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There is No "I" in IPD!

Mike Whaley

Director of Preconstruction, J. H. Findorff and Son Inc.



Growing up playing sports, we probably all heard the reference to the old phrase, "There is no 'I' in team." Well, it is my opinion that this same phrase has to apply to IPD. There can be no "I's" in IPD.

But please—don't come up with a new acronym for Integrated Project Delivery! We have enough acronyms and IPD will serve us fine.

As I read more and more articles about Integrated Project Delivery (IPD), I am concerned about how little discussion there is on what I believe is essential to a successful IPD project—the need for an organized/structured **TEAM** building process as a part of the project plan. Obviously, the focus of previous articles has been on very relevant issues: discussions on the implementation of BIM, legal aspects of three party contracts, and success stories of major projects delivered on time and on budget. These are significant topics and we need to learn about how this process works. However, my experience indicates that to maximize the full potential of IPD, we also need to focus on team building as an organized step in the process.

There are four aspects of team building that need to be considered: First, how do you build a team? Second, is the relocation of the team to one central location worth the investment? Third, how does BIM figure into the team equation? And finally, after the team planning, is everyone performing as a team? This article attempts to address each one of these aspects.

A Brief Look Back

If you take a look back at the traditional delivery process (Design, Bid, Build) in the AEC industry, the approach to design and construction had everyone very comfortable in their various silos of responsibility. The silos of work, in fact, defined the team. The Architects could work away in their world and then throw their documents over the top of the silo to the Contractor. The Contractor could review the documents in isolation and throw their ASIs, RFPs and COs back over. The Owner, meanwhile, sat in their silo, hoping that everything was going great because they had picked a good team!

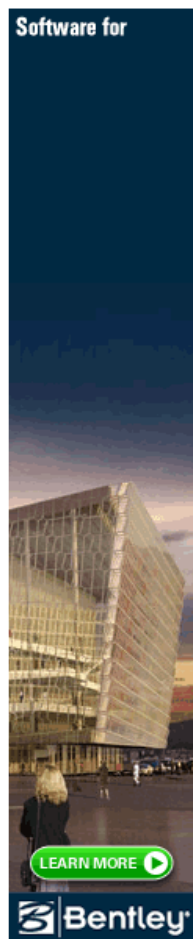
The fact was that things *worked*—not perfectly, by any means, but they did work. And they worked because people understood their roles and responsibilities—the "team" was well defined. It could be adversarial, but that was part of the process and people expected it. Let me be clear—this process *can* work. In my thirty years in the business of designing and constructing projects, the traditional process has delivered some very successful "integrated" projects, even before IPD began to be discussed.

So what made it work? I believe that four things were consistent in those early projects. First, everyone came out of their silos and worked toward four common goals: **Trust** (commitment that we were all working together); **Enthusiasm** (that this was an exciting group of people to work with, and that it was a good project); **Appreciation** (of the various skills that everyone brought to the project); and **Mutual respect** (often based upon previous project experiences). We did not have a three party contract, we did not have a clue about what IPD was, but we were all working towards the common goal of a successful project.

Let's Consider IPD

Now with IPD, we are asking everyone to tear down the traditional silos and responsibilities and all get together in one big "happy silo." Be warned, however, that just putting everyone together does not fix the problem. In some cases, these are participants that have no prior experience of working together; they have simply been brought together by an RFP or an Owner. If old prejudices and a lack of respect exist in these new "forced" relationships, this will not be an integrated process no matter what it is called.

I fully support IPD. The principles and concepts are great and I believe it is the way of the future. I think the potential for improvement in productivity, quality, sustainability, and financial rewards for the entire AEC industry are available with IPD. But as an architect that has lived in two of the three silos (design and construction), I have experienced that just putting everyone into one silo does not make for *Camelot*. A case in point, I was recently discussing IPD with an architect working on a major IPD project and he was all excited about the concept. Then he said, "This is a great concept, but I have never met a construction manager that can accurately estimate a project." Conversely, comments such as "Why don't they (the architects) just quit designing and let us build this?" have rung through many a contractor or construction manager's office. These perspectives make it tough to be an integrated team.



So how do we work beyond these? The answer is to build Trust, Enthusiasm, Appreciation, and Mutual respect. If you are getting into the IPD silo, you need to build a TEAM before you build an Integrated Project. Here are four initial suggestions to help with that process:

#1. Make an investment in the project to have a professionally facilitated team building exercise. The participation by every major team member—Owners, Architects, Engineers, and Construction Management teams—is essential. Even if your teams have worked together in the past, the process of gaining knowledge of the other team members, their skills, and mutual respect is worth the time. If your teams have worked together, maybe this can be an abbreviated team building exercise, but don't skip it assuming everyone is on board. Remember that the objective of the team building exercise is to develop Trust, Enthusiasm, Appreciation and Mutual respect focused on your project. There are many organizations and groups that facilitate these kinds of activities. They range from a one day seminar to several days and can involve everything from puzzle solving to rope courses. The participants must realize that this investment in time improves the overall mutual understanding of who you are working with. If team members do not see the benefit to this investment, then how invested are they in the IPD process?

#2. Team building needs to be more than a one time exercise. The initial core team obviously needs to go through it, as pointed out in #1 above, but as the team expands with more consultants and early trade contractors, the organized effort to facilitate team building must continue. As the integrated team expands to include cluster teams, early trade contractors, specialty consultants, and others, the team building exercise should be repeated. This should be done not only to engage the new team members, but it is also a good opportunity for the core team to “renew” the team building process and to incorporate more of their team members into it.

#3. The team needs to establish and agree to a process for decision making as early as possible. Often, teams can get stuck in an infinite cycle of “paralysis by analysis.” How we make a decision is a very important question for the entire team to discuss and agree upon. One of the most effective ways of establishing a decision-making process that I have discovered is a little known system called *Choosing by Advantages (Making Choices Correctly)* by Jim Suhr (<http://www.decisioninnovations.com>). This process is effective, powerful, and fits the IPD concept because it works as a team building process in the decision-making.

#4. Lastly, not everyone can work on an integrated project. Some old prejudices and opinions are just too deeply rooted. As you form your team and go through team building exercises, you may find some team members who are still muttering some of the negative comments described earlier. As hard as it may be, when this happens, the core leaders for the IPD process must address this with the individual and, if necessary, remove them from the project. One person can cause a huge disruption to the IPD process, so they need to either accept the team and process or move on!

Team Relocation

We started by talking about investing in a team building exercise to establish the components of TEAM (Trust, Enthusiasm, Appreciation, and Mutual respect). I think an equal investment needs to be considered for the location of the team. IPD project or not, experience tells us that if you're working with someone on an assignment and they are close by, it just makes things easier. When you have a question, it is always easier to walk across the room to get an answer than by sending an email. Also, it is tougher to avoid the person standing at the desk with a question!

Therefore, the investment in a single “big room” project office where everyone A/E/C is working together, as early as possible, pays huge dividends, not only from the ability to react quickly to issues and questions but from the perspective of fostering the team atmosphere. Both traditional and integrated projects have utilized common office space during the construction of the project. A combined field office for the contractors and the A/E team during construction expedites problem solving and improves communication. So why not start this process early? To maximize the potential of an IPD team, the incorporation of the design and construction team into one common office during the design and document process brings similar rewards.

Fully realizing that relocating staff and setting up temporary offices can present financial and other hardships for the team, this is a sensitive project issue that may require some special accommodations for team members. Once you get beyond these hurdles, the cost is worth the reward, as verified by many of the teams that I have spoken to that have gone through this effort. Conversely, experience has demonstrated that the remote location of various team members detracts from the true integrated approach. Even ambitious plans for team meetings every week or every other week in one location does not provide the same results as a combined office. So, if you are making the investment in the IPD process, a combined office is essential to maximize the team approach.

BIM Team

Finally, the teaming of our technology groups is essential. One of the great applications of BIM technology is on an integrated project. To realize the potential of this technology, the team building for the BIM team needs to start as early as the preliminary design sketches. This team needs to decide how the model will be created, how it will be used, where responsibility levels of development reside, and a multitude of other technical issues as early as possible.

Can you do an IPD project without BIM? I would say yes, but you lose a huge advantage and will realize a much lower return. With the sharing of BIM models, everyone on the team, including trade contractors and suppliers, can maximize the coordination efforts.

Our experience has been that the model an A/E team builds has different parameters and purposes than the model built by a construction team. In an ideal world, the full integration would eliminate the need for the "remodeling" from one phase or team member of the project to the next. But the development of one all-encompassing "mega-model" that will work for all the disciplines is probably somewhere out there in the future. So knowing that the ideal world is not quite ready to be realized yet, the integration of the BIM team (A/E/C) from Day One can at least minimize the remodeling, even if it does not reach the ultimate goal of one all-inclusive model.

At my firm, what is of concern to us is that many of our subcontractors and suppliers are more advanced at modeling than our design partners. We fully understand that part of this is due to the fact that, for aspects such as ductwork, etc., the manufacturing industry has been doing modeling for years to coordinate with fabrication equipment. This has allowed these industries to be ready to "jump" on the BIM bandwagon faster and, quite honestly, has also given these sub-contractors financial advantages in this tight market by allowing them to pre-fabricate, thereby reducing waste and improving schedule/delivery. On the other hand, many of our design partners are opening the "box of BIM" only now.

We have had the box open for five years and although we have realized some great productivity initiatives, we still know that we are just scratching the surface of what BIM will do to our business going forward. In our part of the country (the Midwest), we have a few design partners that have really embraced BIM technology and, as we look for strategic alliances on projects, this is becoming an important characteristic to us in our team selection process. As IPD becomes the preferred project delivery method, there may very well be some design firms that will unfortunately be left behind because of their lack of ability to provide strong BIM modeling.

Conclusion

To call a project an IPD (Integrated Project Delivery) project is meaningless without the strength of a TEAM that is committed to the process. These teams cannot be formed without effort and planning. One of the keys to IPD is to allow each of the participants to maximize the potential of their individual area of expertise. Designers are not estimators and estimators are not designers. But the strengths of each are needed to realize a successful project. Our teams need to realize that there are a lot of very intelligent people in each of the "silos." We don't all think the same way, but we all have great things that we can bring to a project. So go out there and build your team before you build that IPD project, and everyone will walk away with a new respect for this delivery method.

About the Author

Mike Whaley currently serves as the Director of Preconstruction at J. H. Findorff and Son Inc., a self performing general contractor with offices in Madison and Milwaukee, Wisconsin. The firm has been in continuous operation since 1890, and is currently ranked 242 in the ENR Top 400 Contractors. In his role as Preconstruction Director, Mike leads a team of sixteen professionals involved with Timberline estimating, BIM and construction visualization and integration, LEED initiatives, scheduling, constructability reviews, and Owner preconstruction project management services. His background includes over 25 years in the profession of architecture, including being a partner in firms in suburban Chicago and Madison, Wisconsin, before joining the Findorff team. In addition to his role at Findorff, Mike currently serves on the AIA Committee on Integrated Project Delivery. He can be reached at mwhaley@findorff.com.

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