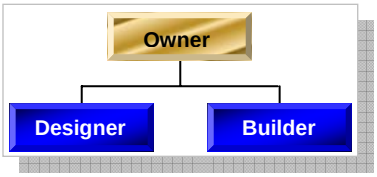
# Integrated Project Delivery
# The Best of All the Worlds

Church building committees spend countless hours wrestling with the approach they will take to design and build their new facilities, and with good reason. Construction still remains the number two most litigated industry in America today behind medical. The result is almost $.20 of every construction dollar goes towards claims and litigation. So how does a church protect themselves from becoming a statistic, while building positive relationships with their designers and builders? Often the approach taken to design and build is a reflection of the building committee, their comfort with risk, and their personal past experiences with similar projects. Today's church building committees face a harder task of selecting an approach than their predecessors, due primarily to the "hybridization" of the traditional three delivery systems: Design-Bid-Build, Construction Management and Design Build into what's being called Integrated Project Delivery.

Let's review the Pro's and Con's of the three traditional delivery systems for designing and building alongside the new Integrated Project Delivery approach.

**Design-Bid-Build**




Design-Bid-Build, or Hard Bid, is the most familiar of the three traditional delivery systems. The normal sequence of events begins with the church selecting a designer. The designer discovers the needs of the church, creates a design, and then bids the plans and specifications to a handful of qualified builders. During the construction stage of the project the designer inspects for quality control and acts as the key customer agent/representative in cases of dispute with the builder.

Pro's

- The owner hires the designer directly, and the designer is his advocate from the beginning.
- The designer becomes the quality assurance and conflict resolution manager for the owner.
- The designer is selected based on his specific experience with the type of project the owner desires.
- Open bidding of multiple general contractors allows for the lowest initial cost for the plans and specifications.
- The designer provides the checks and balances for the owner throughout the process.

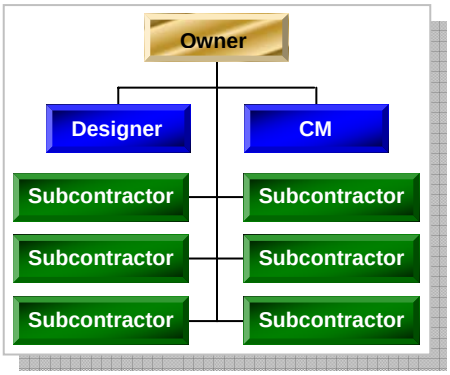
Con's

- Lack of teamwork with the builder during the design process results in 6% more cost than a team approach [1]
- The designer's estimate to establish project budgets may be only moderately accurate due to lack of builder involvement.
- The actual cost of the project is not guaranteed until the design is complete and the builder's bids are received.

# Integrated Project Delivery
# The Best of All the Worlds

- An adversarial relationship often exists between the designer and builder resulting in higher litigation.
- Builders typically operate with a “closed book” accounting approach, thus eliminating any owner provided subcontractors or self performed work.
- Lack of communication and relationship between the owner, designer and builder exists due primarily to sequence of events.
- The average change order increase rate over original contract, due to error or omission, is approximately 15%.

## Construction Management




Construction Management tended to grow as a result of customers not completely understanding the argument between designers and builders/subcontractors and wanting a “third party” to referee the discussion. An added benefit was to rely upon the construction manager’s experience to reduce the costs of the building through open dialogue with the designer and various subcontractors.

Pro’s

- The owner hires the designer and construction manager early, and they become his advocate from the beginning.
- The designer and construction manager become the quality assurance and conflict resolution managers for the owner.
- The designer and construction manager are selected based on their specific experience with the type of project the owner desires.
- Open bidding of each individual subcontractor allows for the lowest initial cost for the plans and specifications by trade.
- The designer and construction manager provide the checks and balances for the owner throughout the process.
- The integration of the designer and construction manager increases the level of communication at the earliest and most critical time of the design process.

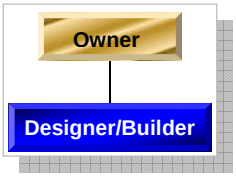
Con’s

- The owner takes the risk of the subcontractors by direct contracting.
- The direct contracting approach with the subcontractor’s results in 4.5% more cost than a team approach. [1]

# Integrated Project Delivery
# The Best of All the Worlds

- The actual cost of the project is not guaranteed until the design is complete and the subcontractor's bids are received.
- An adversarial relationship often exists between the construction manager and the subcontractors due to a lack of an actual contract relationship resulting in higher litigation.
- A conflict of interest can exist with the designer and the construction manager because as construction costs escalate, so does their fee.
- The owner represents to all subcontractors that the plans and specifications are flawless and bears the risk of errors and/or omissions in the plans.
- The owner maintains the risk of errors and/or omissions – neither the subcontractor nor the construction manager.
- The average change order increase rate over original contract, due to error or omission, is approximately 10%.

## Design-Build




Design-Build resulted from the customers need to "one stop shop" and to stay out of the arguments that the other two systems tended to generate. With designers and construction mangers under the same roof, the finger pointing and fault finding ceased because one contract covered all design and construction. Basically, all risk and liability is born by the Design-Builder, according to a Penn State study done in 1998. The study found that Design-Build resulted in 6% less project cost, 10% less change orders, and 23% faster than other delivery systems. The key to the success of Design-Build and less change orders is that the designers and builders are partnered together from the very beginning. The result of building upon each team members experience is an "ownership" of the solutions for the church and drastic reduction in the risk of change orders.

Pro's

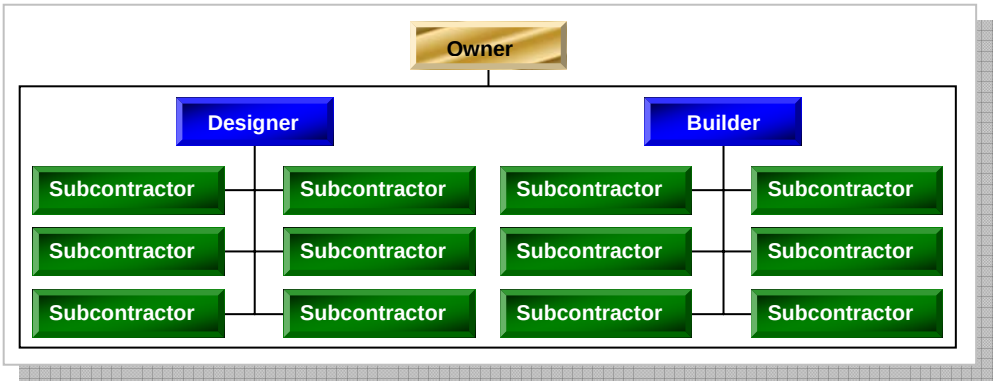
- There is a single source of responsibility.
- The design-build approach delivers projects at 6% less cost than the traditional design-bid-build approach.
- Communication is greatly enhanced by pulling all critical team members to the table early.
- Design fees are lower due to the high level of builder involvement.
- Pre-construction estimates are highly accurate due to early builder involvement.
- A guaranteed maximum price can be established early.
- The design-builder represents to the subcontractors that the plans and specifications are flawless and bears the risk of errors and/or omissions in the plans.
- Subcontractors are contracted directly to the design-builder.
- The design-builder maintains the risk of errors and/or omissions, not the owner.

# Integrated Project Delivery
# The Best of All the Worlds

Con's

- The designer is often an employee of the builder, thus eliminating important checks and balances on the project. — "The fox guarding the hen house."
- The design-build designers may not have the experience needed for each specific project.
- The builder can direct the designer to decrease the quality of materials in order to maximize builder-profit.
- Many design-build companies also self perform major portions of the project, thus increasing builder profit by eliminating competitive bidding of these items.
- Many design-build companies do not share the results of subcontractor bidding with the owner.
- The average change order increase rate over original contract, due to error or omission, is approximately 5%.

**Integrated Project Delivery**




The Integrated Project Delivery approach became a hybridization of the previous three delivery systems, keeping the Pro's of each system and eliminating a great number of the Con's. The key differences lie in complete transparency of costs, a completely open communication system between owner and various professionals, and complete protection from risk through team ownership of the design and build solution.

Pro's

- There is a single source of responsibility
- A highly accurate guaranteed max price (GMP) is established early in the process at a greatly reduced price.
- The team-build approach delivers projects at 6% less cost than the design-bid-build approach at GMP plus up to an additional 5% through open teamwork.
- The team-build approach allows design services to be performed for 2% to 5% less than other delivery systems.

# Integrated Project Delivery
# The Best of All the Worlds

- A highly transparent and open process allows the owner direct access to all team professionals.
- The designer and builder are separate, yet unified companies providing the owner checks and balances through the process—partnered accountability.
- Communication is greatly enhanced by pulling all critical team members to the table early while encouraging open dialogue with the owner.
- Open bidding of individual subcontractors allows the owner to be involved with the selection of every subcontractor on his job while the builder maintains the responsibility for that subcontractor's performance.
- Open and transparent dialogue takes place concerning the types and quality of materials used.
- All work items are competitively bid and subcontracted eliminating high mark-up self-performed items.
- Due to early buy-in and "ownership" of the project, the change order rate, due to error or omission, is 0%.

Con's

- Team-Build is a new concept that is built upon an extremely open and transparent level of sharing that is new and only beginning to be embraced by a traditionally "closed" industry.
- Providing the opportunity to subcontractors, who are members of the church, to bid on the project is double-edged: Significant savings to the church, or hurt feelings if not selected to perform the work.
- "Seeing how sausage is made": A wide-open, transparent design and build process can be frustrating to the owner as they are able to see the "behind the scenes" sub-processes that are hidden from view with other delivery systems.

A good Design and Build Team, with a heart to serve the Lord, can make what could be a time of ministry distraction into a time of ministry focus. Selecting a Team to serve your ministry should be based on the relationship with the Team Members that you would be interacting regularly through the course of the process, the past experience of each Team Member, and the ability of each Team Member to synergize with the others to develop cost effective solutions for your project. Every project, first and foremost, is all about God. The next thing a project is all about is people. Great people can steer your church through the landmines of the construction process and protect you and your congregation from becoming another unfortunate statistic.

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