

# Contracting for Collaboration in Construction

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contractor best keywords a Words working both project associated first coop over ana over analysis Agent specifically Design-Bid-Build architect searched behaviors method team root CMjoint DBB results collaboration clauses collab environment two checks returned specific create manager analyses other using Table between DB involved <sup>−</sup> Suse While<sub>tools</sub> searches risk only Advisor word most projects round uses whereas process arties general trust language all <sup>Total</sup> number environments work design manner parties terms among CMAR processes commonly owner together related study collaboratively one during performance different IPD Design-Build instances promote contract industry methods





## **Working Hypothesis**

- Language used in contracts for Design-Build and Integrated Project Delivery methods differs from more prescriptive and compliance-related terms in traditional delivery methods (Design-Bid-Build, Construction Management as Agent/At Risk).
  - The language in contracts for Alternative Delivery Methods is one of the elements that sets the tone for the collaboration among project stakeholders and the project's superior performance.



## **Research Objective**

Investigate the **language of construction contracts** by identifying keywords commonly associated with collaboration and comparing the incidence of these keywords in contracts for different delivery methods.



#### **Delivery Methods Investigated**

Delivery Methods	Brief characterization of their contractual arrangement
Design-Bid-Build	Most traditional. Separation between design and construction, owner hires architect and general contractor (GC) separately.
Construction Management at Risk	Architect and GC hired separately. GC might get involved during preconstruction. GC is at risk for project performance.
Construction Management as Agent or Advisor	Construction manager hired as an agent of the owner, and owes fiduciary duties to the owner (acts in the owner's best interests).
Design-Build	Designer and GC hired under the same contract as the design-build (DB) entity. DB team responsible for the performance of the project.
Integrated Project Delivery	Multiple parties are signatories of a single contract involving at a minimum the owner, the GC, and the architect. Use of Lean tools, shared risk/reward, target value design, among others.



## **Research Method**

- From a legal standpoint, words and clauses in a contract have no inherent meaning...
  - They develop meanings after people using contracts and their related instruments communicate with each other using contractual terms, thus, attaching meanings to these terms. (Sweet et al. 2015)
- Words have social and psychological meanings.
  - "(t)he words we use in daily life reflect what we are paying attention to, what we are thinking about, what we are trying to avoid, how we are feeling, and how we are organizing and analyzing our worlds." (Tausczik and Pennebaker 2010, p.30)
- 32 Contracts collected by the authors and/or found in online searches



### **Research Method**

Contracts investigated for the following delivery methods	First Round	Second Round	Cross-Analysis
Design-Bid-Build, Design-Build, Construction Management (at Risk, as Agent or Advisor) Integrated Project Delivery	Collab*	Joint* (joint, jointly) Coop* Together Trust*	Are the contracts of the delivery methods investigated written in a way that requires collaboration?



#### 1<sup>st</sup> Round Results – Collab\*

			Keyword (1 <sup>st</sup> Round)		
Delivery Method		%	Collab*		
Design-Bid-Build (DBB)		22	0		
Construction Management (CMAR)		12.5	1		
CM as Agent or Advisor		12.5	1		
Design-Build (DB)		22	0		
Integrated Project Delivery (IPD)		31	177		
Total	32	100	179		



### 2<sup>nd</sup> Round Results – Join\*, Coop\*, Together, Trust\*

			Keywords				
Delivery Method	#	%	Joint*	Coop*	Together	Trust*	Total
Design-Bid-Build	7	22	3	3	4	0	10
CMAR	4	12.5	7	29	14	3	53
CM as Agent or Advisor	4	12.5	4	19	5	0	28
Design-Build	7	22	14	13	15	6	48
Integrated Project Delivery	10	31	114	24	36	12	186
Total	32	100	142	88	74	21	325



## Conclusions

- Number of collaboration-related words does not define a contract as collaborative.
  - The specific context and clauses where they are used are also very important.
- Findings suggest that contracts drafted for more collaborative delivery methods, such as IPD and DB, contain a higher number of keywords associated with collaboration and collaborative behaviours.
- Theoretical and practical implications:
  - Word choices in a contract might determine, or at least contribute to, the relationships among project participants and influence project performance.
  - Owners should be very intentional when defining language to be used in their contracts, in addition to including mechanisms to promote collaborative behaviors.