

# Welcome!

**Achieving Collaborative 'IPD-ish' Delivery with  
basic D-B, P3 or CM contracts: Yes, there is a way...**

Wed, June 10, 2015 1:00 PM - 2:00 PM EDT

Earn 1.0 AIA HSW LUs



# Moderator



**Jane Cameron, AIA, LEED AP**

**Jane Cameron, AIA, LEED AP**, is an Associate Principal in the Chicago office of Perkins + Will. She worked at SOM LLP and SCB architects prior to joining P+W in 2006. With over 25 years of experience, her current role as a Senior Project Architect allows her to focus on the technical aspects of projects and she oversees large project teams to deliver a variety of building types, both domestically and internationally. Originally from Canada, Jane has Bachelor's degrees in Interior Design and Architecture, as well as a Masters in Architecture (focus in Urban Design). She has also practiced in Canada and the UK. She is licensed in the State of Illinois, and has been an AIA member since 1999. She is a retired member of the Ontario Association of Architects. She is an active member in the Chicago Committee on High Rise Buildings, and is also the past Program Director for the Committee. She joined the CCA-KC group in 2013 and is the current chairperson for the 2015 year.



# Speaker



**Dale Munhall, AIA**

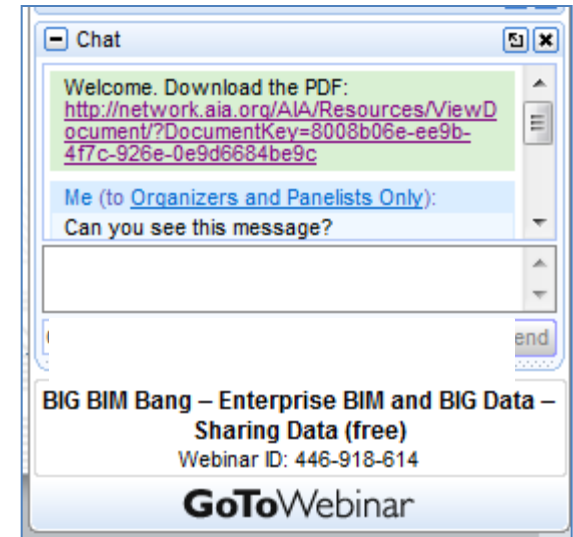
**Dale Munhall, AIA**, is Director of Construction Phase Services for Leo A Daly in Omaha. He is an NCARB certified architect and LEED Accredited Professional. Early in his career he gained experience as a construction manager, field superintendent and part-time building code official. Dale actively serves on committees of the AIA, and he co-founded and still serves on the Steering Committee of the Design-Build Institute of America (DBIA) Nebraska Chapter. He also co-founded the Nebraska Design and Construction Industry Council and helped negotiate Nebraska's Construction Alternatives Act which enabled QBS-based Design-Build and CM at-Risk to be used on Public projects. AIA has published his articles on CA and on Standard of Care as "Best Practices", and he has published and made national presentations on various aspects of the project delivery process.



# Questions?

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# Course Description

This webinar examines the causes and effects of adversarial conflicts built into traditional construction contracts. It details specific ways for all parties to achieve benefits of early, actual-team collaboration via an 'IPD-ish' approach to design and construction. These techniques can be applied to any size project using current project delivery agreements such as CM or Design-Build. 'IPD-ish' delivery utilizes QBS and a fee-based GMP (no lump-sum price and no mark-ups) in open-book contracts to provide financial transparency and joint Owner-Architect-Contractor professional management—not just shifting—of project risks and uncertainties.



# Learning Objectives

1. Understand the causes and effects of adversarial provisions that are built into traditional construction contracts.
2. Discuss the benefits of early, actual-team collaboration via an 'IPD-ish' approach to design and construction using regular CM or Design-Build contracts.
3. Be able to explain to clients reasons for using QBS and a fee-based GMP (no lump-sum price and no mark-ups) to provide financial transparency in open-book contracts in any delivery method.
4. Develop their own 'IPD-ish' approach to joint professional team-management of project risks by Owner, Architect and Contractor.



# **And now for our presentation:**

## **Achieving Collaborative 'IPD-ish' Delivery with basic D-B, P3 or CM contracts: Yes, there is a way...**





***not*** a 'sign' of teamwork

Achieving Collaborative  
'IPD-ish' Delivery with basic  
D-B, CM or P3 contracts:

**yes, there is a way...**

AIA CCA Knowledge Community  
webinar June 10, 2015

**Dale Munhall, AIA**

Director of  
Construction Phase Services  
LEO A DALY

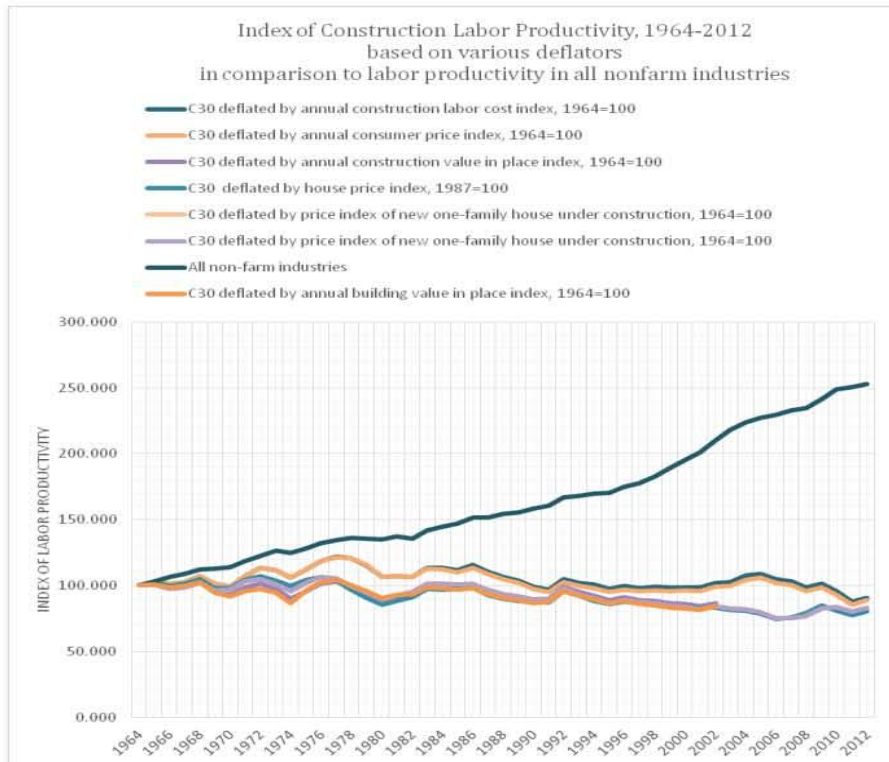
# OUR PROBLEM:

## Real Collaboration is elusive.

- Just calling a random group of participants with conflicting financial interests a ‘team’ is *not* enough.
- Too many provisions in CM at-Risk and Design-Build (and coming soon, P3) contracts are hold-overs from adversarial old design-bid-build delivery. Collaboration is based on risk-*management* not on old risk-*shifting*.
- Adversarial contracts are not working for Owners, and our clients ultimately have to pay more—and get less—because of the lack of teamwork and its resulting inefficiency.

# OUR PAST:

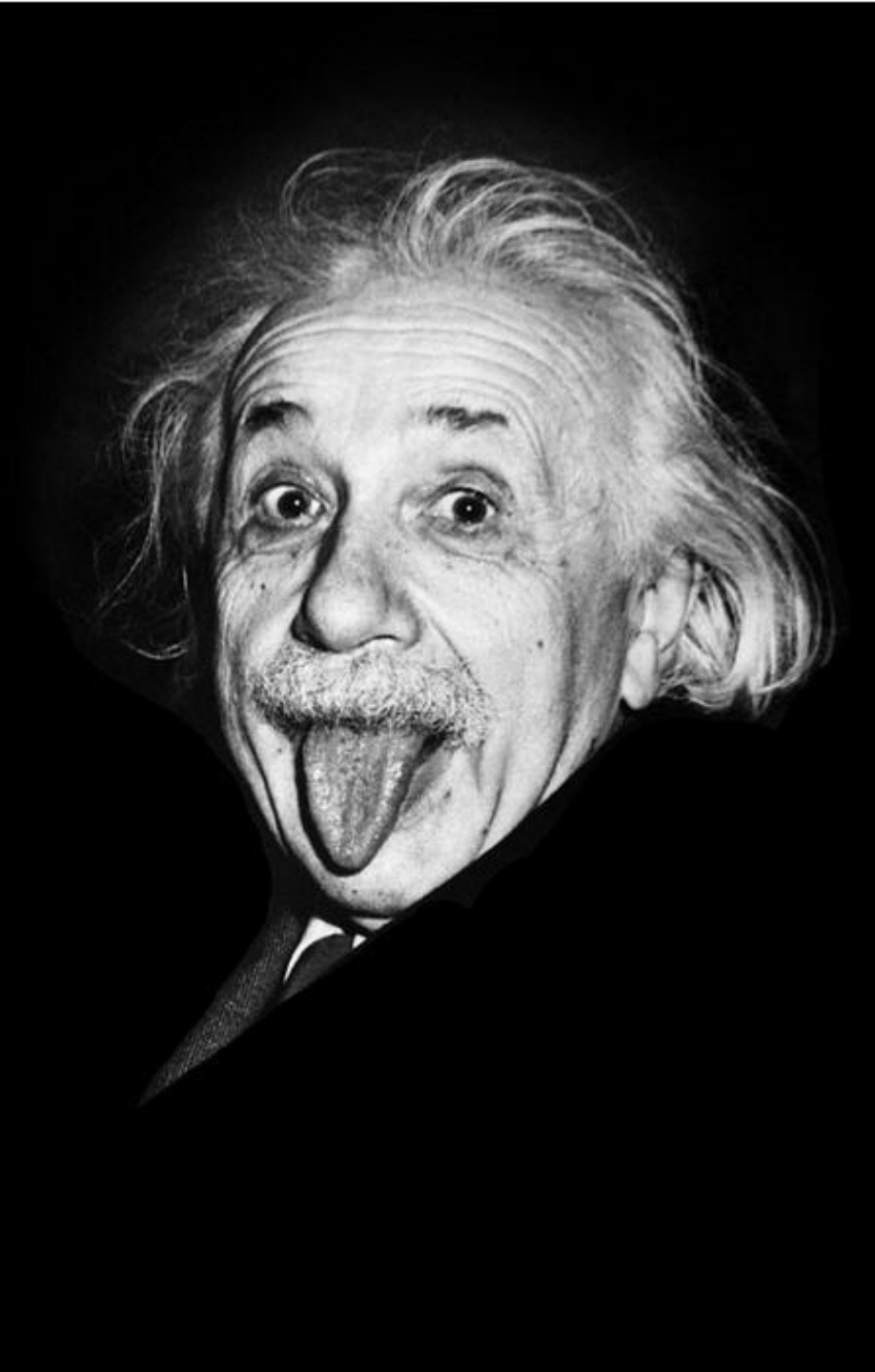
Legacy of adversarial risk *shifting* vs. collaborative risk *management*: **50 years of construction productivity in decline\***



2012 All non-farm US industries  
productivity: 250

1964 productivity baseline: 100

2012 Construction industry: ~85



**“Insanity:** doing  
the *same* thing  
over and over  
again and  
expecting  
*different*  
results.”

--Albert Einstein



# Why Owners Will Demand New Thinking...

**Funny...**

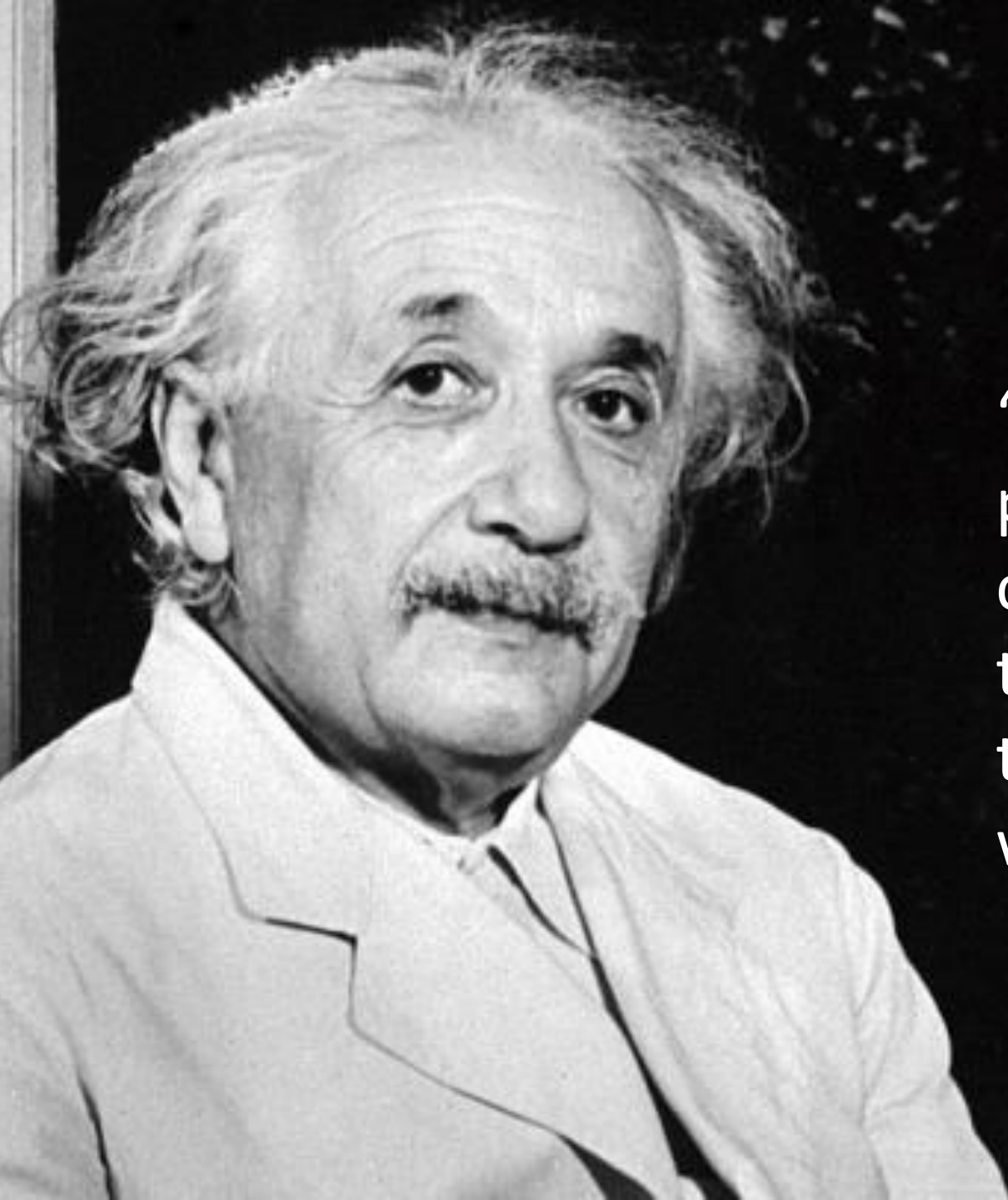
(unless you are an Owner)



*"Original Contract"*

**...but too often true**

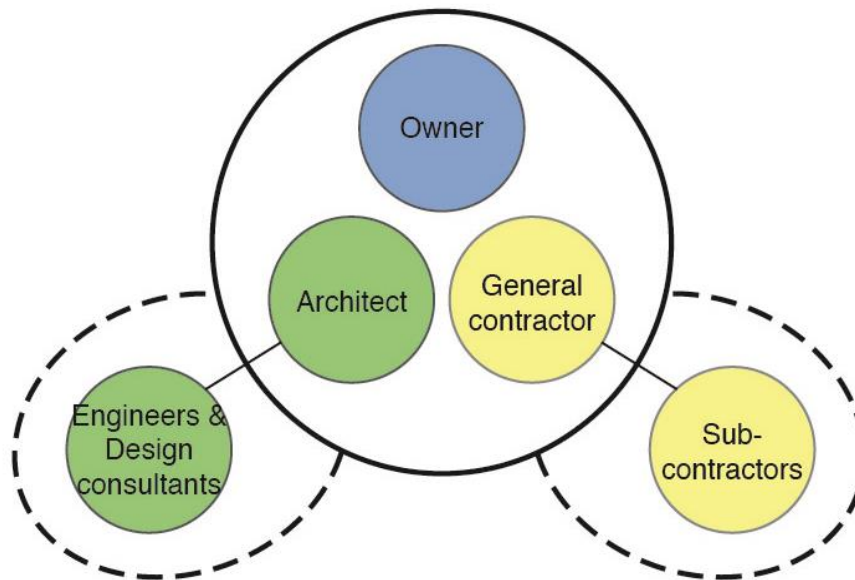




“The significant problems we have cannot be solved at the *same* level of thinking with which we created them”

--*Albert Einstein*

## Integrated Project Delivery Model



5.4.3 Model Element Table				Primary Design		Secondary Design		Design Development		Construction Documents		Construction		Note Number (See 4.4.)	
Identify (1) the LOD required for each Model Element at the end of each phase, and 2) the Model Element Number (MEA) responsible for developing the Model Element to the LOD identified.				LEAD	MEA	LOD	MEA	LOD	MEA	LOD	MEA	LOD	MEA		
Insert abbreviations for each MEA identified in the table below, such as "A" - Architect, or "C" - Contractor															
NOTE: LODs must be adapted for the unique characteristics of each Project															
Model Elements Utilizing CSI Cost Award™				LEAD	MEA	LOD	MEA	LOD	MEA	LOD	MEA	LOD	MEA		
A SUBSTRUCTURE	A10 Foundations	A1010	Shelved Foundations					300							
		A1020	Squat Foundations					300							
		A1030	Slab on Grade					N/A							
A20 Basement Construction	A2010 Basement Excavation	A2010	Basement Excavation					300							
		A2020	Basement Walls					300							
		A2030	Floor Construction					300							
B SHELL	B10 Superstructure	B1010	Roof Construction					300							
		B1020	Roof Openings					300							
		B1030	Roof Coverings					300							
	B20 Exterior Envelope	B2010	Exterior Walls					300							
		B2020	Exterior Windows					300							
		B2030	Exterior Doors					300							
	B30 Roofing	B3010	Roof Coverings					300							
		B3020	Roof Openings					300							
		B3030	Roofing					300							
	C INTERIORS	C10 Interior Construction	C1010	Partitions					300						
			C1020	Interior Doors					300						
			C1030	Partings					300						
C20 Stairs		C2010	Stair Construction					300							
		C2020	Stair Finishes					100							
		C2030	Stair Handrails					100							
C30 Interior Finishes		C3010	Floor Finishes					100							
		C3020	Wall Finishes					100							
		C3030	Ceiling Finishes					100							
D SERVICES		D10 Conveying	D1010	Elevators & Lifts					300						
			D1020	A-Moving Walks					300						
			D1030	Other Conveying Systems					300						
	D20 Plumbing	D2010	Plumbing Fixtures					300							
		D2020	Plumbing Water Distribution					300							
		D2030	Sanitary Waste					300							
	D30 HVAC	D3010	Rain Water Drainage					300							
		D3020	Other Plumbing Systems					300							
		D3030	Terminal & Package Units					300							
		D3040	Dehumidification					100							
		D3050	System Testing					N/A							
		D3060	A-Ridiculous					200							
D3070		Other HVAC Systems & Equipment					200								
D3080		Fire Protection					200								
D3090		Fire Protection					200								
D40 Fire Protection	D4010	Fire Protection					200								
	D4020	Fire Protection					200								
	D4030	Fire Protection					200								

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User Notes: (1530024210)

3

# BIM Model Development: *shared* model input and Lean construction output

# INTEGRATED PROJECT DELIVERY (per AIA/CC 2014)\*\*

“Integrated Project Delivery (IPD) is a project delivery method that integrates people, systems, business structures and practices into **a process that collaboratively harnesses the talents and insights of all participants to reduce waste and optimize efficiency through all phases of design, fabrication and construction.** The Integrated Project Delivery method contains, at a minimum, all of the following elements:

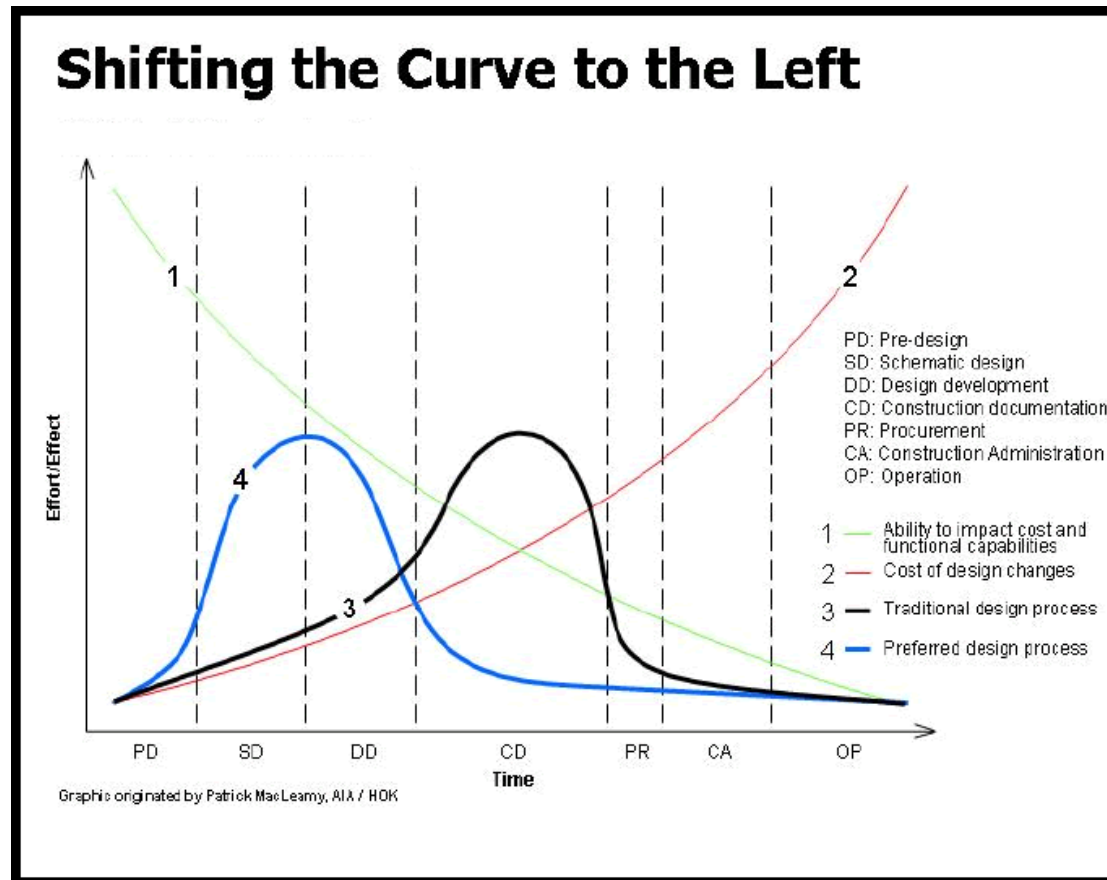
- **Continuous involvement of owner and key designers and builders from early design through project completion**
- Business interests aligned through shared risk/reward, including financial gain at risk that is dependent upon project outcomes
- Joint project control by owner and key designers and builders
- A multi-party agreement or equal interlocking agreements
- Limited liability among owner and key designers and builders”

**Integrated Project Delivery** has so far tended toward mega projects that can absorb the learning curve, heavy setup costs and administrative burdens required for multi-party risk/reward or shared ownership of the project .

**Until full IPD arrives**, we can all benefit from 'IPD-ish' early collaboration and Qualifications-Based design and construction in any project delivery method by using simple contract provisions that are non-adversarial, professional fee-based and most of all, financially-transparent.

**The following 'IPD-ish' alternative** is applicable *now* to contracts on typical projects of any size using more familiar delivery methods including CM-R, D-B and even P3 as Public-Private Partnerships evolve to include project financing, design, construction, facility operations and maintenance.

# Why Owners need collaboration *early*\*\*\*



**Ability to impact cost(1) *declines* as design progresses, while the cost of change-decisions(2) *escalates* rapidly**

# Collaborative 'IPD-ish' Delivery

## Basic terms:

1. **QBS** - selection of qualified Builder *early* in design
2. **Builder compensation** - fee vs. profit markups
3. **GMP** – set *early* to match Owner's budget
4. **Open-books** – Owner & A/E see all subcontracts, sub-bids, invoices
5. **Technology driven** – BIM 3D, 4D, 5D, PMIS, Lean Construction techniques

# IPD-ish Collaboration as a Team

## 1. Establish a *shared-mindset* in both Design-Build and CM at-Risk

- Actual 'teamwork' requires trust, qualifications and shared *mutual* interests of Owner, Architect and Builder
- Who takes the risks, who benefits?  
Answer: the Owner ultimately benefits, and should pay all fair costs of the project (all savings should accrue to Owner, *not* GC)
- collaborate to professionally *manage* uncertainty as a real Team *with* Owner, not as risk-*shifting* financial opponents





# IPD-ish Collaboration as a Team

- 2. Team selection:** Return to Brooks Law QBS on all projects (in CM-R *and* in D-B)
- *Qualifications-based* RFP for CM, D-B and A/E—no unpaid design exploitation, no Bridging, no incomplete-design disputes
- *Approach-based* proposals with proposed CM or D-B team fees in sealed envelope
- Short-list three CMs or D-B teams max., interview *all* key members, select best qualified, then open fees, and negotiate (same process as hiring an architect)





# IPD-ish Collaboration as a Team

## 3. Whole 'team' must have the same financial objectives to be a Team

- Set open-book GMP (including a realistic Contingency fund) early to match Owner's budget—not a lump-sum fixed price
- Professional CM/D-B fee *replaces* hidden-profit mark-ups that invite disputes and self-serving conflicts of interest
- Fair market-rate fees align the interests of Owner, Designer and Builder as a team



# IPD-ish Collaboration as a Team

## 4. Financial transparency is crucial in *any* delivery method

- Open-books-only policy—Owner & A/E see all sub bids, subcontracts and invoices (Owner sees and gets all that they pay for, but not something for nothing)
- Guaranteed Maximum Price (GMP) includes CM/D-B fee and a funded Contingency for unknowns (including E&O by A/E and GC)
- When budget is tight, reconcile CM/D-B's budget estimates at end of each design phase via an Independent Cost Estimate



# IPD-ish Collaboration as a Team

## 5. Liquidated Damages for late completion are not in the Owner's interests.

Unintended consequences include:

- Subs bid higher to cover uncontrolled risk
- Self-protection = *slower*, less teamwork
- Rush to avoid LDs cuts performance & quality
- LDs are virtually *never* paid, but induce blame and increase everyone's legal costs
- *Incentives* for on-time completion do work



# IPD-ish Collaboration as a Team

None of these IPD-ish elements are radical or untried, but all of them must be applied *together* or project outcome will suffer

- **To prevent unproductive risk-*shifting***, use all five IPD-ish concepts: 1) QBS; 2) fee in lieu of hidden profit; 3) early GMP; 4) open books; and 5) shared technology for collaborative risk *management* and early teamwork
- *Otherwise, disputes and claims are the legacy of doing the same adversarial things over and over again but expecting different results...*

***(Einstein was right!)***



# QUESTIONS?

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**\* 50-Year Productivity (graph used with permission):**

*per “Labor-Productivity Declines in the Construction Industry: Causes and Remedies, Another Look” by Dr. Paul Teicholz, Stanford University; see full documentation at*

*[http://www.aecbytes.com/viewpoint/2013/issue\\_67](http://www.aecbytes.com/viewpoint/2013/issue_67)*

**\*\* Integrated Project Delivery Definition Slide:**

*per “INTEGRATED PROJECT DELIVERY: AN UPDATED WORKING DEFINITION, AIA/California Council 2014; [www.ipd-ca.net](http://www.ipd-ca.net)*

**\*\*\* Shifting the Curve to the Left** (graphic originated by Patrick MacLearnny, AIA /HOK)



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