

## Project Approach and Organization

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What is the best approach for managing your project? Who should be hired first: the architect or the contractor? Who works for whom? What approach will save you the most money? What approach is the best for an accelerated schedule?

In completing a remodel, tenant improvement or new building project, there are three approaches most commonly used:

1. Design-Bid-Build (DBB)
2. Design-Build (DB)
3. Negotiated Select Team (NST)

*Negotiated Select Team is also commonly referred to as Construction Management at Risk, Negotiated Contract, Design-Assist, Design-Contract-Build, and Team Build. All are relatives Design-Build.*

### Design-Bid-Build (DBB)

Used 10-15% on a majority of hospital work

Under DBB, architecture and construction are contracted separately. Professional design services are selected (usually based on relationship, experience, word-of-mouth, qualifications or industry knowledge of project type) first by the owner with a negotiated fee. Contracts for construction services are then obtained by competitive bidding, bid after the architect has completed all design and construction documents either publicly bid or from a select list of contractors. The architect solely represents the owner during design and construction and is an impartial interpreter of the construction documents he has prepared.

This method, in my personal experience with private health-care projects, is used roughly

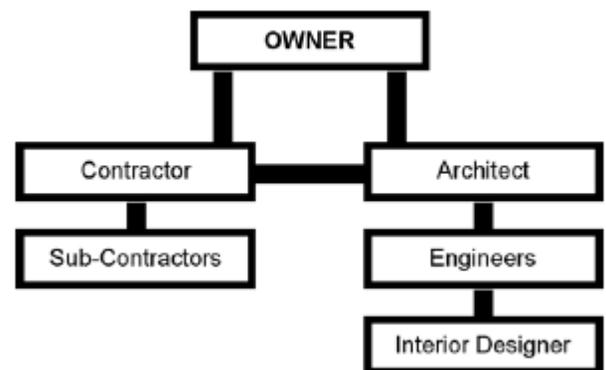
10-15 percent of the time. It is still used on a majority of hospital work, though it has lost ground to design-build in the past 10-20 years.

### Pros & Cons of DBB

DBB is the “traditional” method the industry has used for years to approach the design and construction of projects. It is still the staple for large, municipal, and federal projects throughout the US. It has, however, recently lost some ground to the newer DB approach. Typically, the architect is responsible for the design integrity in the DBB project, from initial design to landscaping to all engineering.

There are three relationships key to a successful DBB project:

1. Architect and Owner
2. Architect and Contractor
3. Owner and Contractor



Some say that DBB projects immediately pit the architect against the contractor. If the contractor has won the project by having the lowest bid, the tendency by many contractors is to make up some of that money via project changes or change orders, which

are typically more expensive than if they were items that were originally bid. The architect is hired by the owner to watch and ensure that the contractor charges fair prices for changes, meets the schedule, maintains quality levels, and follows construction documents.

This is a safe project delivery for projects with the time and budget that will ensure success. This approach is tried and true, though it does have its drawbacks on small projects, projects with extremely tight budgets, and projects with schedule constraints.

## Design-Build (DB)

Used 15-20% for private medical projects

In DB, a single entity known as the design-builder is contractually responsible for the project's design and construction. Often, the architect is contracted by the contractor and serves him. The contractor typically identifies a project budget, and the design team is responsible to meet it.

This method is used roughly 15-20 percent of the time for private medical projects.

### Pros & Cons of DB

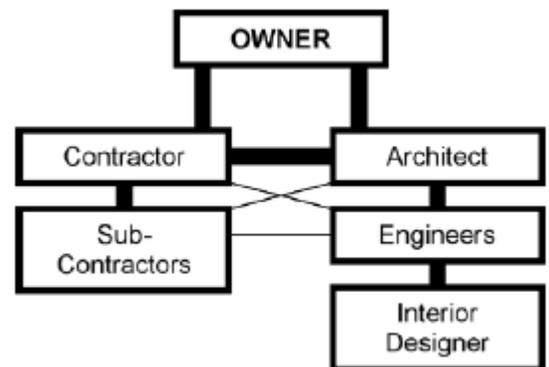
In the past, many believed that design-build projects led to mediocre design because the design-builder was more concerned with cost and constructability. Though this may still be true today, this concern is waning as contractors and architects become more experienced with DB.

With DB, some of the benefits include lower overall project costs, a single point of responsibility, and a decreased project completion time. DB can be a quicker and less-expensive way of completing some projects, but that does not mean this approach is without disadvantages.

There are pitfalls, especially on the design and engineering side, and those pitfalls start right from the beginning. How the architect interacts and supports the owner and contractor is huge. Often, the architect's contract is with the contractor, but the architect needs to design a project around the owner's ideas and needs.

Even with a budget identified early, the owner still tends to ask for things that cannot be afforded. If the architect does not incorporate these items into the work, the owner gets upset. If the architect does incorporate these things into the design (and the design is over budget), the contractor becomes upset.

The architect is responsible for meeting all of the needs of the owner, while also meeting the



budget outlined by the contractor.

If, in the end, the architect's design is too costly, the contractor will make value engineering decisions, many times removing or redesigning portions of the project to meet the budget without asking either the architect or owner or determining the final impact to the project.

Architects and contractors are inherently different in personality and project approach. Each has different ways of working, different schedules, etc. Identifying those differences early and selecting a company to work with that has some compatible strengths can help toward establishing a successful team. It's

not about the capability of the personnel, but the culture of the office that is important. Not only should architects and contractors be able to work together, but they must ensure the team is always on the same playing field.

If you have not had any experience with DB, this approach can be extremely difficult and frustrating. This approach is not one in which to get on-the-job training.

## Negotiated Select Team (NST) Used about 70% for private medical projects

In this approach, the owner selects a contractor *and* architect to collaboratively work on the project. This may be done by either first selecting an architect who works with the owner to identify the best contractor or vice versa. The two are contracted separately, but both represent the owner during all project phases, including design.

This method is used roughly 70 percent of the time for private medical projects. Some people refer to this method as “design-build,” but it is really something different.

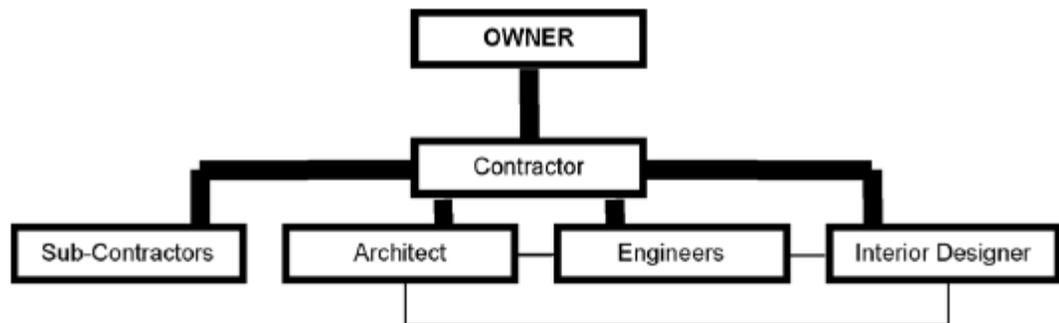
### Pros & Cons of NST

This approach is somewhat of a compromise between DBB and DB. We have used this approach the most in the past 10 years. NST is a delivery system the owner controls. Both architect and contractor are selected by the owner at the project onset. Each has separate contracts with the owner, but together they work as a team to identify the

project, budget, and method of achieving all project goals.

The NST approach fosters a team environment, while maintaining accountability.

In fact, many issues may be determined by the team, including whether the architect is in charge of all engineering for the project. Alternatively, the architect may not have a rigorous role during construction, but may play a role supporting the integrity and quality of construction for the project. Again, these are determined by the team early in the design phase.



## Conclusions and Advice

Educate yourself about your choices and make your best selection. Do not choose one approach and then, mid-project, decide another approach is a better choice; once you choose an approach, stick to it. Do not perpetuate situations that can pit the architect against the contractor.

Remember to do your homework and search for the appropriate professionals who have appropriate experience and expertise.