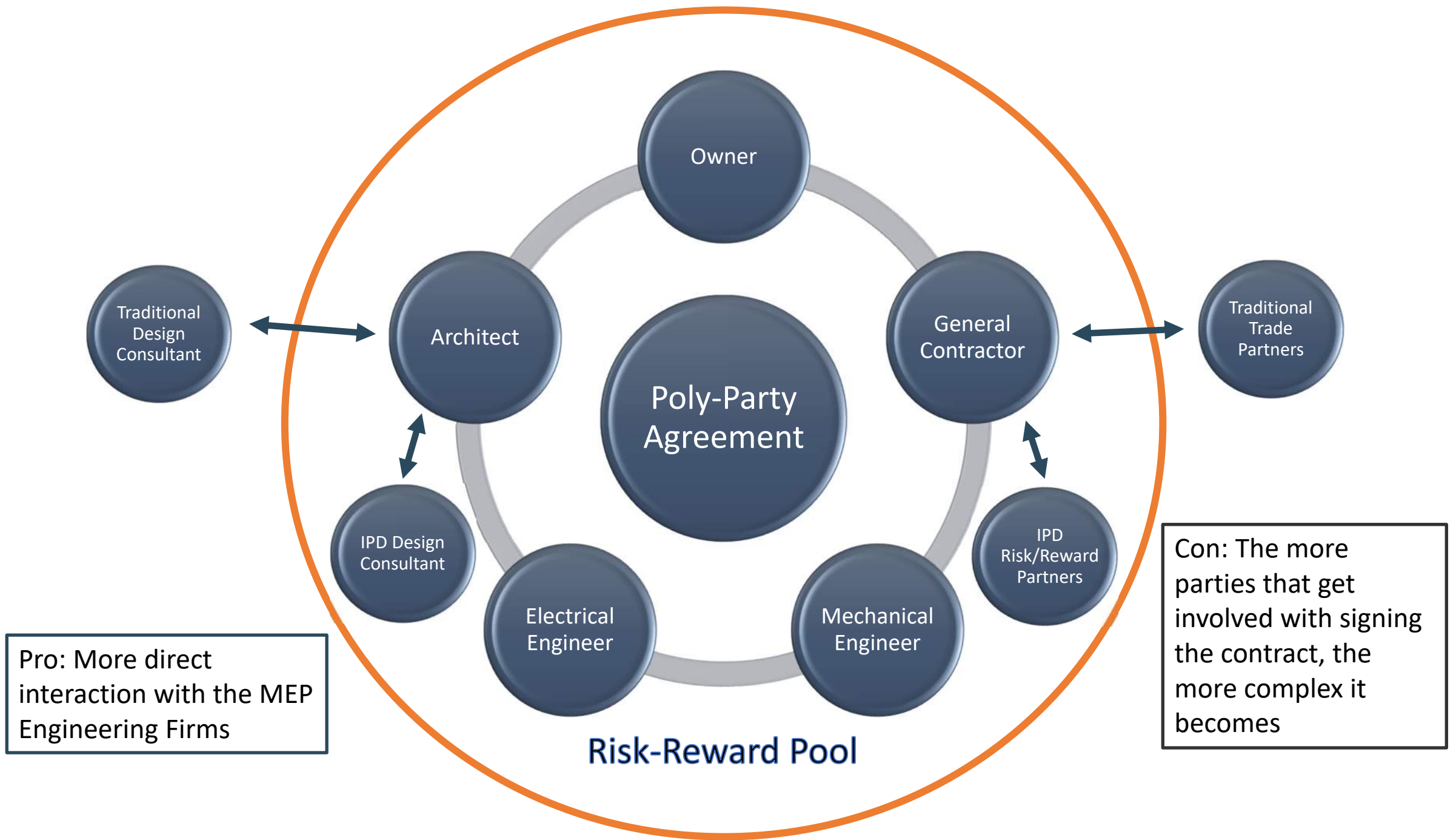




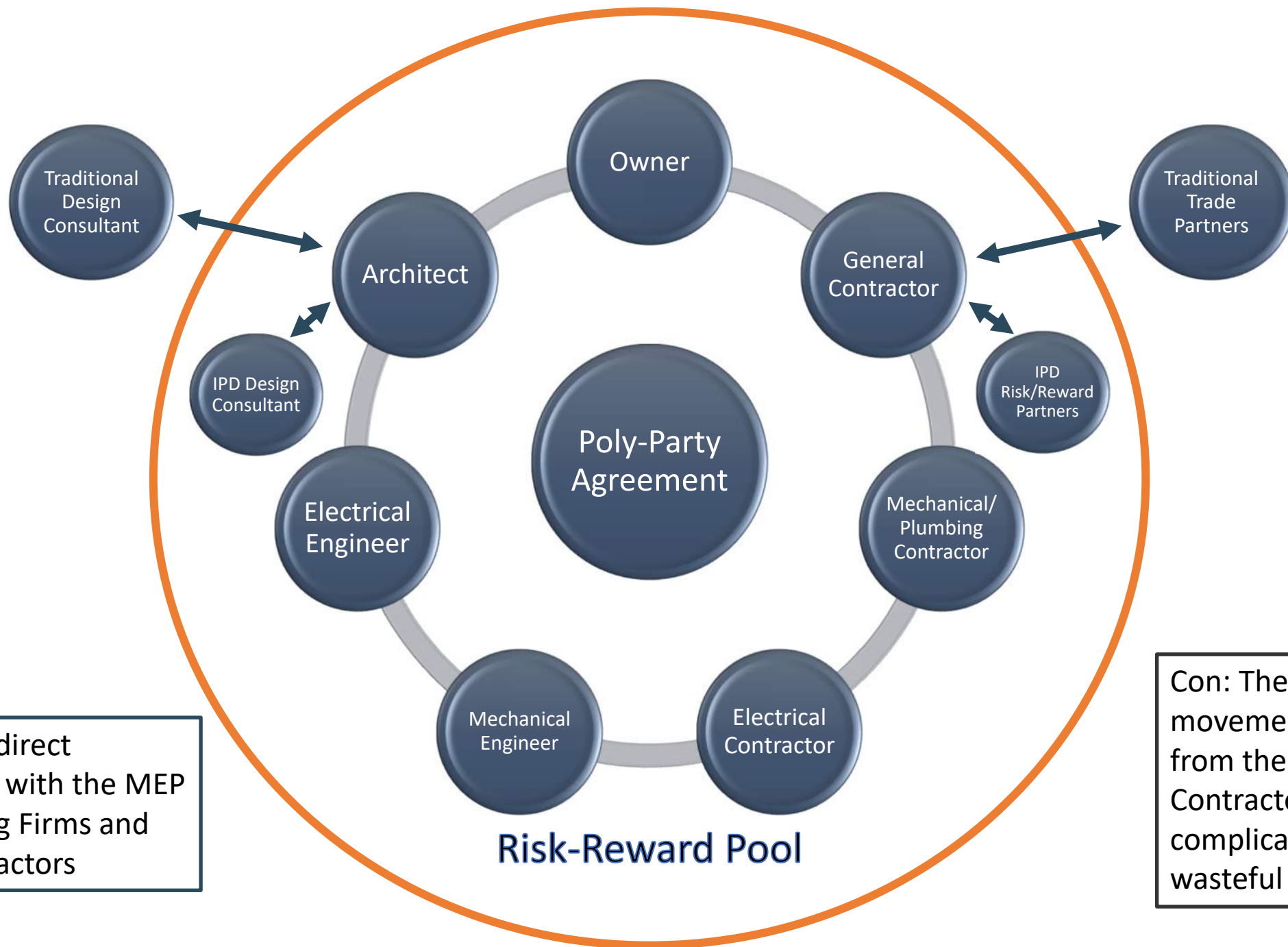


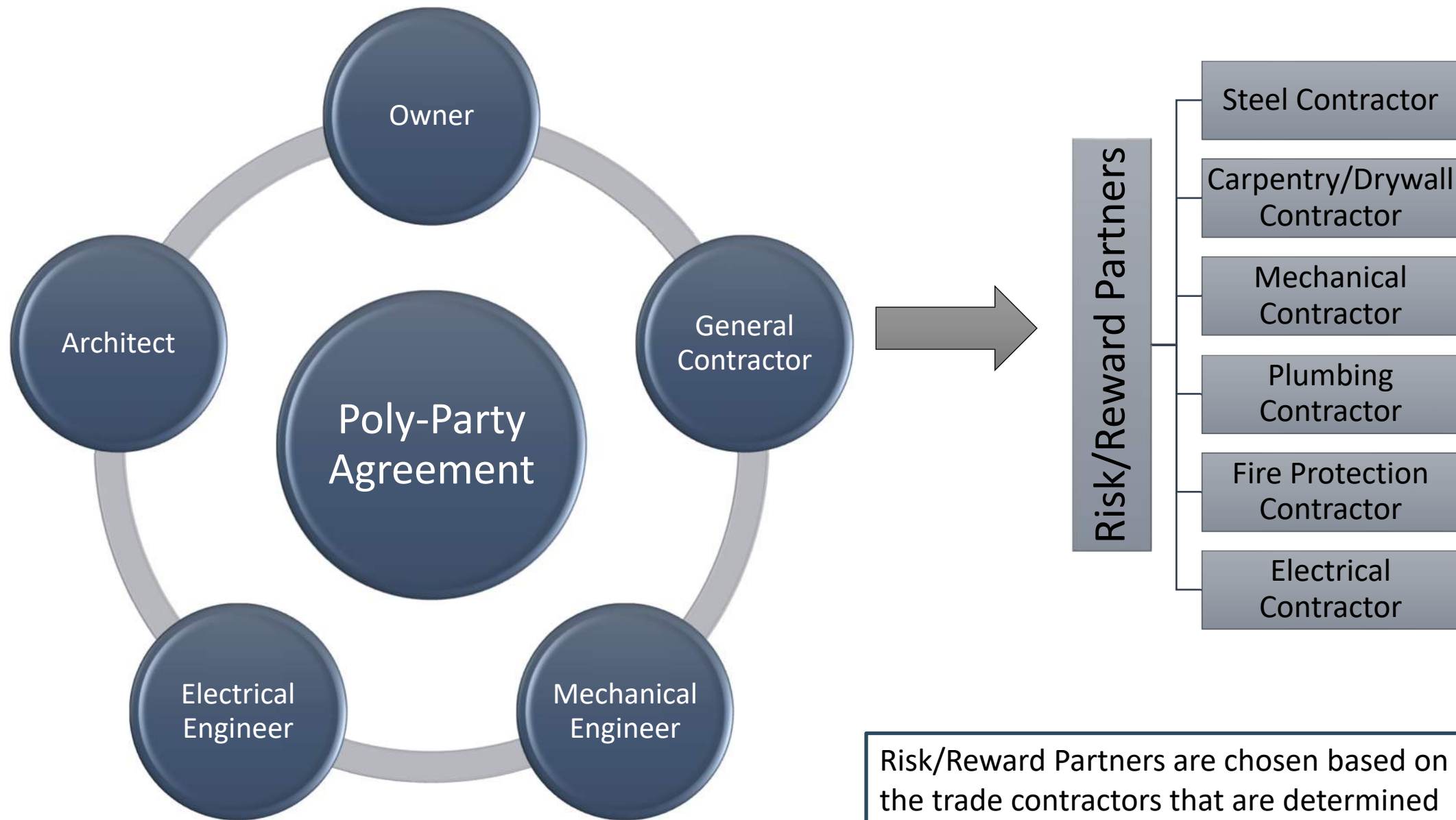








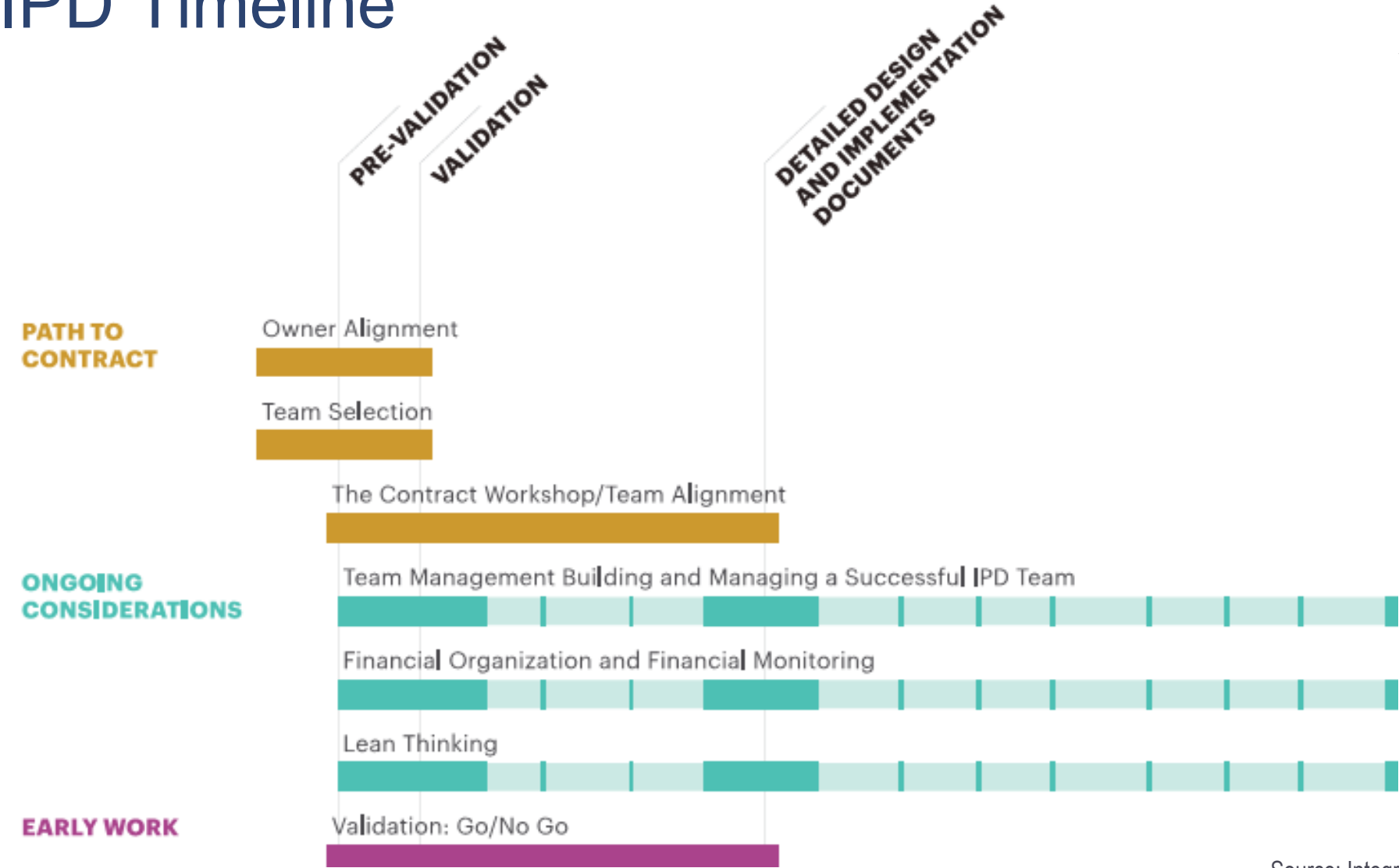




Risk/Reward Partners are chosen based on the trade contractors that are determined to bring the most risk mitigation to the team



# IPD Timeline



Source: Integrated Project Delivery: An Action Guide for Leaders



# IPD Timeline



Source: Integrated Project Delivery: An Action Guide for Leaders

# Conditions of Satisfaction (CoS)

*What conditions must be met to declare success?*

- An explicit description of all the actual requirements that must be satisfied for the initiative to be successful. CoS are collaboratively developed and committed to by all team members.
- A set of statements, each with a clear pass/fail result, that specify requirements at a defined stage of a project (often completion).
- There is no partial acceptance: either a criterion is met, or it is not.

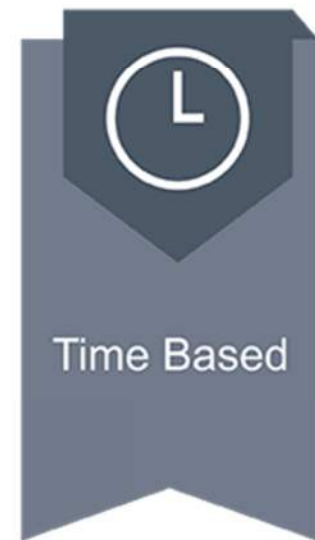
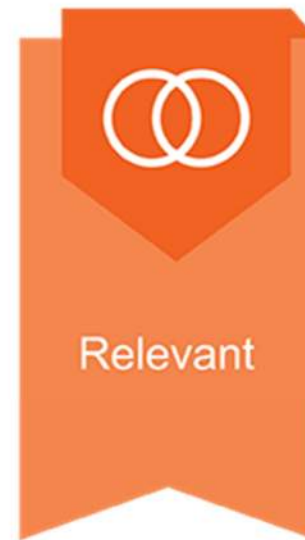
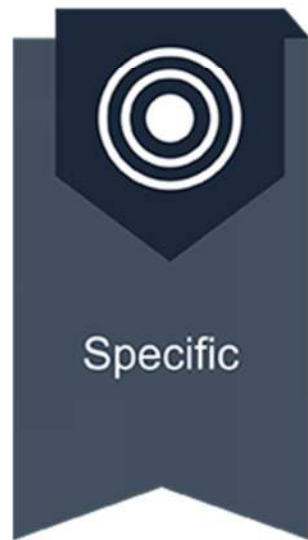
# Conditions of Satisfaction (CoS)

*What does “done” look like?*

- Top priorities – critical for project success
- What would cause you to consider the effort to be a failure if it does not happen?
- Co-developed – everyone must buy-in
- Define what “success” means for the project team
- Guide decision making throughout development and implementation
- Point of reference and measurement when reaching consensus is difficult



# SMART





## A team might establish CoS around any of the following:

- Budget, schedule, safety
- Profitability (ex: everyone is profitable)
- The number of months in which the project is delivered
- Number of RFIs
- Number of Change Orders
- Number of punch list items
- % below market cost
- % operational cost improvement
- % improvement in productivity
- Rapid improvement
- Exceptional teamwork
- Quality at acceptable levels the first time
- Total project transparency
- Strong stakeholder involvement
- Application of Lean Tools/Practices
- Community engagement
- Sustainability

Source: Lean Construction Institute, CAG Experience



# Establishing CoS: Best Practices

- **SMART Goals** – Specific, Measurable, Attainable, Relevant and Time-Based
- **Avoid** absolutes
- All CoS **must be met** for the project to be successful
- Choose CoS wisely, as **partial credit does not apply**
- **Can be adjusted** by the team

# Recap: CoS Define What “Success” Means



DECISION MAKING  
CRITERIA



COMMON  
LANGUAGE  
DEVELOPMENT



SET BEHAVIORAL  
EXPECTATIONS



DRIVE TEAM  
CULTURE



DESCRIBE POSITIVE  
OUTCOMES

# Beyond Development: Best Practices for Using CoS

- Publish and commit
- Make them visual
- Measure progress (and use as a reference point for course correction)
  - Review at project milestones
- Refer to them when reaching consensus is difficult
- Revisit during onboarding or other major changes (and revise as needed)
- Conduct lessons learned



# CoS Example

1. Safety: 50% reduction in TRIR from last project
2. Operations: Zero interruptions to production
3. Schedule: Certificate of Occupancy on May 15, 2020
4. Quality: 60% reduction of punch list items & NCRs
5. Budget: Shared savings incentive – 5% of budget cost improved
6. Documentation: RFI submittal turnaround time of 3 business days
7. Culture of Trust: 80% positive feedback from anonymous survey
8. Customer Goal: Apply at least five “Industry 4.0” principles during design phase



# CoS Example

1. Safety: 2 Safety/Behavior Observations per week for all site supervision foreman and above (superintendents, PMs, etc.)
2. Design/Engineering: Reduce design phase from 12 weeks to 10 weeks
3. Schedule: Plant steam available by November 22, 2020
4. Quality: <1% weld rejection rate
5. Budget: <10% change orders
6. Team Building: At least 1 team event per quarter
7. Continuous Learning: Lessons learned session after each major milestone is achieved
8. Customer Goal: Increase production capacity by 30%





# CoS Example

## Quantitative

- Project has Zero Injuries
- Project will be delivered at mutually agreed Target Cost (\$15MM)
- All team partners earn a fair profit, all team members benefit from project success
- AC5 at full production by AMJ'22 to meet LRD Roll-out Schedule.
- Maximize Project Quality – Minimize Rework (measure TBD)
- No unplanned impacts to operations. All planned impacts follow a plan.


## Qualitative

- Culture of Collaboration: Conflict resolution is forward focused.
- Team operates with a high degree of openness and trust.
- Team fosters a learning culture to build Lean IPD Delivery skills in P&G and Partner organizations.
- Team respects P standards (platform, IWS, etc.), yet challenges constraints when doing so drives value.
- Project has clear acceptance criteria (documentation, handover, ECR, etc.)

## Measurement Methods

- Quantitative: Current results aligned and reported by PMT
- Qualitative: Regular Culture Survey for Qualitative Measures by IFOA members

# CoS Example

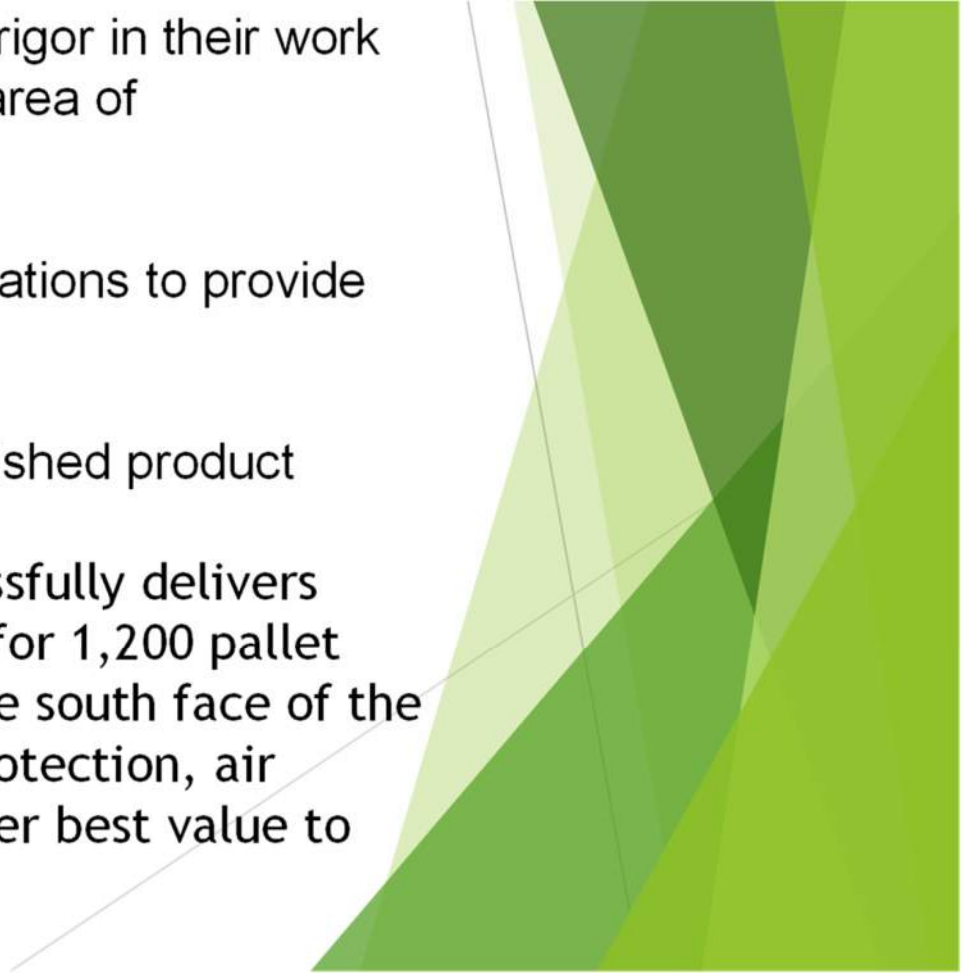


**Cost:** Each team member drives the required amount of rigor in their work process to meet the agreed upon project budget in their area of responsibility

**Schedule:** Each team member meets or exceeds expectations to provide their deliverables for each project schedule item

**Shared Success:** Every member can be proud of the finished product

**Business Need:** The Quicksilver team safely and successfully delivers ~450,000 square feet of finished product storage space for 1,200 pallet inventory locations with 60 dock door positions along the south face of the plant and all associated scope including required fire protection, air exchange, electrical and dock equipment scope to deliver best value to the business



# CoS Example

## TEAM GOAL

A world class partnership built on trust, integrity and open communication, using industry leading design, construction and communication tools to drive innovation and reduce waste in support of a safe and flawless launch of GM's next generation truck.

## TEAM CONDITIONS OF SATISFACTION

1. Every person felt personal responsibility for a safe work environment
2. Met all Production Launch Dates with zero unplanned production interruptions
3. Experienced minimal team conflicts requiring Steering Committee intervention
4. Effectively utilized team resources through clear direction and empowerment
5. Mitigated cost and schedule impacts of all changes
6. All team members achieve their project financial expectations – fair profit and budget compliance
7. Develop a partnership-based project delivery Business Model with transformed processes
8. Implement a minimum of three Lean tools
9. Institutionalize defined M5 Team Culture and Norms validated through regular surveys
10. Limit re-work to less than 0.2% of construction value



# 1<sup>st</sup> Healthcare IFOA in Chicago



- Schedule
- EMP w/Shared Savings
- Everyone Finishes with a Profit
- Owner Operational Efficiency
- All Stakeholders Feel Satisfied

# Hospital Campus Master Plan (IFOA & GMP)

- Improvement of RFI and Submittal Metrics over “standard projects”
- EMP w/Shared Savings
- Everyone Finishes with a Profit
- Timeframe for overall project/master plans



# Office Building in Illinois (GMP)

A 3D architectural rendering of a modern office building complex. The building features a mix of brick and large glass windows. One section is labeled 'HEALTH CLINIC'. There is a parking lot in the foreground with several spaces marked with yellow lines and wheelchair symbols. A person is standing near the entrance of the main building. The background shows some greenery and trees.

- Design Decisions must first be for the Benefit of Participants
- Minimize Disruption to Culture
- Need Campus Environment – coordinate with Training Center already built
- Building Employees can be proud of



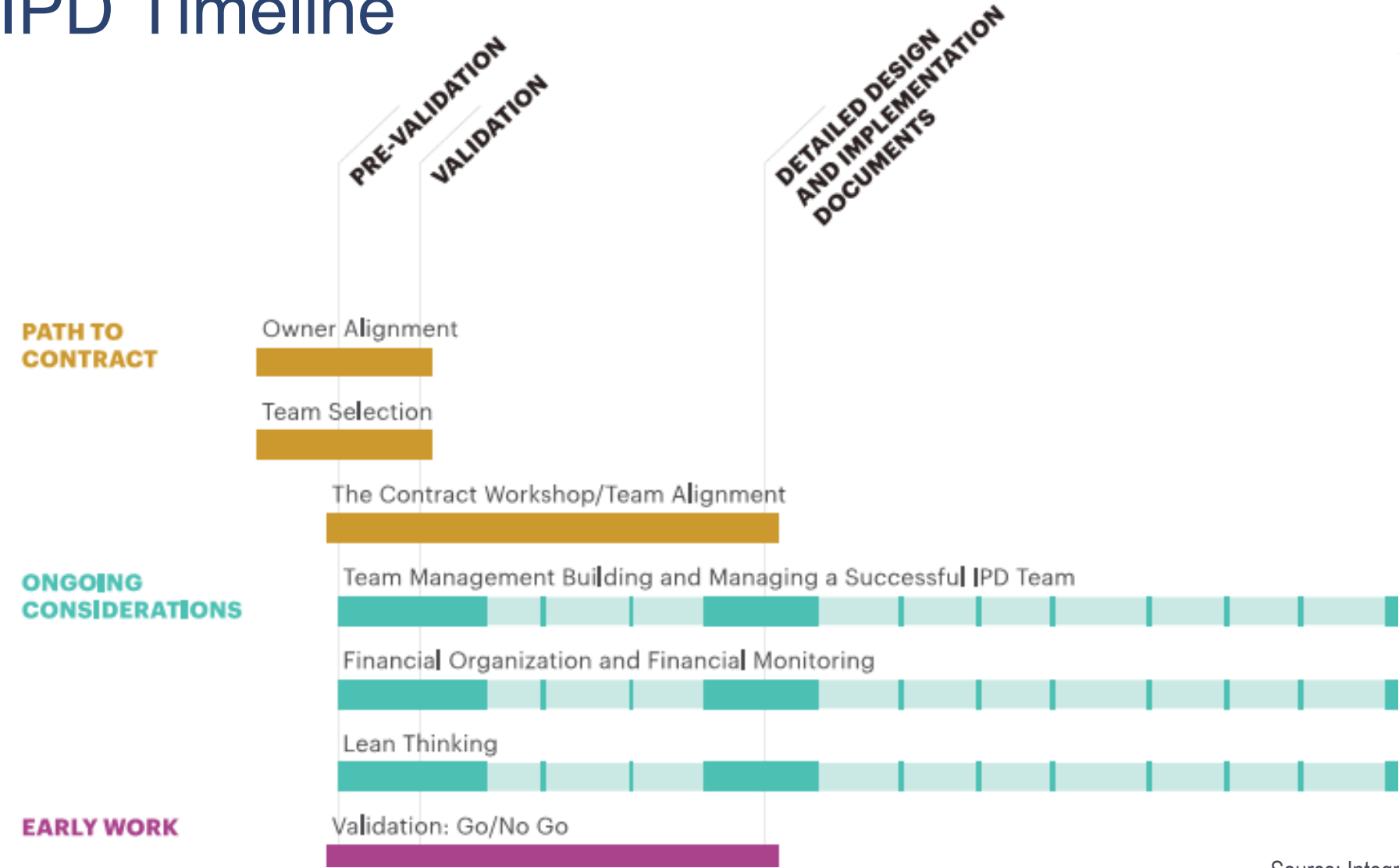
# R&D Building in Wisconsin (IPD Lite)

- Flexibility & Adaptability
- Collaboration & Innovation
- R&D Hub
- Zoning
- Volume
- Illustrations & Visual Connectivity

# Break



# IPD Timeline



Source: Integrated Project Delivery: An Action Guide for Leaders





# IPD Timeline



Source: Integrated Project Delivery: An Action Guide for Leaders



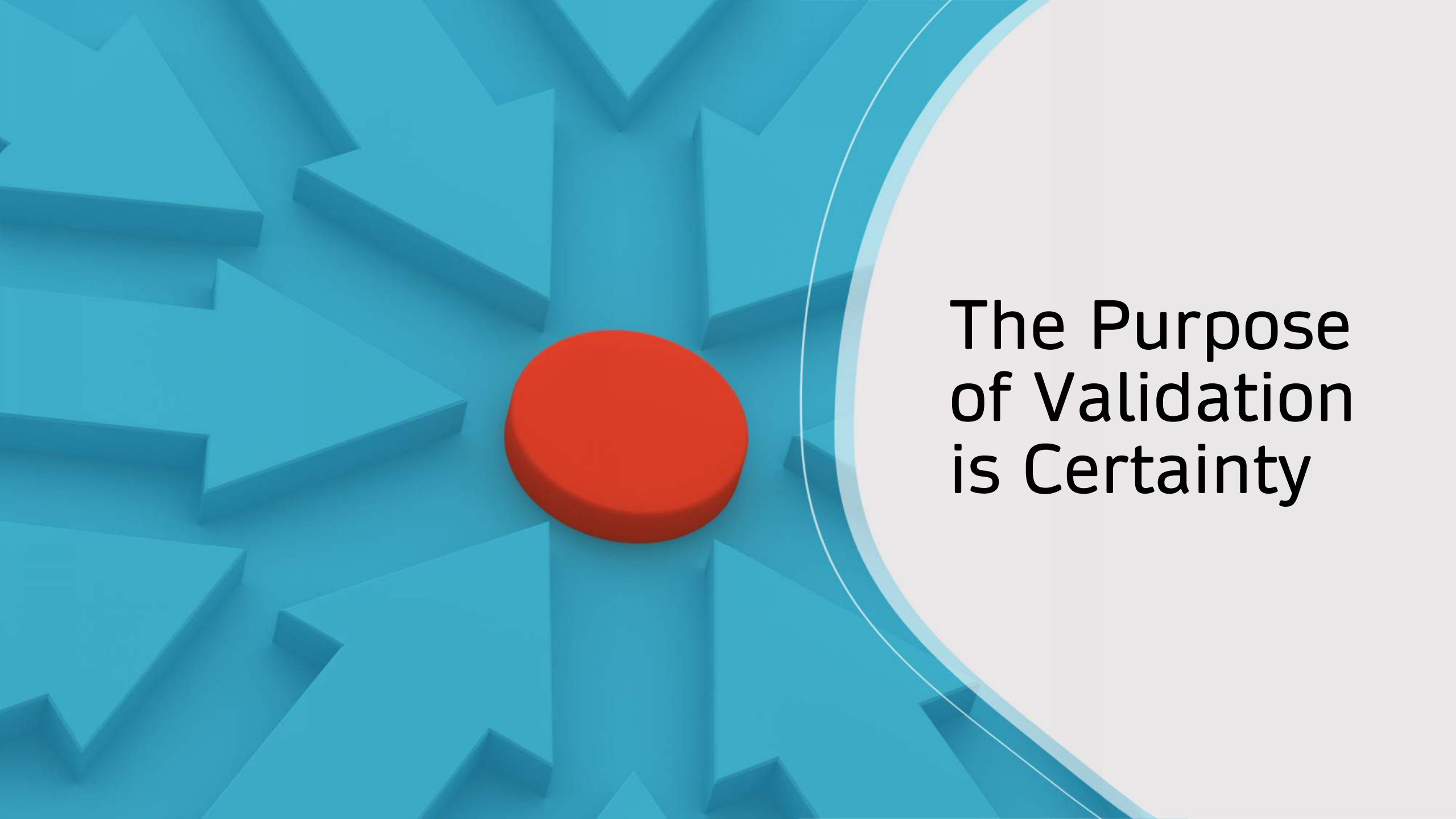
What is Validation and  
Why is it Important?



# Traditional is broken

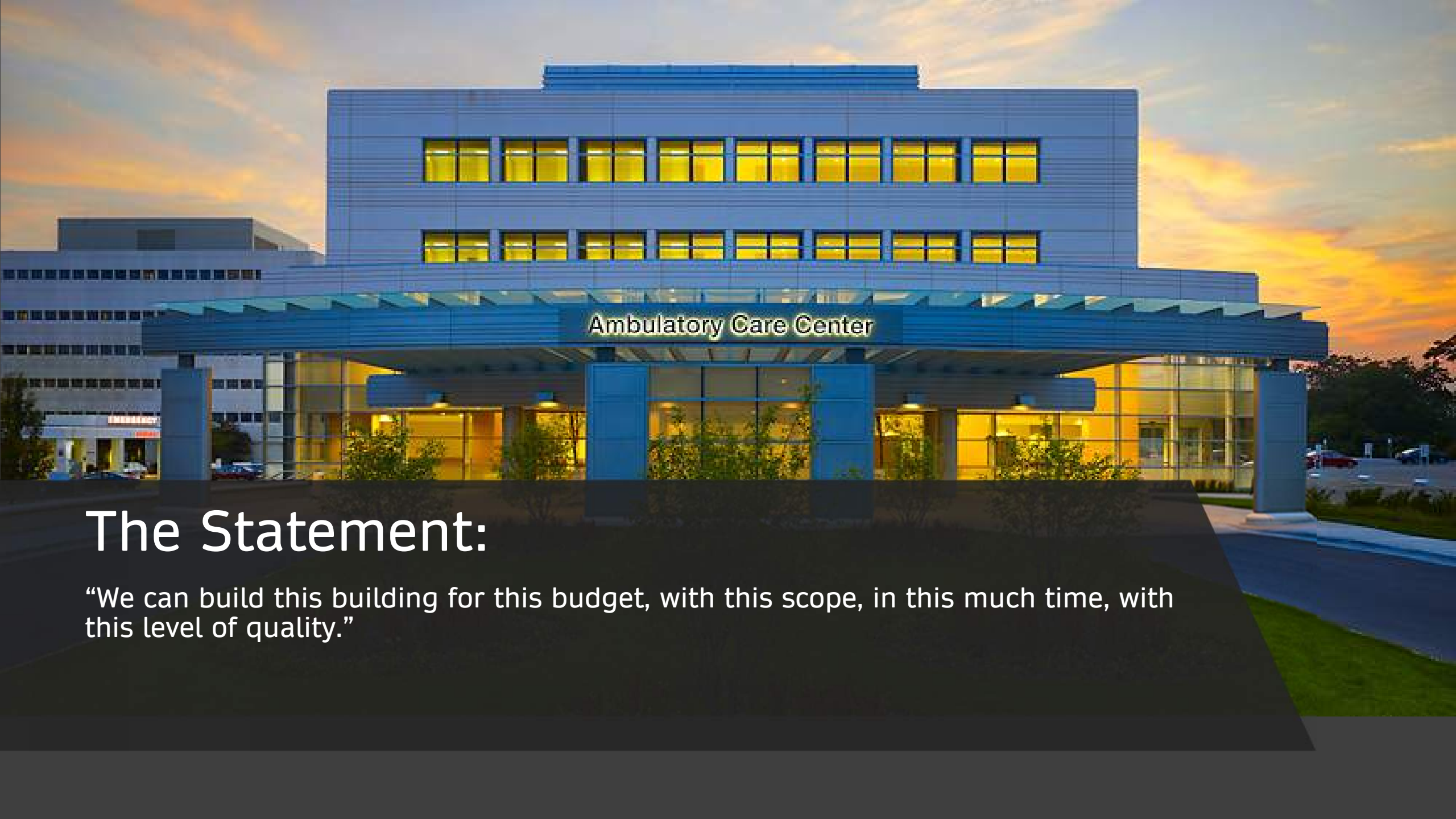
Value Engineering  
becomes Scope  
Reduction Tool

**VALUE**  
Engineering

The background features a large, 3D blue gear with a red circular center. On the right side, there is a white semi-circular area. The text is positioned within this white area.

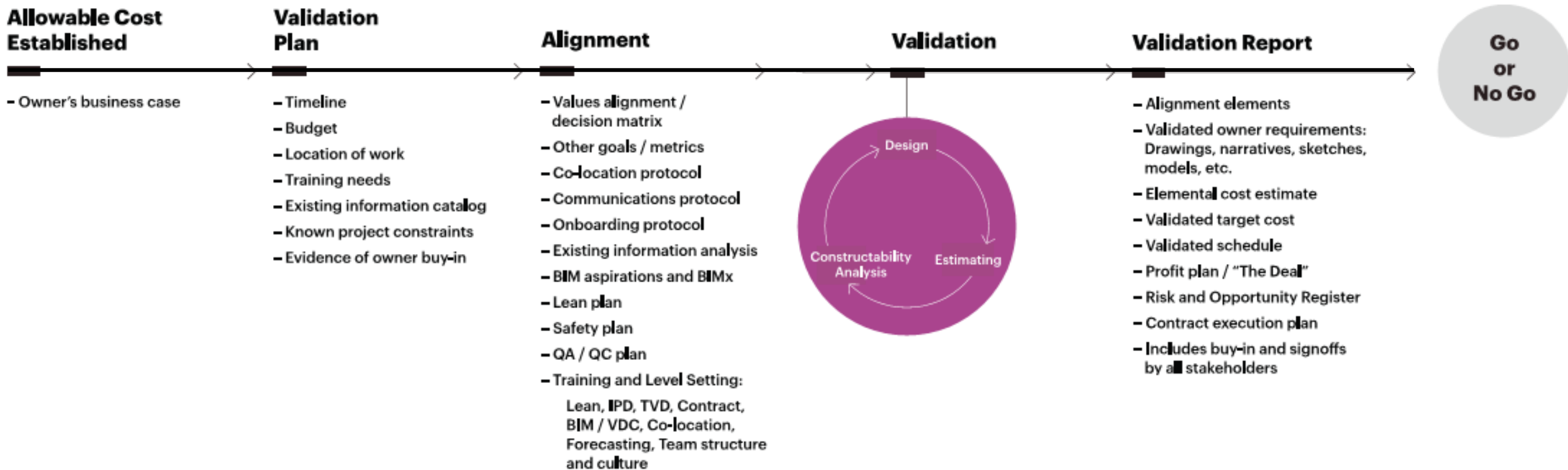
The Purpose  
of Validation  
is Certainty





# The Statement:

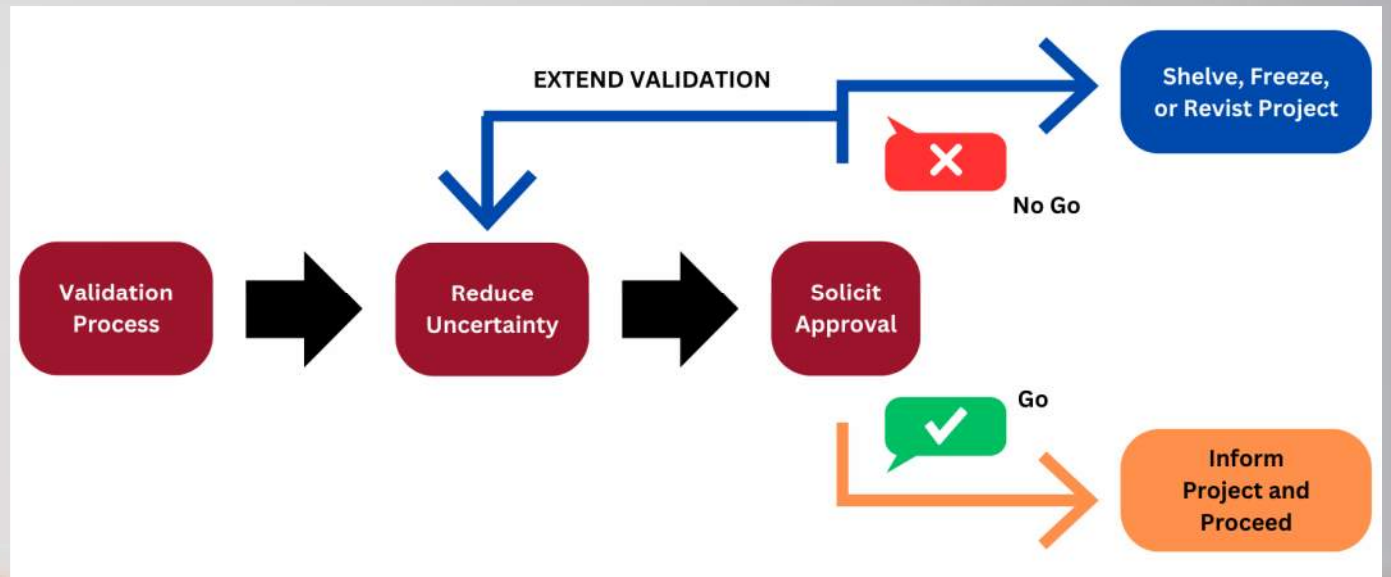
“We can build this building for this budget, with this scope, in this much time, with this level of quality.”





Allowable Cost Established\*

\*subject to change



KH0

John working on new one  
Kelcey Henderson, 2024-10-16T20:48:19.858





# Office Building in Wisconsin (IPD)

- Developer Provides Budget for Renovation at \$30M
- Owner Hires Lean Coach
- Conditions of Satisfaction Established
- Owner Selects IPD contract
- Architect and General Contractor Hired For Validation Process
- THE ISSUE: Validation Process completes with a Target Value of \$60M
- THE SOLUTION: Owner Can Now Make a Good Business Decision For Next Step
- RESULTS: Validation: 3 Months at 1% of Budget Cost vs. Traditional: 12 Months at 15% of Budget

## General

Sutter Health integrated strategy for capital construction projects, utilizing their lean project delivery approach has yielded in significant benefits with contract partners for interior products/systems. All Interior materials and finish components meet and represent the Value-Based Ambulatory Clinic Design Standards including finish types and classifications.

## Design Elements, Features and Systems

All design elements, features and systems shall comply with applicable codes. They shall be cost effective up front and promote lower cost to operate and maintain. Elements should be durable and appropriate for project scope and types; they should withstand wear and repetitive use.

### Entry/Lobby:

The entrance and lobby are the first impression and shall look professional, clean, warm and friendly. Natural daylight will flood through the glass storefront and vestibule area providing a connection and views to the nature.

### Registration:

Sophisticated and modern elements will greet the visitor at Registration. Interior architecture and finishes will promote clear wayfinding to this first point of contact. Interior architecture will include wood look paneling and ceiling soffits as well as decorative pendant lights giving an impression of a hospitality environment.

### Waiting Areas:

Comfortable seating areas will be dispersed and provided throughout the clinical zones. A variety of seating will be provided for a variety of people types and appropriate for the context/neighborhood where this building is located and for the community it is serving. Seating fabric will be pleasing in appearance and easily maintained. Furniture will have vibrant color tones with fresh patterns that are aesthetically pleasing and timeless.

### Coffee Area:

Edible provisions will bring natural aromas to the Entry/lobby area. Slight aromas will provide a positive distraction and ease anxiety for patients. Since patients and family spend a lot of time in waiting areas, this provides a convenient location to wait in a neighborhood café type setting. Café tables and booths combined with a ceiling architectural feature will provide a visual interest for patients and family to stay which are amenities that make patients feel calmer.



Sutter Roseville Medical Center MOB 8 benchmark images





# Risk/Reward Essentials



Labor Rates



Material Rates



Overhead  
Percentage



Profit Percentage

# Incentive Pool Calculations

FINAL TARGET COST		
Architect	\$	170,000
Mechanical Engineer	\$	95,000
Electrical Engineer	\$	60,000
General Contractor (w/Trade Partners)	\$	9,750,000
IFOA Contingency	\$	400,000
	\$	10,475,000

INCENTIVE CALCULATIONS			
Shared Incentive \$371,000	R/R Members	Owner	
Final cost < Incentive			(R/R Members/Owner)
\$1 to \$100,000	\$ 35,000	\$ 65,000	(35% / 65%)
\$100,001 to \$200,000	\$ 50,000	\$ 50,000	(50% / 50%)
\$200,001 to \$500,000	\$ 111,150	\$ 59,850	(65% / 35%)
	\$ 196,150	\$ 174,850	Shared Incentive \$371,000
Contingency		\$ 400,000	
Total Incentive	\$ 196,150	\$ 574,850	

RISK/REWARD DISTRIBUTION				
R/R Members	Risk/Reward Amount	Risk/ Reward %	Added Profit Pool	Total R/R Profit
Architect	\$ 15,000	5.22%	\$ 10,234	\$ 25,234
Mechanical Engineer	\$ 9,500	3.30%	\$ 6,481	\$ 15,981
Electrical Engineer	\$ 6,000	2.09%	\$ 4,094	\$ 10,094
General Contractor	\$ 105,000	36.52%	\$ 71,637	\$ 176,637
Steel Trade Partner	\$ 30,000	10.43%	\$ 20,468	\$ 50,468
Carpentry Trade Partner	\$ 55,000	19.13%	\$ 37,524	\$ 92,524
Fire Protection Trade Partner	\$ 5,000	1.74%	\$ 3,411	\$ 8,411
Plumbing Trade Partner	\$ 12,500	4.35%	\$ 8,528	\$ 21,028
Mechanical Trade Partner	\$ 27,500	9.57%	\$ 18,762	\$ 46,262
Electrical Trade Partner	\$ 22,000	7.65%	\$ 15,010	\$ 37,010
	\$ 287,500	100.00%	\$ 196,150	\$ 483,650

FINAL TARGET COST vs. FINAL ACTUAL COST ANALYSIS		
ICL	\$ 287,500	
Final Target Cost	\$ 10,187,500	(all costs + contingency) (A value below Final Target Cost)
Incentive Threshold	\$ 9,787,500	
Final Cost	\$ 9,416,500	(actual costs)
Variance	\$ 371,000	(shared incentive)

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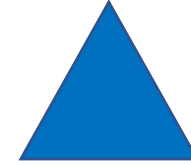






(What did we find was valuable?)

- Contract comparison
- Quality accurate info
- Good graphic examples
- Learned something new
  - disbursement of profit pool
- Polls
- Better understanding of the IPD contract



(What would we adjust for next time?)

- Poll technical difficulty
- Took too long to get started
- Maybe do icebreaker at tables for efficiency
- Example projects not as useful
- How to sell the benefits of IPD to owners
- More about IPD light differences?



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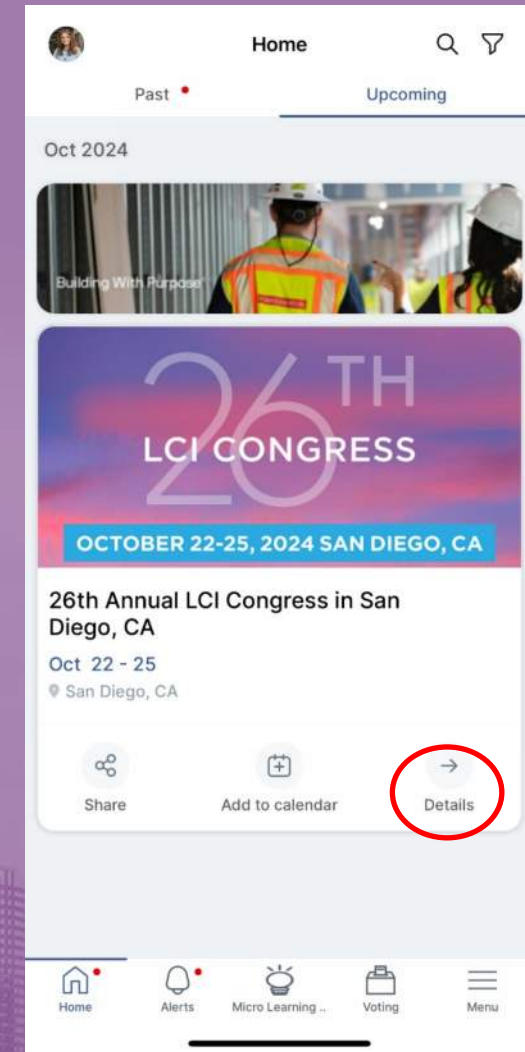
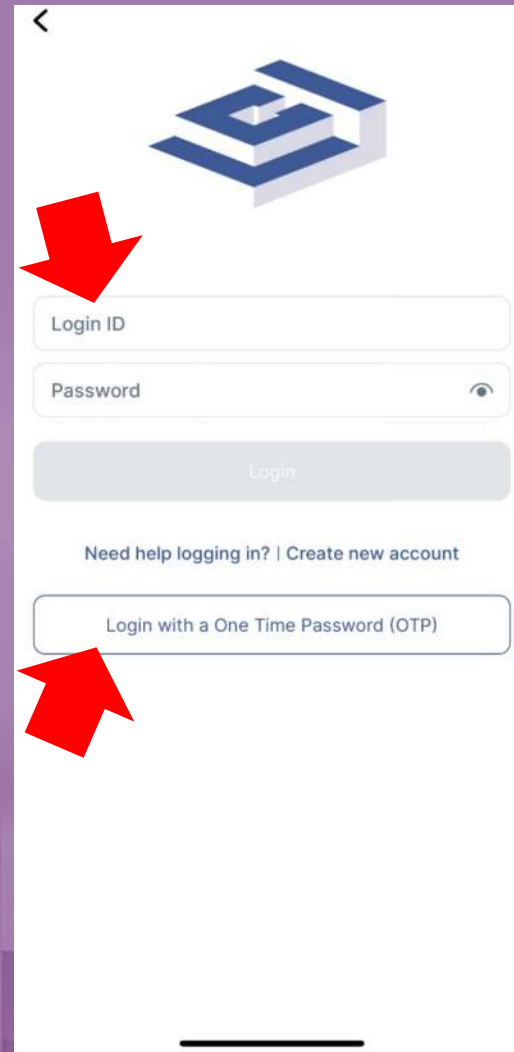
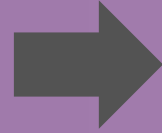
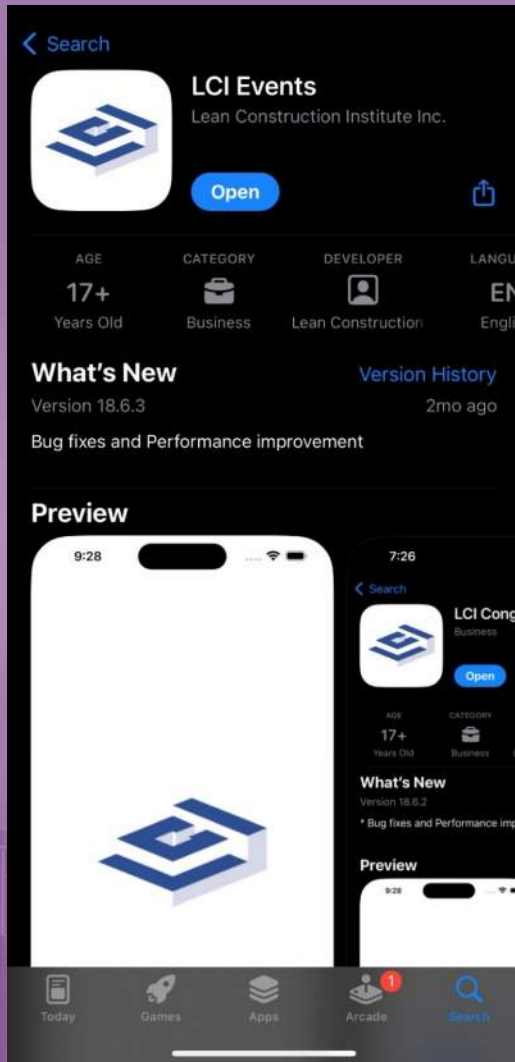


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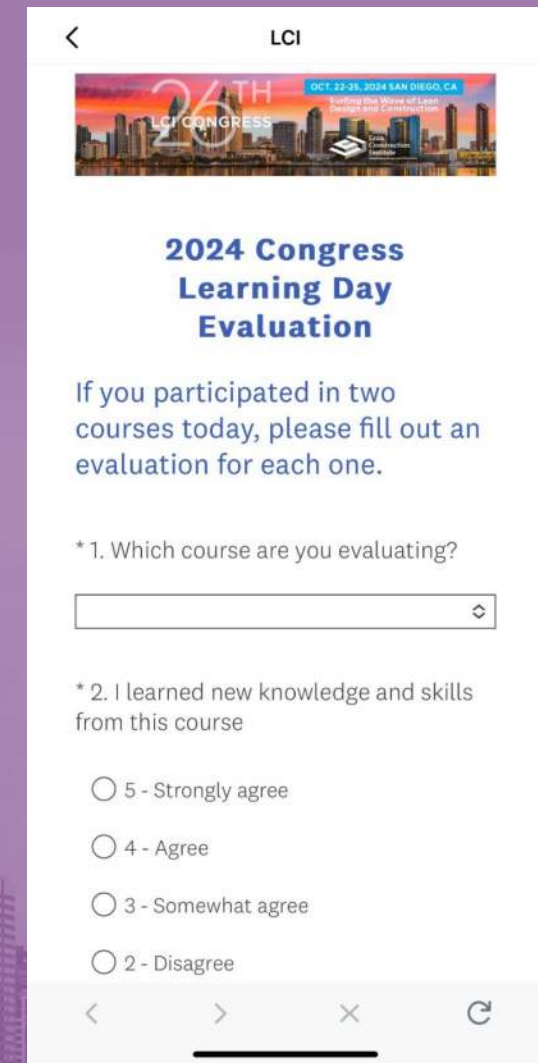
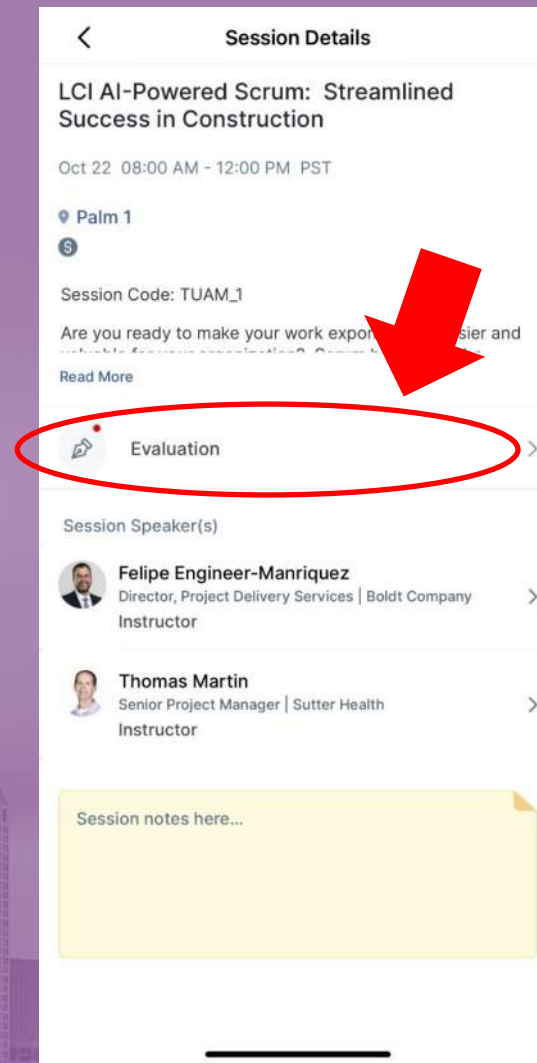
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Thank you for attending this presentation. Enjoy the rest of the 26<sup>th</sup> Annual LCI Congress!