

"The Deal" is a unique business construct in the Lean/IPD environment that attempts to align all project participants to a shared project goal, called Conditions of Satisfaction (CoS). The Deal ties the profits of several project participants to the outcome of the entire project rather than to individual performance. The intent is to open the eyes of the participants to the waste that has been generated by the silos of previous contract forms. It also encourages participants to act as one entity, thus optimizing the entire value stream rather than focusing on individual piecework. It is best when a wide variety of project participants participate because they can offer project-wide design and build perspectives.

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1.0 Why

The construction industry typically contracts for work in a way that rewards and punishes individual companies for their individual performances. The traditional contracting system is inefficient; so much so that owner/operators typically expect that projects will be late, over budget and inaccurate. The contracting strategy is at odds with the desired outcome. Despite this dysfunction, not much has changed over at least the last 50 years because everyone who is not an owner/operator on the team has learned how to make money from a dysfunctional system. Contractors often must choose between supporting a project's success or their company's success.

This dysfunction causes project participants to choose between behaving in a way that supports project success and behaving in a way that supports individual companies' success. If the behavior that will help the project will cost a company money and the contract they are under does not allow them to be compensated for that effort, the project manager is often forced to choose between helping the project or getting a bad performance review and losing a salary bonus. If the behavior were aligned, we would not have this problem.

In contrast, The Deal encourages collective teamwork to achieve collective success. The financial logic of a shared risk/reward deal reinforces the culture of a single team having a single focus. The Deal also reinforces all the other characteristics of the Lean/IPD model. It encourages the team to collaborate—particularly during a project's challenging or difficult stretches.

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2.0 What

The Deal ensures that project partners establish a shared pool of money (i.e., a Profit Pool or Incentive Compensation Layer). The owner/operator typically guarantees that all true costs will be paid, regardless of outcome, thus removing the fear of catastrophic failure and encouraging innovation.

With an IPD-contract (Integrated Form of Agreement), this pool of money can be structured to directly or proportionately increase or decrease depending on the cost of the work.

Note: Tying the pool solely to the budget essentially ties it to the schedule because the longer a project goes the more overhead costs increase and the more exposed the project becomes to escalation increases. It also ties to the scope because scope typically will be a key element of the Project CoS.

Where other contract forms are in place, this pool will likely need to be created with some form of proxy. Project compensation can be more specifically tied to the CoS through contract performance bonuses or contract penalty for missing targets. This has shown to be helpful in more stringent procurement environments. Aligning the bonus to the outcome encourages teamwork and rewards the team accordingly. It also discourages silos.

3.0 How

Below is the ideal situation that is available under an IPD-contract. The intent here is to present a goal to which a project can strive with other contract models. The difficulty in achieving the ideal situation varies dependent on the contracting model in place. Here is a rough guide to degree of difficulty to construct a business deal that supports everything that needs to happen on the project.

- Integrated Project Delivery Contract EASIEST OF ALL
- Design-Build Done Right (IPD-like) FAIRLY EASY
- Multiple Prime or CM At-Risk MODERATELY CHALLENGING
- Design-Build Done Wrong (Des/Bid/Build-like) HARD
- Design / Bid / Build HARDEST OF ALL

The intent of the business deal is to directly motivate the business owners, key project team leaders and financial managers to achieve project goals. It is not to directly motivate last planners and support staff. By motivating the business owners and key team leaders, they then become a resource and advocate for changing and aligning the behaviors of their staff with the needs of the project. A top down buy-in from each organization makes adoption much easier.

The team established four buckets of cost:

- Owner direct cost not at risk to the team
- · Total project hard and soft costs including home office overheads
- An appropriate project management team contingency
- Aggregated team profit

The last three buckets combine to become the Current Working Estimate (CWE).

The owner/operator should set a project investment threshold from which the team creates a target cost and can use Target Value Design to meet the target. The collaborative team works together to discover the detailed project requirements and meet this target through innovation. A detailed CWE is established and validated between owner/operators and partners. An initial target is created that is a meaningful stretch, yet attainable.

One key dynamic to create is to have the designers to be at risk for project failure during construction and for builders to be at risk for not informing the design well enough during design. This will create a significant need for collaboration among all partners and will require input and respect across traditional responsibility boundaries. This is a key benefit to the owner as the team is now responsible for improving the communication between designers and builders to avoid the typical causes of project change orders and delay. This risk structure can be particularly challenging for a Design/Bid/Build contract, as the team is not complete during the design phase.

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4.0 When

Most Lean/IPD teams solicit business terms input during the Partner Selection process. This helps define profit needs and personnel unit costs in a competitive environment even though the project details are not sufficiently mature to transfer risk.

It is crucial that the project risk/reward criteria link directly the project scope in the project CoS. This is a critical timing issue among all parties. If a project is not sufficiently defined, partners may be subject to undue risk, resulting in inflated contingencies and unwanted protectionist practices.

Teams should create the target and associated profit pool ownership as soon as there is validation around the CWE. By doing this, teams can define the individual ownership of the profit pool, thus clearing the way for partners to assess the project costs. By doing this, teams minimize scope hoarding and scope avoidance. The best project partners assume the appropriate work without concern for impact to profit. This

helps align scope with capability, allows scope to be aggregated and to be shifted as the needs change.

Project teams new to partner selection should seek advice from companies experienced with Lean/IPD and consult with legal and insurance experts.

Stretch goals embedded in the business deal create tension that drives innovation. These goals should be significant and not limited to 2% or less. The goals should recognize the significant waste embedded in the system and encourage partners to think differently about the way they do business, both individually and jointly. The shared savings should be commensurate with the willingness to take risk and the effort required to meet those goals.

Contingency should be determined based on risk, not historical experience. Teams should strive to identify and create mitigation strategies for any known or perceived risk. A portion or all remaining contingency should be shared with the partners to incentivize all parties to efficiently resolve risk issues.

While the premise of this article is that the owner be fully involved and engaged with the partners in all aspects of the delivery, the owner does not always need to be a participant in the business deal. There are contract models where the above structure is entirely within a GC-led progressive Design-Build structure. However, the owner/client still needs to be an engaged participant in the project, and it is particularly vital that before the final cost is agreed to the owner must have a clear, robust project CoS.



For additional readings and information, please see the below information.

CHAPTER 24 – THE SHARED RISK REWARD BUSINESS DEAL

Additional Readings

5.4 Case Studies of VDC for Lean	Pro	iect	Delivery	Ī
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BIM and Value Stream Mapping Robert Mauck

Commercial Terms to Support Lean Project Delivery

Competition and Collaboration are not mutually exclusive

Conflicts Between Contract Law and Relational Contracting

Contract Or Co-Operation Insights From Beyond Construction
Collaboration - The Honda Experience

Contracting for Lean in Design Build

Editorial Lean and Integrated Project Delivery

Hard Bid Multi Prime Airport Last Planner

<u>Implementing Integrated Project Delivery on Department of the Navy construction projects</u>

Integrated agreement on one page

<u>Integrated Project Delivery An Example Of Relational</u>
<u>Contracting</u>

Last Planner and Integrated Project Delivery

Lean and IPD Panel

Owner Perspectives-UCSF

<u>Project Alliancing A Relational Contracting Mechanism For</u> Dynamic Projects

The Application Of Lean Principles To In-Service Support A
Comparison Between Construction And The Aerospace And
Defence Sectors

<u>Transitioning to Integrated Project Delivery Potential barriers</u> <u>and lessons learned</u>

<u>Using a design-build contract for Lean Integrated Project</u> <u>Delivery</u>