Project Management 101

Prepared by Trent J. Keenan, PLS & Kristina Poulter

An abstract of The Geoholics Podcast – Episode #66.5

Are you a project manager?

Even if your title doesn't include those words, chances are you're responsible for some elements of project management.

Like anything, project management is a skill set that can be practiced and honed. It involves things like visualizing the steps ahead, getting buy-in from key stakeholders, and managing team members and vendors.

Glen Abramowski, Supplier Program Manager at Boeing, has spent the last three decades in the realm of project management. Tony Mintrup is an IT and project management professional at Klein Tools.

As guests on surveyor Kent Groh's Geoholics podcast, the two men broke down how they conceptualized project management from start to finish.

Read on to hear their four-step thought process, and gain tips to help you whether you are running a survey firm or are considering a proper project manager role.

Step 1: Project initiation

The first phase of kicking off a new project is the initiation phase. For Tony, this is what he calls the project charter.

"Number one for me is project charter. You've got to define what the scope of the project is. Who the stakeholders are, a rough timeline, what your objectives are with the project. If you start with that, you can run any project," he said.

Yes, there are certainly more steps that follow to enable pulling off the project itself. But if you are able to encapsulate the key details summarized below, you'll kick off the project in great shape.

1. Project goals
2. Project stakeholders
3. Project timeline
4. Project risks

There are lots of fancy project management organizational tools out there. But Tony's tried-and-true system is to get the above four details summarized in a 1-2 page Word document.

Use that document to get buy-in from all key stakeholders, getting their literal sign-off if necessary.

Tony also takes time in this first phase to think through any risks associated with the project.
Risks can include things like:

- Critical vendors
- Critical funding
- Critical resources

You need to think through what happens if you can't get the specific vendor or funding that you need. What will be the Plan B course of action?

Sometimes the project manager isn't the one spearheading the very start of the project. If that's the case, try to make sure you're at least in the proverbial room and looped into these key conversations. Otherwise, it will impact your ability to do your job well.

"Ideally, the project manager's involved from the start. They're the one that's doing the initiation," Tony said. "But if that's not the case and it's handed to you, I do the same thing. I say, whoa, we don't even have a charter yet. Let me see what you got here.

Let me build the charter, and let's go from there and think through all these things because if we don't, that's the number one risk."

Kicking off a new project without proper initiation in the form of a charter means that you run the risk of unclear objectives and wasted money.

In his work for Boeing, Glen takes a similar approach and adds one additional factor to the mix: thinking about project competitors.

"I always have to think about competitors in addition. So that might drive how we tweak the scope. Now, obviously, you may have a directive scope from the prime contractor for our customer. But you may want to try and slip some things in there to try and throw your competitors off or give yourself an advantage," he said.

This ties into thinking about your company's long-range strategies and how an individual project fits into the bigger picture than just the value of the project itself.

Step 2: Project planning

Surveyor Kent Groh jokes that he lives by the "Seven P's" tongue twister when it comes to project planning: *Proper prior planning prevents piss poor production*.

But all laughs aside, the planning stage is critical.

Even if you're a surveyor focused on $1,500 lot surveys, setting up smart processes can still lead to increased profitability.

Map out major milestones

Planning your project takes the outline of your project charter a step further. It involves mapping out critical details like major milestones.

"I like to say, all right, here's the major 5-10 milestones, or deliverables. And roughly, this would take six months, four years, whatever. So that's what I would put in the charter, just so the stakeholders have an idea and we can come to some agreement," Tony said.

If you apply this to the world of surveyors conducting lot surveys, maybe this translates to an email template that you use as the base for every single project. Then, each time you get a new proposal, you change the name and send out the email in a quick 15-20 minutes.

For Glen, the planning stage is all about simulating the project in his head. Just like competitive athletes visualize themself doing a race, you can do the same thing as a project manager.

"When you're in the planning phase, in your mind, simulate the first couple of days, simulate the month, simulate the year. You've done these things a hundred times, so simulate it in your head," he said.

Use this process to tease out those milestones, then write them down on paper. This will help you start sequencing the project in a logical order.

"If you're in some of these smaller projects, just list the four or five things you want to do today as part of your plan. Then simulate it in your head, and then you'll start to be able to sequence the things that lead you to that milestone and what kind of resources you need along the way," Glen said.

Once you have your milestones written out, treat that list as a map.

What tasks need to be completed to take you from Point A to Point B? Then, from B to C?

"Just pretend you're going to do the job yourself. Then along the way, okay: that means I need that GPS. I better go get that," Glen says. The process is like putting together a physical toolkit to head to a job site, but at this point, it's all in your head.

The "tools" you need can include things like:

- Physical tools
- Paper resources
- People
- Equipment

Think about everything possible.

"If you're going to go to someone else's site, what are the ingress/egress? Where are the safety points? How do you keep yourself safe while you're doing the job? All those things are part of the resources," Glen said.

Consider quality control

Creating a thorough schedule based on project milestones is key to quality control.

A big project is like a line of dominos: if you tip over one domino, the rest will start to fall.

"It's gotta be built into the schedule. It's not; here's my project schedule of tasks, and then quality control's off somewhere else," Tony said.

"Even if it's one task, you gotta account for it. What I've learned in projects is come up with a great plan. Stuff happens. And whoever's at the last third of the project that has to deliver, they're already screwed. Because the delays just impact them. And that's usually quality control comes at the end."

Whether it's securing the critical resources, you identified earlier, buying materials, or scheduling personnel, you need to help set up the rest of your team for success in their own roles.

"You've got to know your vendors, and you've got to qualify them in advance. I think that's part of quality control and risk assessment as well," Tony said.

'When I think about risks, people sometimes confuse risks and issues. Risk is like a 'what if' scenario. What if this happens? What are we going to do? And then are we going to try and eliminate the risk or avoid it? Are we just going to mitigate it, so it doesn't have as much of an impact?"

Ensuring quality control might look like a detailed onboarding process for vendors, so everyone's in the loop and working towards the same goals and expectations.

Glen said that there need to be clear signals planned out in his mind that signify you are leaving one milestone and heading into another.

"What are the things that I need to demonstrate verification to the overall requirements of that project at that phase of the program? That's where your quality comes in. Because they're going to be part of those artifacts and making sure that you prepare those artifacts in advance of the milestone, and then you document them after," he said.

All of this activity is in service of demonstrating completion and showing compliance with the project charter and expected delivery requirements.

Step 3: Project execution

If you plan your project well, the execution itself should be smooth sailing.

For Glen, execution is a matter of breaking tasks into chunks and ensuring the schedule is moving according to plan.

Block your tasks

"There are lots of complicated artifacts that you can use: integrated master schedules, integrated master plans, earned value management, all kinds of really complicated things for big projects that once you're in will give you an indication of whether you're on track," Glen said.

"I really do try to keep this thing to simple blocking and tackling," he said. "From week to week, you can just keep certain things like an action tracker."

By action tracker, he means keeping tabs on:

- Who is responsible for action X?
- What does action X involve?
- When is action X due?
- Who does action X impact?
- What happens if action X is not completed?

The real key here is knowing what needs to get done and when.

If you are working with outside vendors, keep them accountable by having them provide a schedule to you based on your desired due date.

"If I'm working with a particular supplier, I want that I want them to develop a schedule, and then tell me where they feel like they've fallen off their plan, and show me using their schedule," Glen said.

Communicate with your team

As a project manager, you typically aren't doing the hands-on work yourself. You're relying on a team of internal and external people to get the job done.

Keeping an open line of communication and developing a high degree of emotional intelligence is important.

"At the end of every meeting, I like to ask what kind of help is needed," Glen said. "I go around the room and say, no, literally I need you to tell me, do you need any help? What is it? And if you have something, bring it up," he said.

This practice develops a culture where open and honest communication is at the forefront.

The more your team feels comfortable sharing challenges and asking for resources, the quicker you can identify new risks and help solve them.

Tony agreed. "You've got to have a great team, and you've got to create that. People don't just always fall into excellence. Every day, you've got to manifest that. And that's why there are project managers that can do that, and there are project managers that can't, and they just manage the schedule."

If you can manage a schedule, you'll be a good project manager. If you can manage people effectively, you'll be a great project manager.

"You have to care about the project. Number one, you care about the customer," Glen said. "And then literally care about the people that are working within the construct of this project. And it's not always easy to do because there's lots of stuff that comes up. You realize that people are people. They're human."

Communicate with your client

As the project progresses, it's also important to communicate regularly with your client.

"Depending on the project, you could have a standard check-in with the client and/or stakeholders," said Tony.

For large projects, Tony's meeting schedule looks something like this:

- Daily scrum meeting
- Weekly team meeting
- Weekly client meeting
- Monthly executive meeting

Tony's learned that honest and regular client communication is best.

"With the client, what I've learned is you talk to them frequently with an honest status—whether it's good or bad—and let them know. If there's something wrong, what are you doing about it? Don't let there be any surprises, or them find out another way. It's got to come from you," he said.

Glen said that sometimes, a client won't be as concerned about an issue as you expect. In fact, they can often help you navigate hurdles that come up.

"Sometimes your customers can help you solve problems too so that when you're open and honest with that, they can help you. And then there are times where you can help them in solving some of their problems," he said.

"Everything is a relationship. You hope this is something that is not a one-time thing. You want to try and establish long-term relationships with not only your team but your customers."

Sometimes client communication is related to change management if something comes up that impacts your project scope.

If you have a good relationship with the client, these conversations are easier. You can work with the client to confirm why the price is increasing or why the timeline is extending.

Tony likes to add an extra 20 hours to the project at the very beginning that are dedicated to change management in the contract. Then, if the funds aren't needed, they are refunded to the client.

"That way, if things come up, we can just take care of it. So we don't have to have this formal back and forth change control. And then we're going to track that. And if we end up using fewer hours, we'll reimburse you," he said.

"Or you tell them, all right. We're budging these hours. This is exact. Anything beyond this, we have to do a change order. And then they just know upfront, and it's documented it's in the contract."

This approach won't work for all projects, but it's been an innovative practice that serves him well for Tony.

Step 4: Project close-out

It's a great feeling to wrap up a project and check it off your list.

But the best project managers don't end their project involvement after the final payment is received.

The project close-out phase is a great time to document what worked well, what didn't, and the associated lessons learned.

Tony holds a project debriefing session, where stakeholders are gathered together to both celebrate and review those lessons learned.

"You're celebrating for sure. Here's what we accomplished. Here's what we overcame. Here's how you helped us out, customer, client, vendor, whatever. Make everyone look good. Be humble about it, and document it. Say hey, here are the things that we know we would repeat or do differently the next time we work together. Just keep assuming we're going to do work with you again, and keep that relationship going," he said.

Glen agreed that project completion is a natural place to start selling again and to plant the seed for getting the next project with that client on the books.

"Maybe you say okay, we finished our part. And now there's still life to the client's project. And you check in on occasion to find out how was your product being used in the overall project? Is it still working?" he said.

Checking in on past projects can continue months later. After all, the true lessons learned may only be discovered once the completed project or site is used.

Any additional learnings that arise can go into your project recap and help you do better on the next project. They can even help you look better in the eyes of your client if you move to address them.

"They may say, ah, we're really frustrated with X, Y, and Z. And you go, oh, that would have been an easy fix. And maybe you do it for free because it's so easy. And then you're like, holy cow. You've established a relationship that's going to set you apart from your peers," Glen said.

While there are project management certification programs out there, they are helpful but not essential. The true skills of project management are learned on the job.

When done well, project management is a role that can truly add value.