

The Benefits of Conducting a Strategic Project Launch Readiness Assessment – Part 13 in a 13 Part Series

Contracting Approach – Selecting the Appropriate Delivery Approach and Associated Contract Can Reduce Risks

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Throughout 2009, Capital Project Solutions ran a series of articles on Project Launch Preparedness. December's issue discussed Project Delivery Team Organization and Approach. This month's article explores the 12th and final spoke of the Strategic Project Launch Readiness Assessment (SPLRA) – Contracting and Delivery Approach. Throughout a SPLRA, every major issue that could potentially impact your launch will be identified and explored. The SPLRA will keep you focused on all the elements that impact the "Big 3" of your project – scope, schedule, and budget. If you should miss any of the 13 articles in the series or to learn more about other strategies to ensure your project's success, visit KLMK Group at www.klmkgroup.com.

The process of selecting a project delivery approach and applicable contract occurs during the Project Launch phase and is an important "spoke" on the SPLRA wheel. Any major project involves significant risk. Healthcare projects are especially risky because they have the potential to disrupt life-saving services. During the project launch phase, the healthcare owner needs to select the delivery approach that best fits their project and minimizes their risk. First and foremost, a CEO needs to know the definition of project delivery approach – it is the planning, design, construction and other services necessary for organizing, executing and completing a building facility or project. Once that approach is determined, then it must be documented in a contract that specifically outlines the "business arrangement(s)" for the project.

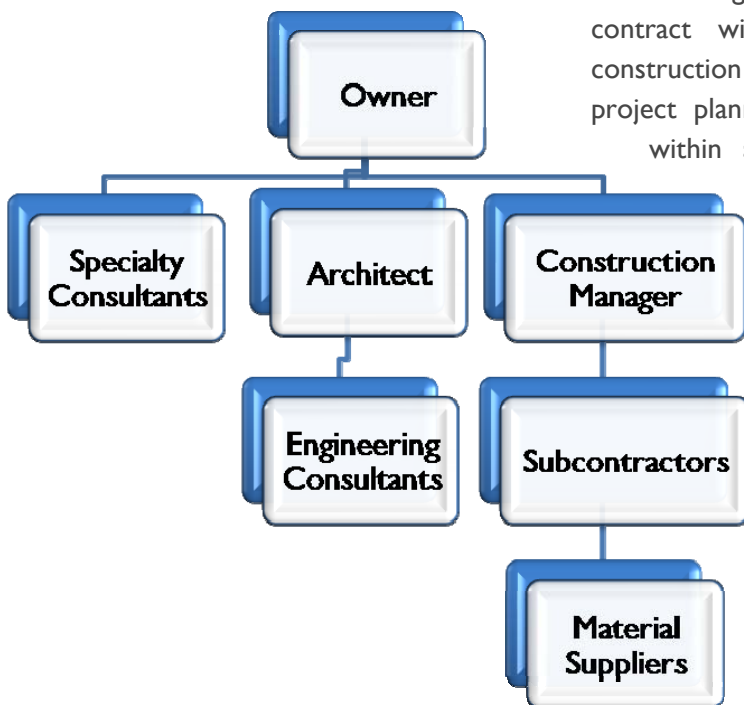
A greater number of healthcare owners are beginning to explore alternative models for delivering projects. This shift is due to the

frustrations associated with the traditional method of project delivery. It is outdated and full of inefficiencies, thus making it difficult to achieve desired outcomes. Despite decades of attempts to improve on traditional delivery approaches (design-bid-award, design-build, construction manager at risk), projects are still frequently over-budget and delivered late. More importantly, the completed facilities often do not improve the operational efficiency of the organization.

Understandably, owners are still searching for a reliable process that produces more predictable outcomes. The industry is abuzz over new ways of delivering projects. Currently, there is a revolutionary shift in the way projects are delivered and owners are beginning to become more curious about this process. The shift to a more integrated form of delivery has the greatest potential to correct the major problems associated with the traditional approaches. First, let's review the traditional project delivery methods and then evaluate a more integrated approach.

Preconstruction-Construction Manager

Typical Preconstruction-Construction Manager Delivery Team Organization

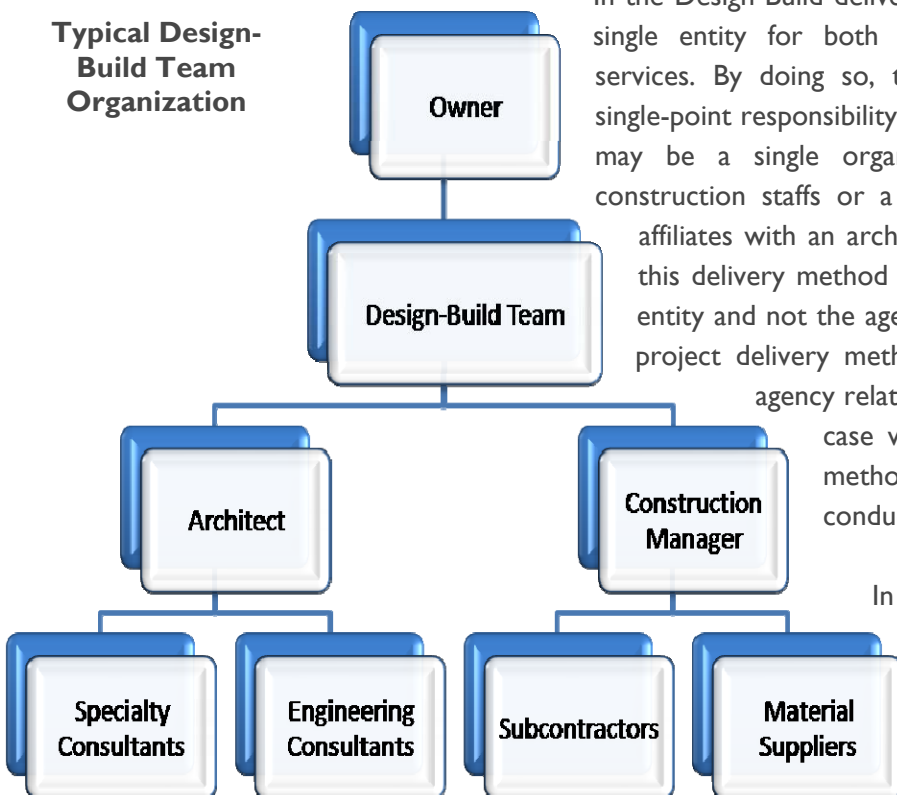


Under a typical PreConstruction-Construction Manager project delivery method, a healthcare owner contracts with an architect/engineer for design services and enters into a separate contract with a preconstruction-construction manager for construction services. The objective of this approach is to treat project planning, design, and construction as integrated tasks within a construction system. The team, by working together from project inception to project completion, attempts to serve the owner's interest in optimum fashion. But, there's no formal or contractual relationship between team members. By striking a balance between construction costs, project quality and completion schedule, the team strives to produce a project of maximum value to the owner within the most economic timeframe. On most construction management projects, phased construction is applied and adherence to the established time schedule and construction budget is a prime responsibility of the construction manager.

The PreConstruction-Construction Manager project delivery method has been typically utilized by healthcare owners on their most complex and challenging projects. This approach takes into account that the design and decision making process is interactive and may involve an evolving design process as the clinical operations of the facility are being analyzed. Under this delivery method the owner will incur a significant amount of design fees before understanding the final construction cost. It is also incumbent on the owner to be the leader of this process and be able to make timely decisions. Should the owner lack sufficient “in house” expertise with time available to commit to the project, it will greatly impact the design process and lead to project delays before construction is even initiated. However, with this approach the owner does have significantly more control over the design and specifications of the systems that will ultimately be a part of their new facility.

Design-Build

Typical Design-Build Team Organization



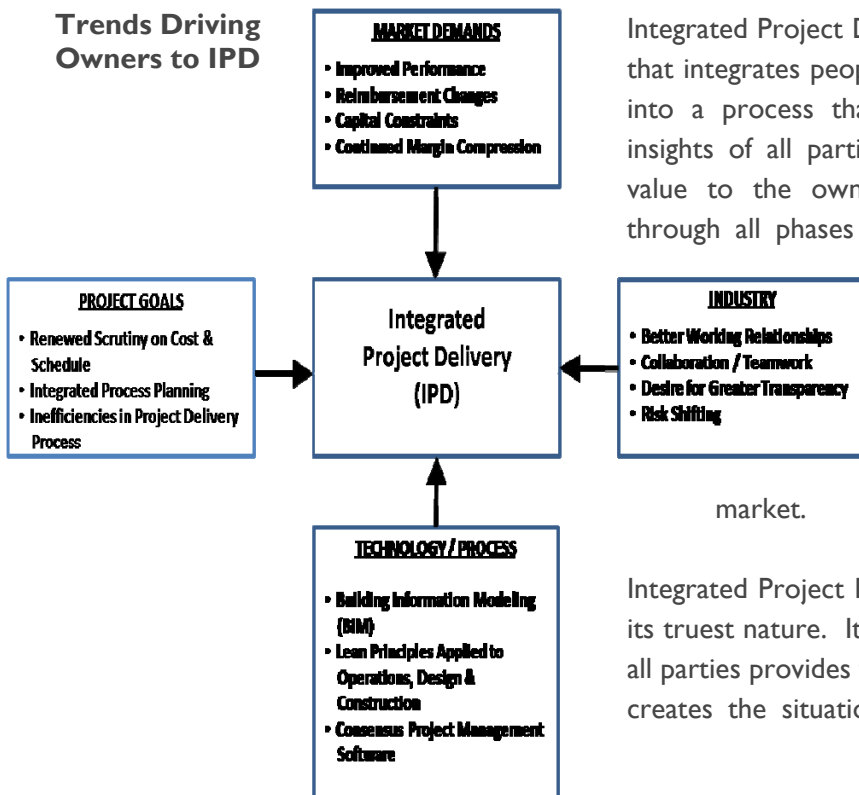
In the Design-Build delivery method, the owner contracts with a single entity for both design and construction management services. By doing so, the owner has one contract assigning single-point responsibility for the project. The design-build entity may be a single organization with both architectural and construction staffs or a construction organization that hires / affiliates with an architect as part of a design-build team. In this delivery method the architect is part of the design-build entity and not the agent of the owner. Thus, unlike all other project delivery methods, no one individual is acting in an agency relationship on the owner’s behalf. As is the case with the construction manager delivery method, the design-build method is also very conducive to a phased construction schedule.

In healthcare, design-build is a practical approach for projects that are easily defined and have a low risk of significant scope revisions. Parking garages, medical office buildings and outpatient care buildings are good

examples of such projects. These types of projects typically require minimal involvement from a multi-disciplinary group of end users and the design period is usually not as lengthy. Once the guiding principles are established (such as the number of parking spaces in a garage, the number square feet in a medical office building or the number of operating rooms in an outpatient surgery center) it is easy for the design-build entity to provide the owner with a total project cost that can be reviewed and approved. In many instances, the owner utilizes these guiding principles to define the building scope in order to solicit competitive bids from design-build entities. With this selection process the final construction cost is known sooner in the overall process. One of the most attractive aspects of his delivery model is that change orders related to design errors and omissions are non-existent. With the design professional and contractor on the same team, they are both held accountable for errors and discrepancies on the drawings. Costs associated with any errors are thus not the obligation of the owner.

Integrated Project Delivery (IPD)

Trends Driving Owners to IPD



Integrated Project Delivery or “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 optimize project results, increase value to the owner, reduce waste, and maximize efficiency through all phases of design, fabrication, and construction. In other words, true IPD is a collaborative capital project delivery approach that shares risk and reward via a integrated form of agreement (IFOA) or tri-party agreement to reduce the time and cost to bring a superior product (new facility) to market.

Integrated Project Delivery is relational, collaborative and lean in its truest nature. It is **Relational** because the contract signed by all parties provides financial incentive to mitigate risk. Its language creates the situation in which pushing risk down the chain in

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order to avoid it is not an option. IPD is **Collaborative** because it creates a larger talent pool during the critical coordination stage of a project and harnesses the insights of all participants. The larger talent pool comes from gathering all necessary expertise at the outset of the project. Healthcare owners are becoming more accustomed to applying Lean principles to their operational processes. Therefore, transference of these same principles to the capital delivery process should be a rather seamless shift. IPD applies the same **Lean** principles to development and thus reduces waste and optimizes efficiency through all phases of design, fabrication, construction and occupancy. It creates an environment to allow proper allocation of resources and responsibilities in order to reduce errors and avoid rework.

IPD is not the right approach for every owner. The CEO and the project delivery team must first understand and buy into the principles of IPD which are as follows:

- Mutual respect and trust
- Mutual benefit and reward
- Collaborative innovation and decision making
- Early involvement of key participants (design team, contractor, specialty consultants and trade subcontractors)
- Early goal definition (scope, budget and schedule)
- Integrated process planning
- Open communication
- Application of technology (BIM, etc)
- Application of lean principles in planning, design and construction

In addition, the healthcare owner must fully understand what makes IPD different in the following critical areas:

- Teams
- Process
- Risk
- Compensation and Reward
- Communication and Technology
- Agreements

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During the SPLRA, it is important to analyze all project delivery options to determine which method will help you accomplish your facility strategic objective while minimizing your risk. Evaluation of the method that is right for a particular owner and project should happen in the earliest project discussions. Your institution's culture may lend to a more "traditional delivery approach" such as CM at Risk or Design-Build. But, if you are open to a more collaborative way of delivering a project, you should investigate an integrated delivery approach - IPD. IPD can eliminate inefficiencies in time and budget by bringing owners, contractors, consultants, architects and vendors onto the same team under a single set of contract, risk and rewards agreements. This method helps to focus the team and reward each member for achieving optimal project results. Trust in and by all parties delivering the capital project is the crucial determining factor in the success of an IPD approach.