Avenue Scan
Point Cloud *& Cad Drawing*

OVERALL POINT CLOUD

STREET VIEW 1

STREET VIEW 2

FLOOR PLAN

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Working with a local surveyor to augment their service offerings to include scanning.

NATIONAL TEAMWORK

was really surprised at the response to a question in the latest issue of the USIBD Cornerstone Report. It asked "Do you pair up with other companies to supplement your hardware capabilities?" The response was a resounding "Yes". The Cornerstone Report was focused on hardware so the question was pointed in that direction, but I don't think the openness to teamwork stops there.

I would have bet the farm that those open to this kind of teamwork would be in the minority, primarily due to the nature of our business. We're all developing workflows and materials to be more efficient and effective than our competition. Opening ourselves up to a close relationship with a competitor could give them some valuable insights into our trade secrets.

Many of the teams we've worked on were created to temporarily augment the existing structure in order to increase/diversify existing software, personnel, experience level or hardware capabilities. This is usually done for the purpose of accomplishing a specific goal on a single project. I use the term "temporarily augment" because some traditional relationships exist to permanently supplement service offerings (the relationship of Land Surveyor and aerial provider comes to mind).

Unlike permanent relationships, these temporary teams usually offer competing services to a common client

BY TED**MORT**
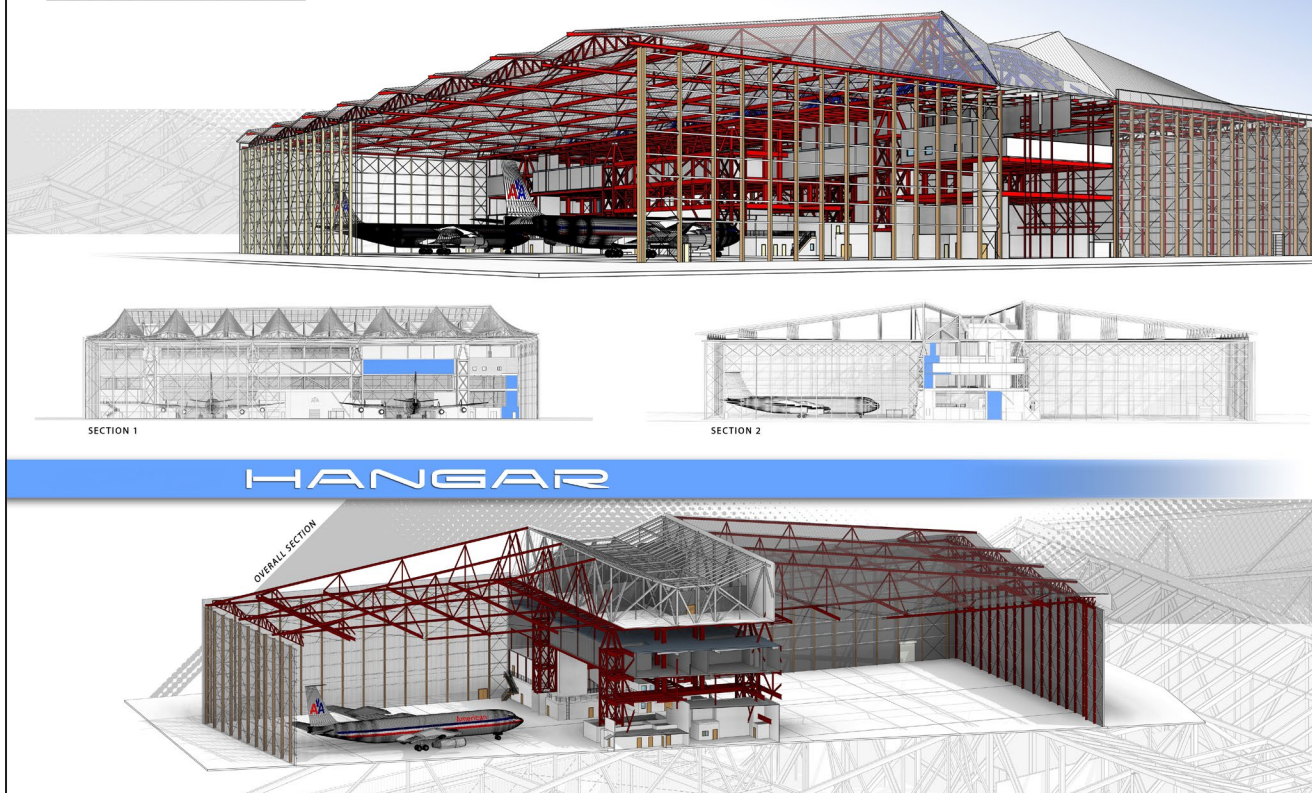
Large scale work like this hangar produced in a laser scan to Revit workflow can use the team approach to increase efficiencies and skill levels.

base. This dynamic can complicate even simple communication as everyone is a bit cautious about how much information they share with the team.

I've had the opportunity to be both the 'outsourcer' and the 'outsourced' on many occasions and each role has several factors that need to be considered. I'm going to break down a few common points from each perspective that have helped us become a good team player.

Communication: *this is what everything is built on, take the time to get this right or nothing else will work.*

- Outsourcer—Leave nothing unknown. Who will be the (single)

point of contact for your team? What is the preferred method (e-mail, phone call, etc.)? What are the minimum expectations?
- Outsourced—Walk the fine line and be persistent but don't pester. Chances are that the outsourcer is juggling a number of responsibilities; by being refined and to the point you can help them help you.

Expectations: *not just the scope, what else needs to be established ahead of time?*

- Outsourcer—What traits define a successful outsourced resource to you?

- Outsourced—What do you need from team to be successful?

Milestones: *we're responsible and dependent on each other; a ripple here goes a long way.*

- Outsourcer—Set these up and sandbag. Plan on the unexpected and a few missed deadlines. Give yourself some flexibility but make sure the goals are still achievable.
- Outsourced—Be honest during this discussion. Make sure you can meet the goals defined by milestones. If your ability to meet these deadlines is dependent on factors outside of your control, make sure it's known now.

QA/QC: *this happens at least twice, don't cause unnecessary repetition.*

- Outsourcer—Check the work being turned in to you and make sure a plan is in place for the outsourced team. Use your influence here to make sure the QA plan is complimenting the plan being used by your outsourced team. This prevents you from making checks that are irrelevant or repetitive.
- Outsourced—Be flexible. You know what you're doing and already have these steps in place, but to be a great addition to the team you will need to make concessions. Just make sure those concessions don't reduce the effectiveness of your existing workflow.

Payment: *be reasonable and make this a conversation if needed.*

- Outsourcer—You have contractual stipulations with the client and may be a pay when paid. Just realize that your outsourced teammate is completely dependent on your diligence in turning the cash around fast. Keep them in the loop here as much as possible and let them know up front what you're expecting from the payment source.
- Outsourced—Make sure you can afford to wait, you're eating the cost up front and even though you say Net 15, you're not going to get it. Be courteous with the Outsourcer, if you don't trust that they'll pay you as soon as they receive the funds you may have made a mistake getting involved in the first place.

Lessons: *get 'Six Sigma' on it.*

- Outsourcer—Schedule a follow up meeting with the team. Go over the project details and talk about the challenges faced along with the steps to avoid them in the future.
- Outsourced—Look for constructive feedback and give it as good as you get it. Make sure that your challenges during the project are addressed as well.

During that last point on "Lessons" I'm not suggesting that you actually need to use a Six Sigma approach, just apply the principle. After the project is complete, dissect it and have those uncomfortable conversations about the parts that didn't work so well. Only through this acknowledgement can we start to refine and develop an improved process for the next opportunity together.

This industry is starting to have large opportunities become more readily available. Those that are willing to work together will be best suited to take down these giants. These relationships should also be looked at as tools to help you maintain a workload. A strategic partner winning a huge project out of the blue can make for a good month on your financials too.

In a recent project we teamed up with a local surveyor who did not offer laser scanning services but wanted to implement the technology on a mile of topography along a busy arterial street. In this case they knew that there would be return trips required as the design firm worked out different options and saw the opportunity to make those return trips virtually.

We started out with establishing a solid line of communication between their PM and ours. In addition to the typical information exchanges, they worked together to set up future calls that would occur at predetermined points in the project tied to milestones— upon arriving on-site, after completion of the registration, 10%, 50% and 90% post processing completion stages.

When it came to expectations, they worked together to establish a thoroughly refined scope of work. The surveyor had some perspectives of the work that weren't conveyed originally and the understanding of his position and concerns allowed us to preplan a few additional set-ups while removing a couple that wouldn't result in as much value. They also decided that the best way to stay aligned was through virtual meetings. We used a web based screen sharing software to host our meetings, being able to trade off control allowed them to easily convey their points.

The milestones almost took care of themselves because the communication schedule took into consideration the points in the project that were sensitive. Upon arriving on site, the team would confirm that everything previously established was still accurate. They also had the opportunity to sync up with the survey crew to coordinate control points. A meeting after registration served as an opportunity to review the data captured and ensure appropriate coverage was completed. If changes needed to be made in the direction of post processing, the 10% meeting should help them become apparent. It also kept our costs predictable because revisions could be made through the rest of the project and not reworked backwards after the drafting was complete. The 50% and 90% meetings kept everyone abreast of our progress and let the surveyor relay the team's position to his client.

Like all of your companies, we have our own QA/QC system in place but we were able to add a few features to give the surveyor a sense of comfort. After tying into their control points, we asked them to set a few 'blind' points that we didn't have coordinates for, but would check into. This list of our coordinates for the check points would be delivered and cross checked to the surveyor's record to ensure we were on the mark.

Knowing that they were expecting payment within 30 from invoice to their client also let us prepare our accounts receivable for the understanding that this would be close to a 60 day turnaround on revenues. This kept our collectors from making 30 and 45 day calls, saving the frustration of the client having to explain the situation repeatedly.

A few weeks after the end of the project we got back together to talk about what went right, what didn't and how we can improve on future work. It turned out that after figuring out a couple of these points, we were both able to reduce our cost moving forward and remove a couple bottlenecks.

The term teamwork gets thrown around internally through almost every business and should be given just as much consideration when looking outward. Whether it's a typical client or an opportunity to work with someone that you usually compete against, investing in the relationship will increase your odds of success this time and the next. ℹ

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