



Projects In Less Time
Taming project complexity



Spot Delivery Problems Early

Building Blocks For Successful Project Delivery

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5 Early Warning Signs of a Troubled Project

Thousands of surveys around the world show that projects are rarely delivered on time, on budget and in scope. Here are the warning signs and what you can do to turn things around.

You don't see it coming until it's too late. Everything was "green" until it wasn't. All parts of the project were close to being on time. At least until they weren't.

If you knew earlier, you could have made changes that wouldn't be as costly and damaging to your customer relationships as the choices you're making now.

That light at the end of the tunnel? Definitely a train.

What to do?

Most project managers and executives assume that since the schedule showed the project was on time, it must have been a bad schedule that caused it. If we had planned better, we would have finished on time!

Well, maybe.

Projects are not abstract things, lived out in spreadsheets or software.

There is no such thing as a perfect plan, no such thing as a 100% accurate forecast. After all, who can predict the weather?

Uncertainty is What Makes a Project a Project. When we start the projects, we know many things we will encounter on the way to completion, but not everything. That means surprises are a way of life in the project world. Any plan is made up of educated guesses about what will happen in the future. How accurate could they be?



Experienced project managers develop coping strategies: negotiating for more resources, disguising contingency, stakeholder management, risk management processes, increasing the amount of detail, frequent re-planning, and more. All of these are good to have, but they don't get at the root of schedule variation; they're coping strategies for the surprises that plague every project.

No matter how good you are at planning, you will never have a perfect schedule. You can make them better, but they will never be perfect. Improving your planning is not where you're going to find the biggest opportunity. You be nimble during execution. If you're not, your great plan will not matter anyway.

Let's agree that your schedule will not be very good. How do you know if you're in trouble? How can you quantify your nimbleness? How do you pull out of a bad situation?

In the following chapters, I'll be showing you how to see project risk, then a strategy for pulling out of a bad situation.

Three Secrets to Seeing Project Risk

- ◆ Manage Uncertainty
- ◆ Execution Behaviors
- ◆ Make it Visible



The Early Warning Signs of a Project in Trouble

Project planning is a bit like time travel. Who knows what we'll find there?

So rather than be the best forecaster, build the best time machine; the project delivery process. Your execution behaviors are the best predictors of project success.

While we can find opportunity in every plan (I started my career as a scheduler), look first at what the project team is doing.

- ◆ How they're managing the project.
- ◆ How flexible are they?
- ◆ Do they respond quickly?
- ◆ Decisively?
- ◆ How are they responding to the day to day surprises that are presented to them?

There are behavioral indicators of whether your project will be on time. They can be observed, measured, and improved.

1. Focus on the future; what needs to be done, not what has been done
2. One team, one goal; the team members' functional objectives are subordinated to project objectives
3. Task priorities are stable; they do not change from day to day so resources are able to work on each project task until completion
4. We know where the leverage points to accelerate progress; bottlenecks are clearly identified and communicated
5. All leading to rapid resolution of the unexpected

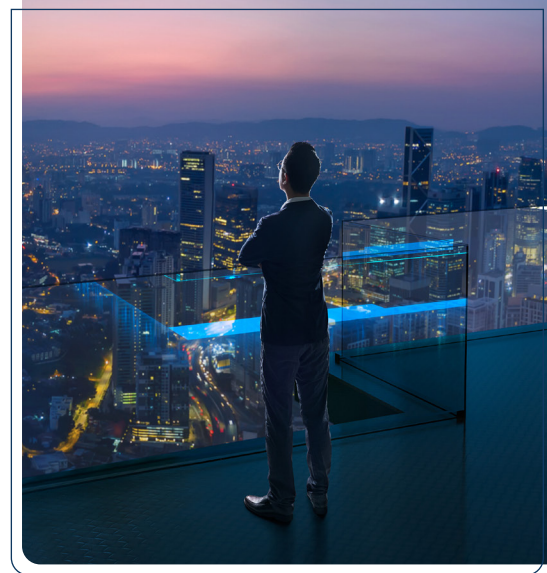
So let's look at your team. Are they doing any of the following?

Living in the Past

In many projects, reporting progress is a substitute for moving forward. True, you must understand where you are relative to where you're going, but reporting completions is not a substitute for managing the future.

If your team is living in the past, they'll be spending a great deal of time reporting "progress"; percent completed and giving the reasons why things are not done. They're a little stuck; working to understand where they are in the project. Project meetings are spent sorting out what has been done and negotiating priorities. They're not looking forward and project progress reflects it.

You won't get to your destination looking through the rear-view mirror.



[Check out this video](#) to learn more of this symptom and what you can do about it.

Conflicting Goals

Many times, the only person who is actually on the project is the project manager. He then spends his time on enrollment and buy in activities, rather than the core task of moving the project ahead. It happens so frequently, there is a section of the body of knowledge devoted just to stakeholder management.

If any team member has conflicting goals, they will not be fully engaged with work of the project, they may even make decisions that make completing the project more difficult. They don't respond to questions quickly, don't come to meetings, are not working with the rest of the team to move the project forward.

In order to win, everyone on the team must have the same goal.

[Check out this video](#) to learn more of this symptom and what you can do about it.

Shifting Priorities

The project team members are spending their time sorting through the work to determine which tasks should have the highest priority. They'll respond to the latest communication from a customer or a friend, or a boss. They'll be switching – changing priorities for the resources (people) doing the work of the project.

When priorities are changing, more work is added to the project, time and productivity are lost, and the project is delayed.

Priority shifting breeds multitasking; the number one killer of productivity.

[Check out this video](#) to learn more of this symptom and what you can do about it.

Wandering Bottlenecks.

The project never has enough resources to complete the work at hand. Finding more resources is a constant battle. There's never enough time or budget. It just seems that the right resources are not available when you need them. The team may feel a little like they're playing project "Whack-A-Mole".

There is always a constraint that limits the rate at which the project can be completed, but if it's always moving from week to week or day to day, it indicates a poor grasp of the resource requirements to complete the project.

The bottleneck is where you get leverage to go faster. If you don't recognize it, you're just spinning your wheels.

[Check out this video](#) to learn more of this symptom and what you can do about it.

Slow Response to Problems

Many projects are riddled with the “I sent an email, but have not gotten a response.” kinds of problems. Yes, the different time zones are an issue. Yes, we get hundreds of emails a day, but a delayed response to a critical problem slows the entire project down.

A slow response to problems indicates a team that is not engaged. They have a poor understanding of what the important issues are, who owns them, and what is needed to resolve them.

The single largest aspect of project duration is wait time. The more you wait, the longer it takes.



Diagnose Your Project. Will You Be Late?

Experienced project managers and executives may still point to the plan as the biggest cause for troubled projects. Or the assumptions behind the plan. They have a point, I have never worked in a recovery project where the plan was acceptable or was even being used to drive the day to day behavior. I'm talking about leverage. In a recovery situation, you must focus on the most critical elements that will get your project back on track as quickly as possible. You can't fix everything that's wrong, you have to fix the things that will give you the biggest results as fast as possible. Re-planning your project is an excuse to delay taking the necessary medicine to get things moving. Focus on execution. that's where your leverage is.

2 Sources of Project Uncertainty

Projects, by their nature, are uncertain, but not all uncertainty can be treated the same way. Knowing where your project's uncertainty lies will help you pick the right approach to managing your project and delivering the best outcome for your team, your customer and the project owner.

Many projects are time bound, with specific dates that must be met. There are known parameters to the project outcome, but how you're going to execute are uncertain. If your project is software or product development, which is iterative, most uncertainty lies in the deliverables; you're not sure exactly what the deliverable will look like. In essence, you don't know what you don't know until you develop a prototype; you're learning as you go. In these types of projects, there is little uncertainty in the process, but a lot of uncertainty in the outcome. This is different than say, construction, where the deliverable is quite well defined. What is most uncertain is the events (like weather or errors) that lead to the deliverable. The process has the most uncertainty, the outcome has little.

Two Approaches to Managing

Scrum and Agile methods that focus on iterations to reduce the learning cycles and reduce the uncertainty. The problem with these projects is when there is a date attached, it's difficult to effectively manage schedule risk without significant time buffers.

If the uncertainty is in the process, what most project managers do to reduce it is create more detailed plans or (attempting to) closely managing the details in the plan. These projects have many moving parts and lots of detail to manage – along with the normal uncertainty they cannot manage, like the weather and mistakes. So – with all this comes complexity. That complexity is difficult to manage. Project managers lose control of their schedules. Project owners lose visibility into schedule risk. Project run late, firefighting ensues. It's difficult and messy. Deadlines are missed. Costs go up. Customers are unhappy. Business is lost. Profits suffer.



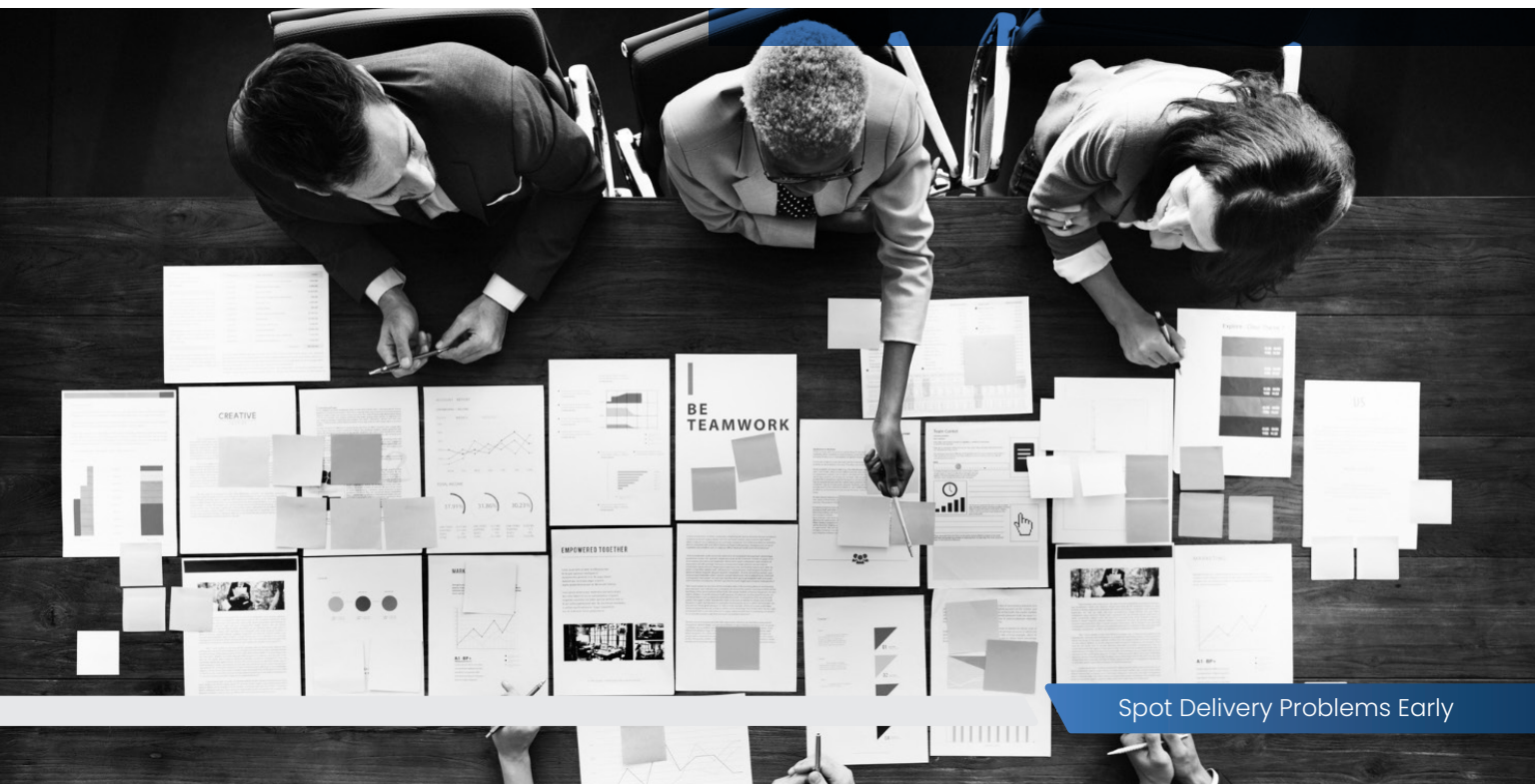
Detailed Planning is Not the Cure-All

So, the solution is not in the direction of more detailed planning, but in the direction of improving management effectiveness. This is what [ViewPoint](#) does. Stripping the project plan to its essence. Doing simple things that leverage what we know about process behavior (little's law, priority control, etc.). [Making the process visual](#) to communicate the critical items quickly. Providing feedback on the project AND the delivery process to allow the team to act early on risk and improve their delivery effectiveness.

Taming complexity.

With ViewPoint, the team always knows the most critical items to work on. They are focused on those items. There is less chaos in the project, so less stopping and starting. People can focus on the work, not on the next meeting. Tasks get done quicker. Project durations are reduced. Costs go down. On time delivery goes up. More projects are delivered. Revenue goes up. Profits go up. Project owners have visibility into the schedule risk so they can intervene when they must. Customers are happy. Project Managers are happy. The CEO is happy.

Next up, a project recovery strategy.



Governance

“

I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science, whatever the matter may be.

- Lord Kelvin

Do you have genuine insight into your project's delivery risk? Do you know the chance your project has of delivering on time or late? By genuine, I mean, something quantifiable?

Most of the time, managers look at task completion dates or schedule compliance to judge the risk. If you're on planned timeline, your risk is deemed to be low. The problem is that you can't know if that plan is a good one. You only know it's good so far. Good, in that your progress matches the plan. What if the plan is padded with extra time? Your team is only going as fast as the plan tells them to. What if there is risk later in the project? Only "so far" won't tell you if you can speed up, or if there's an obstacle ahead.

Most managers don't know if their project will be on time, until it's not.

I wrote about the importance of proactive and speedy resolution of problems. These behaviors are the drivers of results. If you want to know if you're going to get the results, observe, measure, and influence the behaviors.

All managers are at the core, influencers of behavior. What needs to be done, is done by people, behaving in specific ways to accomplish specific results. Managers exert influence to:

- ◆ Increase some behaviors
- ◆ Decrease some behaviors
- ◆ Initiate new behaviors

No matter what you're doing, whether you're improving quality or increasing productivity, it's the behavior that drives that result. I've often said the best project managers are the best negotiators. The best project managers are the ones that know what behavior they need and are successful at getting it.

Do you know the behaviors that will deliver projects on time?

If you don't know the behaviors, you can't measure them; you can't influence them.

Any project worth doing is worth doing quickly. Shorter completion times mean more revenue, sooner. If your project is not moving, the risk of late completion is rising. Therefore, the on-time behaviors to watch and measure are geared towards speed and flow

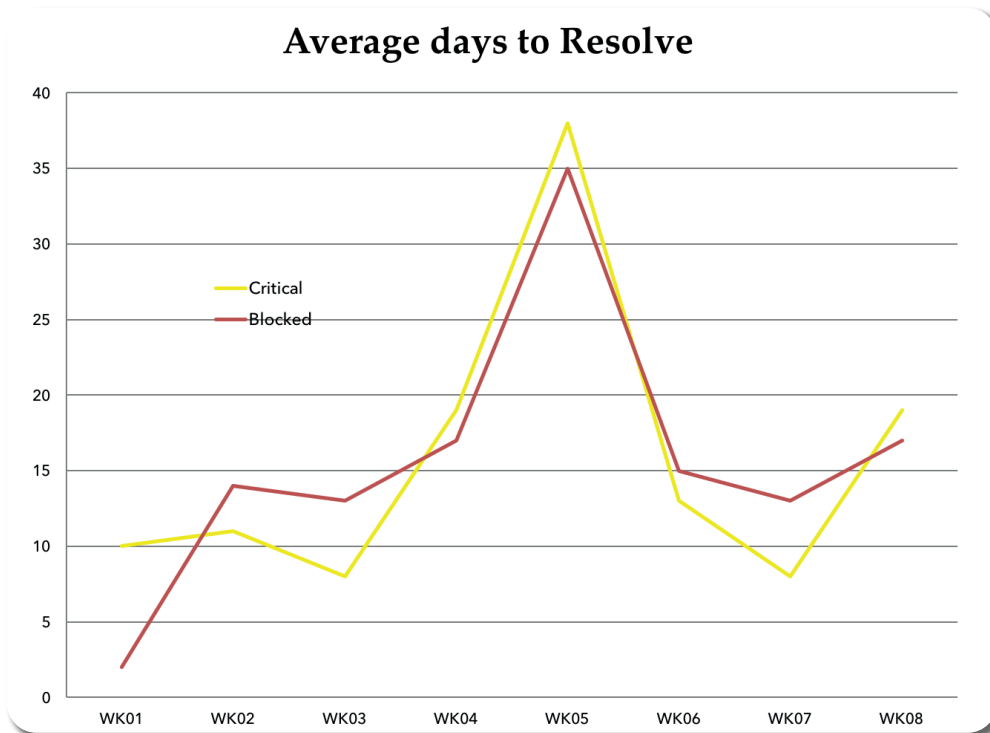
Several people have roles in keep the project moving: Executives, Project Managers, Functional (Task) Managers, and the Resources that are doing the work.

In this post, I'm focusing on just the executives. The owners of the projects. It's the project manager's responsibility to manage their behavior, as much as it is to manage the activity of the project.

The most critical on time behaviors for the executives are around engagement. They are engaged in the process of delivering projects; governing the portfolio schedule, establishing project priorities and resolving resource allocation conflicts to keep the projects moving. They're directing and leading process improvements.

You could ask, "Why should I care about process improvement?" After all, you're a project manager, you don't own the work practices of your resources (engineers, subcontractors, welders, etc.). While the project manager doesn't "own" anything except the project, you do care about schedule risk. You should care about speed (or flow). Speed is a function of the process. That puts you (the PM) in a kind of governance role, overseeing process improvements. You can't implement the improvements, but you can make sure there's a process in place to continuously reduce schedule risk.

How do you know if the senior managers are engaged? Not by the number of emails you get, that's for sure.



Measure the blocked and critical tasks , the quantity, and the number of days to resolve them. I keep a list of process improvements and watch if the number of items is stable or falling and the rate of the completion of process improvements



If blocked and critical tasks are languishing, it means someone is:

- ◆ Not watching the impediments to progress
- ◆ Conflicts are not being resolved
- ◆ Resolution priorities are not assigned correctly (for speed)

Each of these are governance responsibilities.

If you don't have the right behaviors at the top, you're not going to get them in the middle or the bottom. As the person accountable for on time delivery, you must know, measure, and manage the behavior to get what you want.

Schedule Risk – Behaviors

If the owners of the project are not governing the basic behaviors to execute well, your risk of delivery is rising.

Let's talk about the behaviors needed to deliver on time; or why projects are late.

How does a project get to be a year behind schedule? One day at a time.

Fred Brooks

Someone, perhaps it was Elon Musk, says your car is the most under-utilized resource you have. Only 15% of the time. It's typically the most expensive asset people have, after a house. It's sitting. Not moving. In your garage. In your parking lot at work. It's a pretty expensive convenience.

Like your car, projects are sitting most of the time, too. At least half the time. You could be going faster, but your project is waiting. Considering the value of a project, that waiting is quite expensive. I worked on an oilfield development project where each day early or late meant over \$4mm in revenue *per day*.

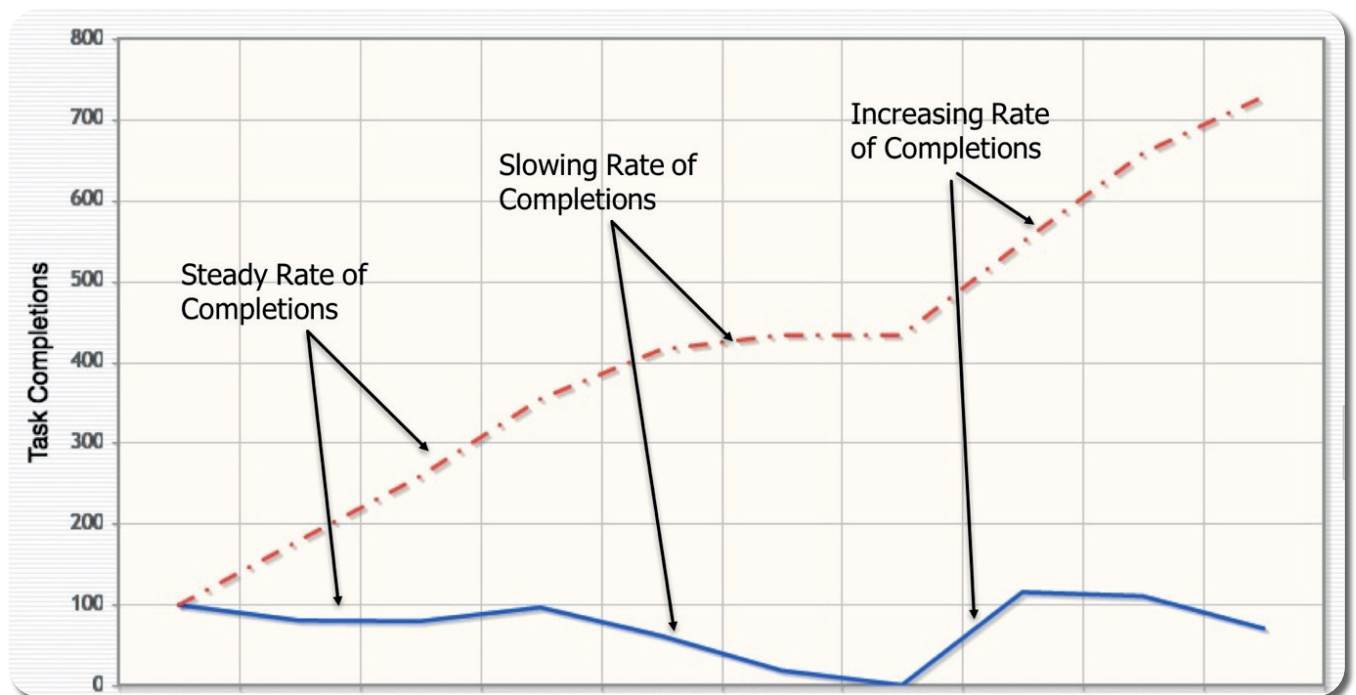
Maybe you don't have projects that are that have that sort of impact, but the point is that the earlier a project is completed, the sooner you receive the benefits of that project. Most of the time the project is waiting, why wait?

You can know – early – if your project is waiting around. Projects that are going to be late are comprised of tasks that are slow to complete. If you measure the rate of task completion, you can get sense of how fast your project is moving. You can measure the duration of tasks, too. If the task duration is increasing, your project is slowing down.

If you are doing projects over and over, you could measure the rate of completions. That would give you a sense of how your process is delivering, but it's always after the fact. It's not predictive. You must look at the actions that are needed to increase the rate.

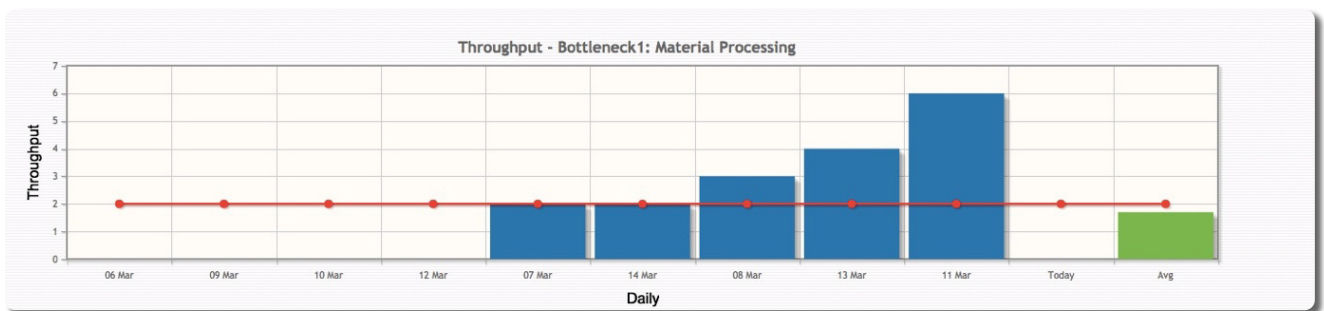
The rate of task completions will give you a sense of how all work is proceeding, so you look at the rate and the accumulation of task completions. If tasks are completing quickly, that means that in general, waiting is minimized and we've achieved good flow.

The two elements give you a different look at completion velocity. One gives you an absolute number, the other gives you a sense of acceleration. If the slope of task completions over time is 45 degrees, you're holding steady. Less than 45 degrees, you're slowing. Greater than 45 degrees, you're speeding up.



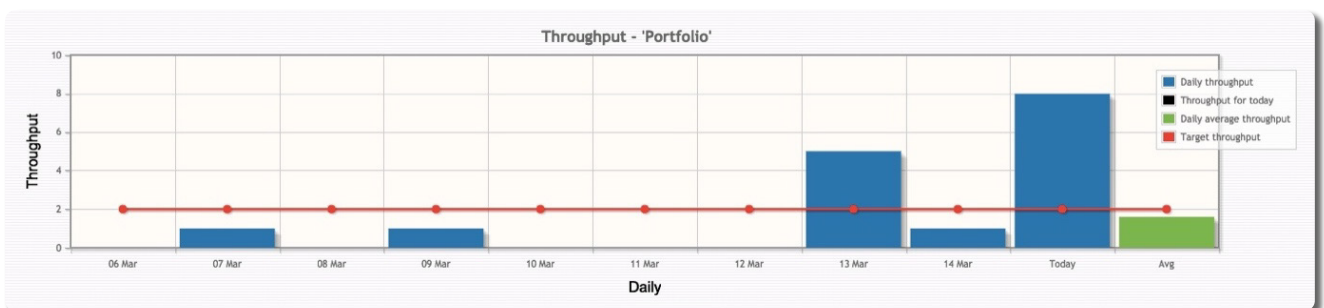
You can see that during part of the project things slowed down. A lot! Then things sped up again. Why is that? This will have a big effect on your delivery. The slowdown tells you that your project delivery risk is rising! Managing delivery risk is the PM's job, isn't it?

That doesn't tell the whole story. We know the rate of the system is determined by the rate at the constraint. This graph tells us about all the project tasks. It could be, that the constraint isn't working very fast, and all the non-constraints are working ahead. When that happens, your project delivery risk could still be rising and you wouldn't know. So you must look at the throughput (completions) for the system versus the constraint.



In the example above, the constraint (bottleneck1 Material Processing) didn't complete anything for four weeks, then started completing more and more. The red line indicates the target throughput for this resource, 2 per week. On the right, the average is a bit less than target. So that means that this portfolio team is completing slightly fewer projects per week than planned. Schedule delivery risk is rising.

What about completions, once the projects pass through the constraint, do they get completed?



A similar wave effect as the constraint operation. Very little at the start, then a lot. We can safely say that that output at the constraint resource is a predictor of the output of the overall system. The operations geek in me is also wondering about the hockey stick effect. Hmm. Looks like something is broken there.

Knowing, measuring, and managing the precursor behaviors as measured by task completion velocity is critical to managing the schedule risk. Our teams look at overall completion velocity to see we're going faster or slower and we look at the constraint completions as the predictor of system output.



Schedule Risk – By the Numbers

No matter how good your plan may be, managing schedule risk is essential to project success. Risk will always be present; the question is, is it effectively managed? In organizations with immature execution behaviors, risk manifests itself as surprises that derail workflows and delay completions. Unless a means of early identification and mitigation of risk is available and utilized, your team is always going to be reacting. As a result, your projects are doomed to delays, constant firefighting, and rising costs. Getting your team out in front of risk is the goal of Schedule Risk Management processes.

Traditionally, project managers have tried to reduce schedule risk by projecting completion times for projects based on the sum of individual task completions in the critical path. But these task-completion time estimates are suspect. When managers ask for time estimates, teams and individuals add “contingency” time that allows for uncertainty and anticipates setbacks. Contingency time in itself is relatively benign— in fact, the need for contingency time is essential— but when added up, the time collectively added by various teams and individuals makes the project much longer than it needs to be, clouding the actual schedule risk and adding unnecessary delays to project completion.

Worse, management has lost control of the project in the sense that resources determine their own contingency time buffers, rather than the project owner. Additionally, the project team loses clear sight of the project; they cannot distinguish between the work and the contingency. To overcome this lack of clarity, they must either react conservatively to keep everything on track (forcing unnecessary overtime and expediting), or wait until the situation is clarified (creating more risk). Multiple projects in execution at the same time compound the risk.

Project managers must maintain constant situational awareness relative to overall project schedule performance, identifying the work remaining versus the time remaining— before time runs out. Too often, the “horse is out of the barn”; the project can’t be stopped midway to correct problems that should have been anticipated during the project planning process. During execution, the problem becomes one of focus. If your project plan is broken, how can your team know which is the most significant risk to respond to at this moment?



Schedule Risk Management is a statistical method for maintaining that situational awareness and improving a project manager's ability to manage and control work and resource priorities. This in turn enables management to direct action early enough to prevent late deliveries. When applied across a portfolio of projects, Schedule Risk Management aids project and resource-level decision making to accelerate the completion of all of the projects that share resources. It improves project team decision making by identifying the project tasks with the highest schedule risk throughout the life of the project. Teams can then act early to ensure project completion on or before a committed project or milestone delivery date.


Uncertain Task Durations Mean the Project Must Own Contingency

Let's start with the most basic assumption about projects: that they are full of uncertainty. There's uncertainty about the deliverables themselves, especially if there is technical risk (i.e., new things being created), and there's uncertainty about the work that will be necessary to achieve those deliverables, since many projects are "one-off" affairs.

Therefore, the tasks and their durations within the project schedule are an estimate, a forecast. Those who provide these estimates usually have a limited understanding of the work to be accomplished, and they may be pessimistic in their estimations. Few people are trained in estimating task duration, so for most projects, the tasks that make up the project plan are not accurate, making the project completion date(s) suspect as well. In short, duration estimates and completion dates in most projects are not to be trusted.

To correct this deficiency, we could focus on the most obvious problem and strive for more accurate estimates. However, this will take a long time! Here's a more workable solution: Rather than decompose the duration estimates to make them more accurate (even though that would be helpful to our projects), let's consider only one element— the contingency time. We can assume the remainder of the estimate is the work.

The contingency time is the amount of time we have in the schedule to compensate for risk. We often call this the time buffer, or just "the buffer." This time is not owned by individuals or functions, but rather by the project. The reason for that is to protect the integrity of the purpose of contingency— reliable project delivery dates as opposed to individual task completion dates. Thus, since the project is full of uncertainty, the project itself must own and manage the buffer.



As the project progresses, you should expect that task duration variation will occur, both favorable and unfavorable. In some cases, they will cancel each other out. However, you should expect that the buffer will be consumed as work is accomplished; you'll have more in the beginning and less at the end. In a perfect world, you would have zero on the day you deliver your finished project.

Knowing the amount of time remaining to do the remaining amount of work is valuable for the organization; it tells you where to focus your attention. This knowledge is a simple, straightforward tool to govern portfolio risk.

The Schedule Risk Ratio: Your Early Warning Indicator

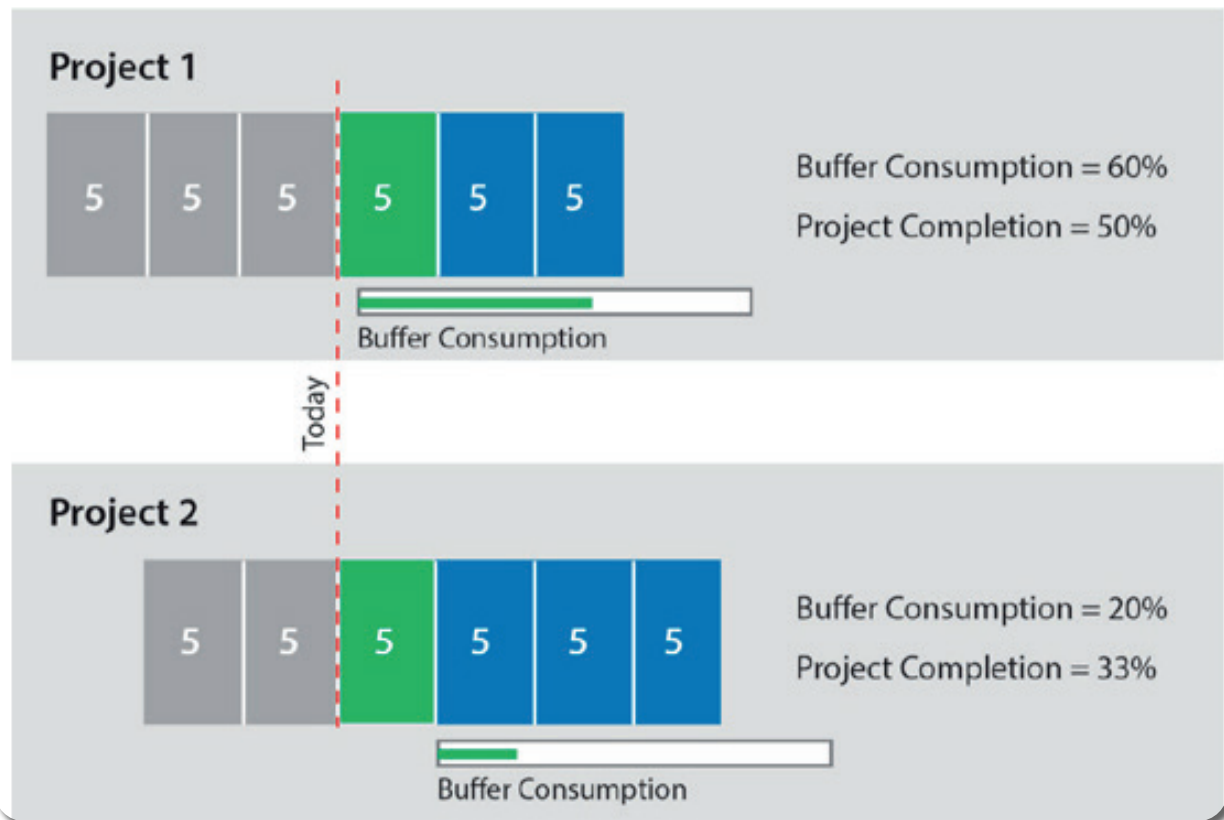
The Schedule Risk Ratio is a tool that allows you to accurately identify small problems before they become truly major problems. Even early in the project, you can determine whether you're ahead or behind schedule by identifying how much risk you have, adding another dimension to your Priority Control processes.

The ratio is determined by how much buffer remains compared to how much work remains along the critical path, and assigning that buffer to the oldest in-work task along that path. Assessing a ratio for each task provides a normalized set of priorities across the project and the portfolio, thereby reducing multitasking.

Use the Schedule Risk Ratio to Direct Project Activity

Using a simple green-yellow-red system, you can easily communicate project status and activity to the team and to the rest of the stakeholders. When the percentage of buffer remaining is more than the percentage of work remaining on the critical path, your project is in the “green (we’re on track) zone.” Your project is in the “yellow (caution) zone” if your percentage of buffer remaining is less than the percentage of critical path work completed. When the ratio of work remaining significantly exceeds the remaining buffer—say, 70 percent of your work remaining and only 30 percent of your buffer— you are probably in the “red (do something!) zone” of project execution.

Project 1 has the higher priority (for resources, help) because it is using buffer faster than it is making progress

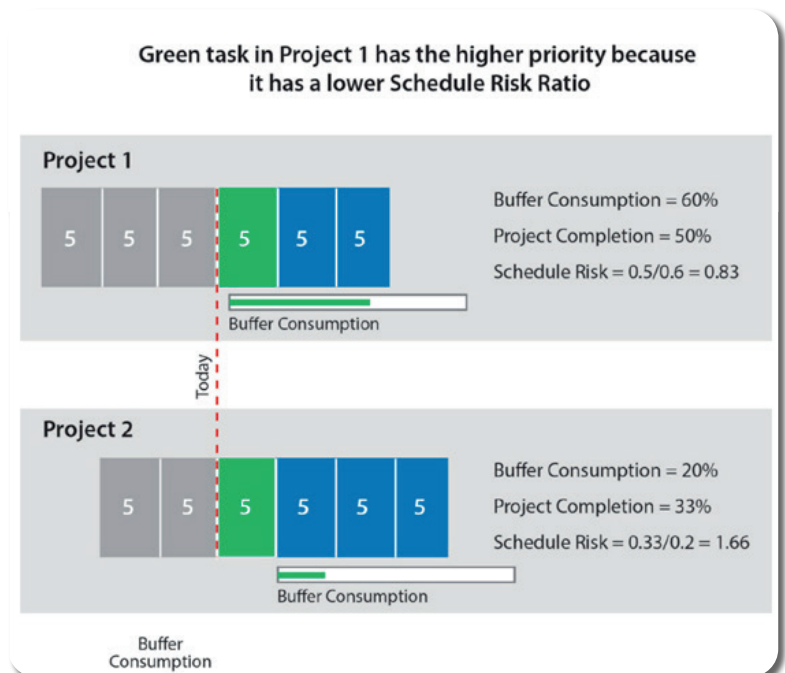


Now, don't wait until the project goes "red" before you do something. When the ratio is in the yellow zone, develop a buffer recovery action plan to respond in case the buffer consumption trend continues and your project goes red. If it does, your project team's buffer recovery plan should go into effect.

With this plan, you will likely be focused on reducing the duration of the longest task on the critical path. Any specific tactic— process changes, additional resources, offloading— is good as long as the project deliverables aren't compromised. Just don't assume you'll work your way out! Don't jump to rescheduling your entire project, either; your recovery plan absolutely must get done before the project due date is modified.

Use the Risk Ratio to Set Task Priorities

The Risk Ratio is assigned to the open, in-work task in the critical path. When there are multiple ongoing tasks, a Risk Ratio is assigned to each one. Utilizing the Risk Ratio provides your team with a normalized priority system that can function as an early warning tool across a portfolio of projects. It brings the Priority Control process to greater maturity. This enables you to be more strategic in resource allocation and directing activity, and to allocate resources more effectively. If you can see that one project in the portfolio is behind, you can borrow resources from another project that has more buffer for support.

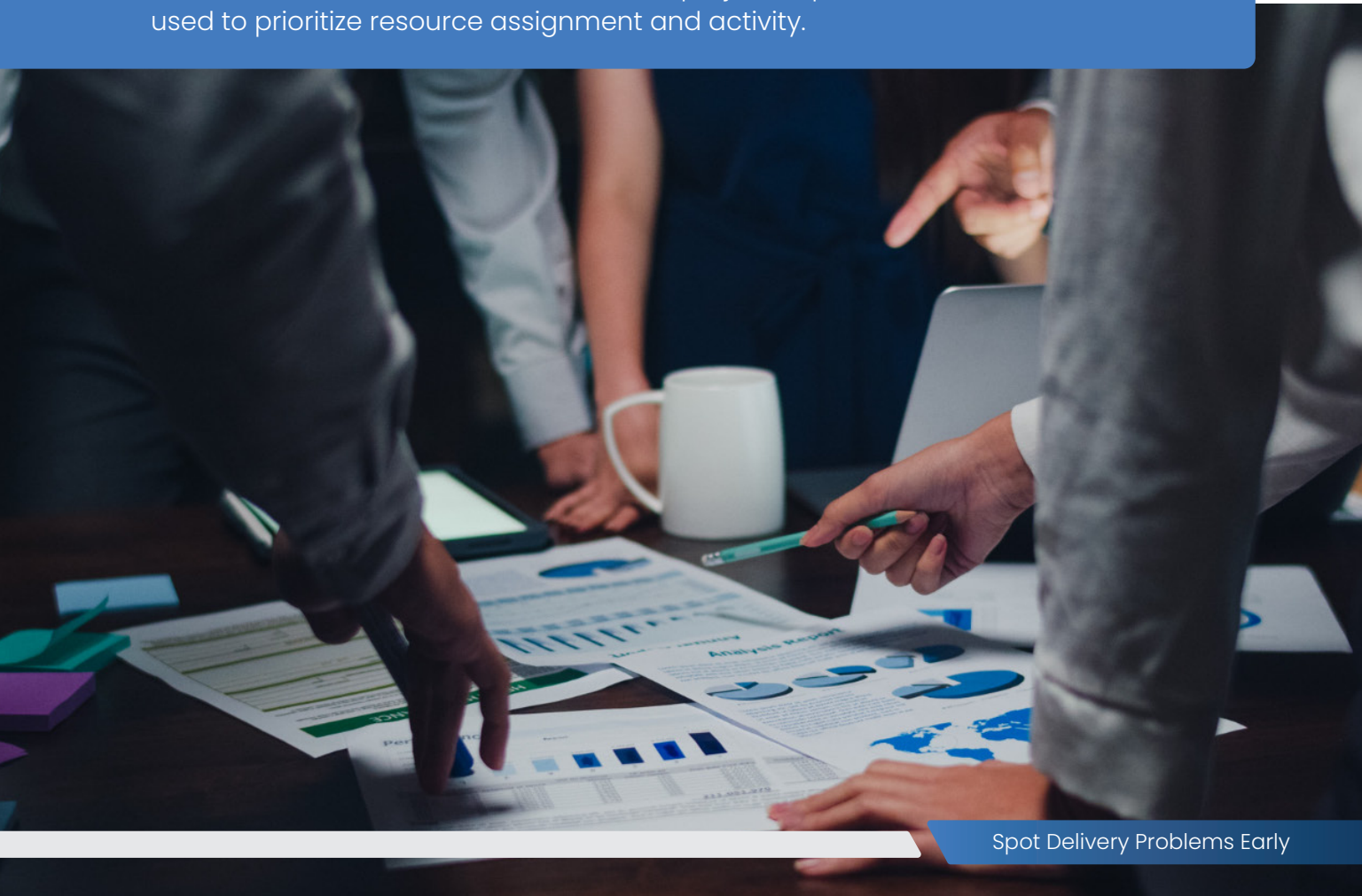


As your team manages the project buffers, you will be monitoring not only the open tasks, but the upcoming ones as well, reinforcing the "future orientation" you established in Basic Collaboration.

The Schedule Risk Ratio provides a measure of the health of the project schedule, tells your team which tasks it should focus on and which ones need additional attention, and alerts the team when they must take action to ensure project delivery by the committed date(s). Armed with advance knowledge, you can act early and strategically, adjusting priorities and resource assignments to ensure timely delivery. You'll have greater control, better decision-making ability, and shorter project durations.

You'll know that your organization effectively manages schedule risk when:

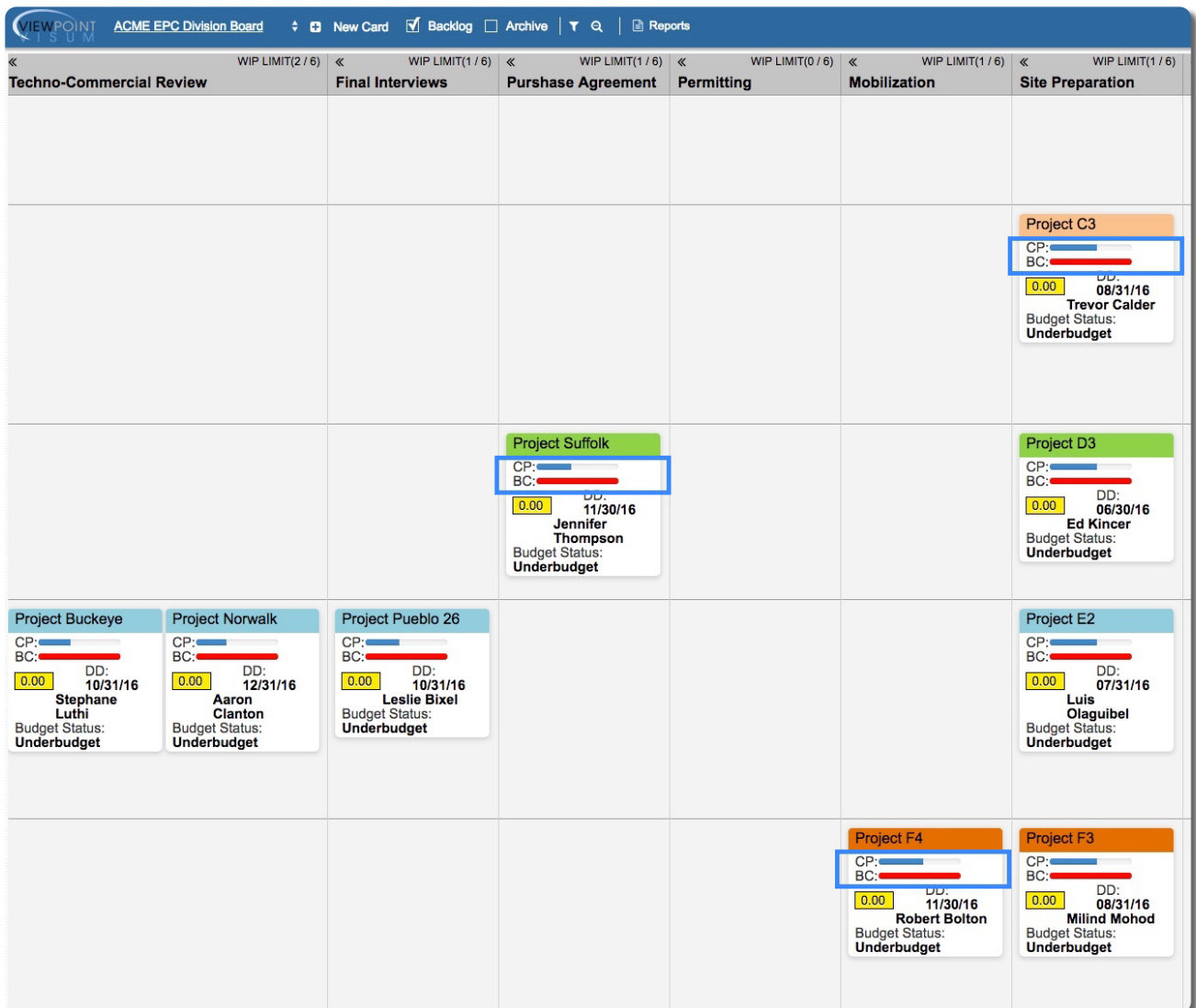
- ◆ The work duration for tasks on the critical path is clearly separated from the contingency duration;
- ◆ Variability in task duration is accounted for, using time buffers at the project level;
- ◆ The project time buffer is explicitly managed; and
- ◆ Schedule risks are normalized across the project or portfolio, and the level of risk is used to prioritize resource assignment and activity.



When schedule risk is effectively managed, your projects are more likely to meet deadlines without allocating extra budget dollars to overtime or expediting efforts, or using additional people.

ProjectHub has schedule risk and buffer management built in. It is the only visual Kanban-type tool with backward and forward scheduling algorithms that constantly assess and display your schedule risk.

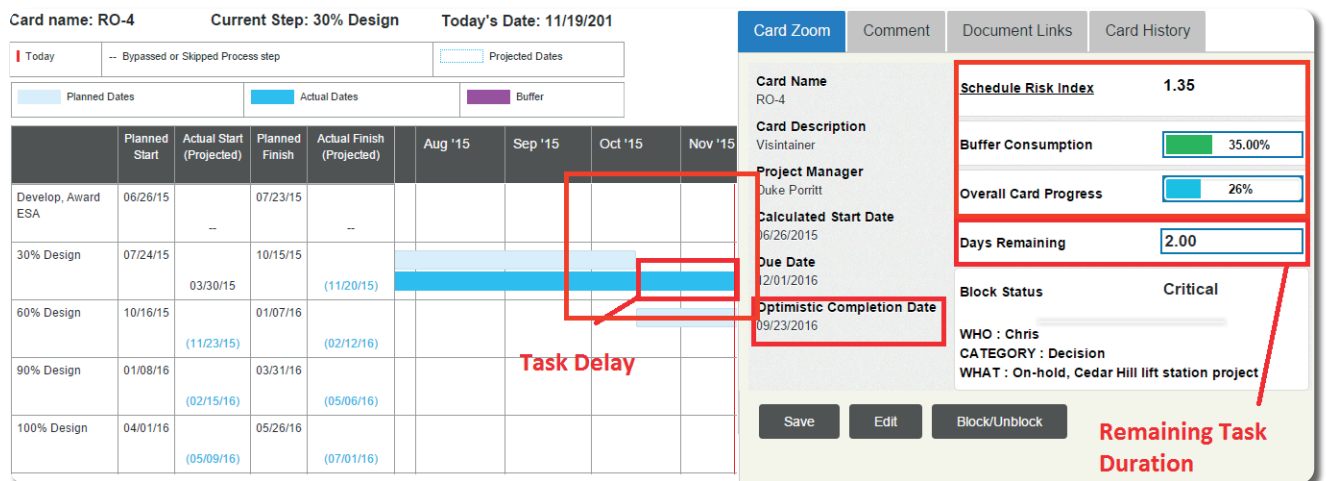
In the board view, you can get a quick overview of the schedule risk, looking at the project completion percentage (CP) and buffer consumption (BC).





Looking at the detail of the cards, you can get a Gantt view of past and anticipated completion dates with an optimistic completion date (with no buffer).

These two displays are an integral part of keeping your promises and delivering your projects on time.



Turning Things Around; Looking Forward

When your project is in trouble, you must change the way it's working. Change the behavior of your team. The most important project measurement is not whether it is arriving on time; that train has left the station. To arrive on time, you must stop losing it. To stop losing time, you must change the behavior of your team. The right measurements will drive the right behaviors.



Stop Losing Time

One of the biggest challenges in project that is behind schedule is stop falling further behind. So, the first priority is "stop the bleeding".

Preventing things from getting worse has little to do with the plan, no one's using it anyway. Rather than re-baselining the plan, focus on the process of execution first. Change what people are doing. This is where you're losing time, so focus on the things that will make the biggest difference in the least amount of time.

- ◆ Get your team looking and working forward to get out in front of any problems
- ◆ One team, one goal to speed decision making
- ◆ Control task priorities to reduce multitasking and boost productivity
- ◆ Go faster by systematically leveraging the bottleneck of the project
- ◆ Set your execution tempo and quickly respond to problems

Once you have accomplished these things, you can turn your attention to regaining time.

Visualize Your Project

A visual representation of the project helps your team: they can see where they are, where they're going, and the major obstacles to moving ahead. Making your project or portfolio process visual prevents information overload, exposing previously hidden process problems. This is not a substitute for your project plan; the basics of a plan or process is required to build to your board. The visualization is a summary of your plan, to be managed by the team.

A visual project board (VPB) provides tangible feedback that everyone can see and understand. If there's a bottleneck or a gap, team members don't waste time finding the focus areas, they're obvious. They problems are visible, no longer hidden. It solves the "living in the past" problem because the VPB points the way towards completion. It helps get the team out of the weeds and into sorting out only the biggest problems that block progress.

Present your project visually – so your team can quickly communicate and grasp the project status. It eliminates the debate about where things really are, so you can move into action. It sets the stage for the next thing you must accomplish: active collaboration.

Watch [this video](#) to learn more about visualizing your projects.

Build the Measurements that Reinforce the Behavior You Want

When your project is in trouble, you typically have only a few concrete measures of success. Delivery date – you're late! Budget – it's out of control! Scope – it doesn't work! These outcome-based metrics are not very helpful in telling you what's wrong. After all, if you know what to do, it would have been done already!

Going back to the early warning signs. These are the problems; you must find solutions. How can you know if these behaviors are occurring? If these behaviors are happening, your project will continue to lose time. To refresh your memory, the early warning signs are:

- ◆ Living in the past
- ◆ Wandering Bottlenecks
- ◆ Conflicting Goals
- ◆ Slow response to problems
- ◆ Shifting Priorities

Turning your troubled project around begins with deciding what you want to see, every day. To stop losing time, you must change the team's behaviors to the opposite:

- ◆ Focus on the future – proactive management
- ◆ Alignment with the project goal
- ◆ Stable priorities – less multitasking
- ◆ Focus on the project bottleneck
- ◆ Quick response to problems



Focusing on the Future – Managing Proactively and Promptly

The project team that spends all its time on status updates and fighting the fire of the moment has little time or ability to manage what's coming. To manage what's coming, the team must be able to see what's coming. That's why visualizing your project is important. Once the project is visualized and broken down to its deliverables, you can measure your team's future focus.

To know if your team is focusing on the future, you must identify on what they should be focusing. Focusing on the future could mean they look forward to the weekend. I want my project team to focus on risk. What could go wrong? What could create a delay? What is not known?

Once they're identified, are they being mitigated? Resolved? When your team is focused on the future, risks are systematically identified and resolved before they affect progress.

Focusing on the future has three elements:

- ◆ Identification of risks
- ◆ Mitigation or resolution of those risks
- ◆ Before they affect the project

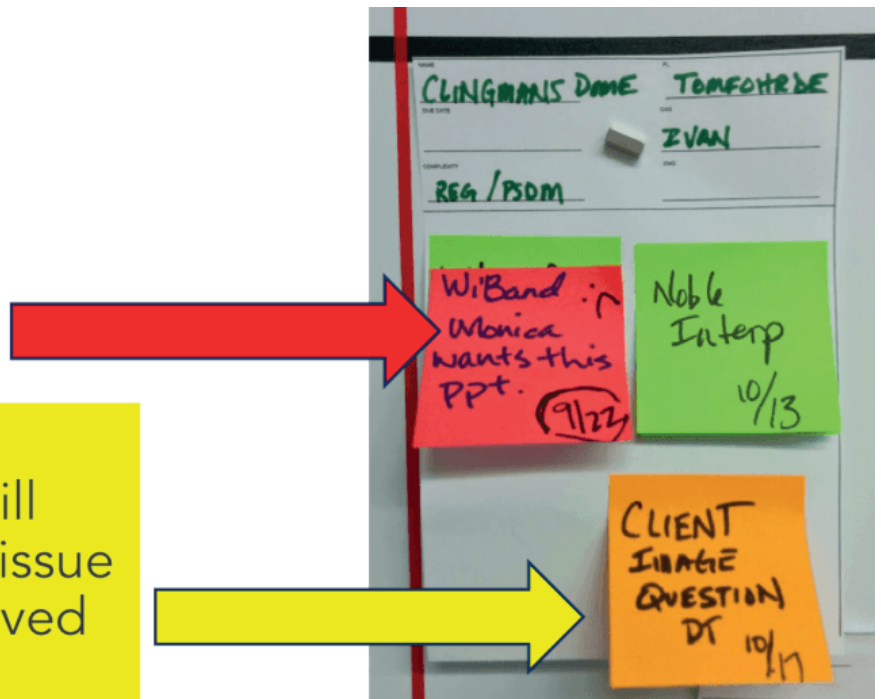


To measure the behavior, you can simply count risks and how many of those risks never become obstacles. In other words, they do not delay the project, (within limits, because risk mitigation is not free) increase costs, or sacrifice project deliverables.

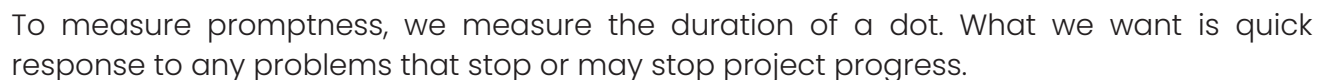
When we visualize the project, we use a red dot on cards to identify tasks that are stopped and yellow dots that are risks.

Red Dot
– Progress has stopped

Yellow Dot
– Progress will stop if the issue is not resolved by...



Your measurement of this behavior is the number of yellow dots per week versus the number of red dots. If people are systematically identifying risks, yellow dots will be rising or will be stable and red dots will be declining or stable. Managing your project team's ability to focus on the future is as simple as that.



Reinforcing the future oriented behavior will transform the dynamic of your team. Rather than excuses, they'll bring solutions. Rather than surprises, you'll find alternatives. Fewer obstacles, faster progress. You'll stop losing time because your team is looking ahead. They're solving problems. Systematically. That's what you want!

Summary of Metrics

Team Roles

- ◆ Project managers
 - ◆ Identify project risks
 - ◆ Develop & launch risk mitigation efforts
 - ◆ Exploit constraint resource(s)
 - ◆ Resolve task priority conflicts
 - ◆ Identify process improvement opportunities
- ◆ Task Managers
 - ◆ Ensure resources are not multi-tasking
 - ◆ Set priorities for resources
 - ◆ Exploit and subordinate to constraint resource(s)
- ◆ Resources
 - ◆ Work as fast as possible on tasks
 - ◆ Complete tasks at 100% quality
 - ◆ Report time to completion, rather than percentage complete

Measurements Drive Behaviors

Behavior	Measurement
Focus on project progress	# cards moved/week
Focus on project completion	# cards completed
Exploitation of Constraint Resource	Duration of cards in work
Fixing problems early	cards that don't go red
Escalating problems early	Red cards that were never yellow
Identifying problems early	# of yellow cards
Execute to avoid problems	# of red cards

Quick response when jobs or projects are stopped. To improve performance, you must reduce waiting time.

Early identification of problems. Don't wait until there's a problem, act to prevent stoppages

Work on the right jobs; control priorities.

Prevent multitasking – look at task completion speed