

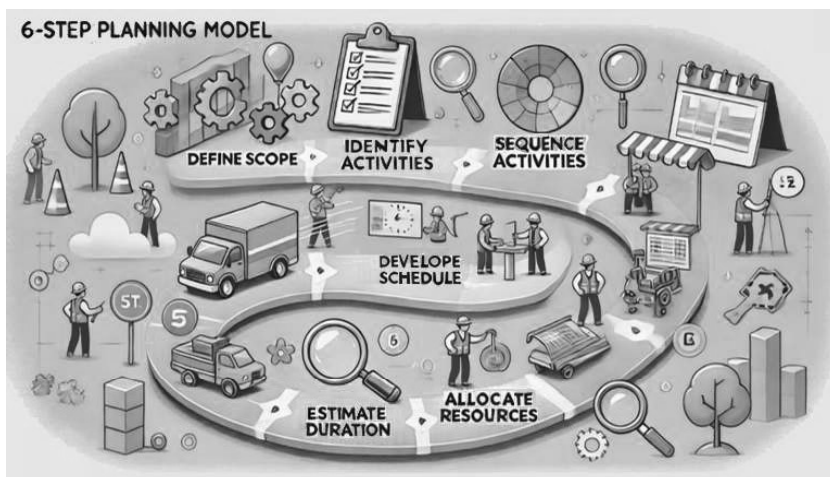
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The 6-Step Planning Model

– Because Even the Best Projects Need a Game Plan!

Introduction

Every seasoned project manager has had their “never again” moment—when a schedule collapses, deadlines vanish into thin air, and management asks, “Why didn’t we see this coming?” But fear not! The road to scheduling redemption is paved with a solid planning model. Enter the **6-Step Planning Model**, designed to prevent disaster, restore sanity, and keep your project from becoming a cautionary tale.



"Great projects start with great planning—Master these 6 Steps"

Step 1: Define the Scope (For Real This Time)

Scope creep is the silent assassin of good schedules. Before even touching scheduling software, ensure that the scope is clear, detailed, and agreed upon by all stakeholders. No vague “install equipment” tasks—break it down. What equipment? Who installs it? What dependencies exist?

■ **Common Pitfall:** “We’ll just figure it out later.” (Spoiler: Later = Chaos.)

💡 **Redemption Tip:** Define work packages in detail—if you can’t describe it clearly, you can’t schedule it properly.

Step 2: Identify Activities (Not Just the Obvious Ones)

Too often, schedules include only the headline tasks and ignore the nitty-gritty details. Identify every activity needed to complete the project, including preparatory work, approvals, inspections, and closeout tasks.

■ **Common Pitfall:** “Oh, we forgot about the permitting process.” (Which just happens to take six weeks.)

💡 **Redemption Tip:** Use work breakdown structures (WBS) to ensure no task is left out.

Step 3: Sequence the Activities (Because Order Matters)

Not all tasks can run at the same time, no matter how wishful thinking goes into the schedule. Dependencies should reflect reality, not just for the sake of meeting the deadlines.

■ **Common Pitfall:** Scheduling “asphalt paving” and “lane marking” to run simultaneously.

💡 **Redemption Tip:** Identify true dependencies—which tasks logically follow others? Avoid fake constraints that artificially stretch timelines.

Step 4: Allocate Resources (Because People and Machines Aren’t Unlimited)

Scheduling without checking resource availability is like planning a road trip without making sure you have a car—and petrol. Assign the right people and equipment to each task, or you’ll end up stranded with a schedule that looks good on paper but goes nowhere fast.

■ **Common Pitfall:** “We’ll just double-shift the crew!” (Until burnout and mistakes cause rework.)

💡 **Redemption Tip:** Check resource over-allocation—a perfectly sequenced schedule is useless if there aren’t enough people to execute it.

Step 5: Estimate Durations (Ask the Right People!)

If your duration estimates are based on gut feelings and wishful thinking, your schedule is already doomed. Ask the people actually doing the work how long tasks take—don't assume.

Common Pitfall: Manager: "How long will this take?"
Engineer: "Three weeks." Manager: "Make it one."

💡 **Redemption Tip:** Use historical data and expert input, not just what looks good in a report.

Step 6 – Schedule Development: Because Winging It is Not a Strategy!

Once activities are defined, sequenced, and assigned durations, the next critical step is to transform this information into a structured project schedule. A well-developed schedule ensures that all tasks are arranged in a logical, efficient, and achievable timeline, balancing resource availability with project constraints. Without this step, even the best-laid plans risk turning into unrealistic deadlines and uncoordinated efforts.

Key Aspects of Schedule Development

1. Validate Task Sequencing – Are Activities in the Right Order?

Before diving into resource assignments, double-check the logic of task dependencies. Misaligned sequencing leads to inefficiencies, rework, and schedule bottlenecks.

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- Ensure predecessor-successor relationships make sense.
- Verify that no task accidentally overlaps when it shouldn't.
- Identify opportunities for parallel work to shorten the schedule.
- Check for any missing or redundant dependencies.

· **Common Pitfall:** Assuming that software-generated dependencies are correct without reviewing real-world execution constraints.

💡 **Redemption Tip:** Walk through the sequence with your project team—sometimes, practical site realities differ from theoretical logic.

2. Estimate Duration with Realism, Not Optimism

A schedule is only as good as the accuracy of its duration estimates. Overly optimistic estimates create unrealistic timelines, while excessive padding leads to wasted time and resources. Duration estimates must be grounded in historical data, expert judgment, and real-world productivity rates.

- Base estimates on historical data, expert judgment, or industry standards.
- Apply three-point estimating (optimistic, most likely, pessimistic) for accuracy.
- Consider crew productivity rates—not every team works at the same speed.
- Account for external factors (weather, approvals, inspections).

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■ **Common Pitfall:** Assuming all tasks will be completed in ideal conditions—this is fantasy scheduling at its worst.

💡 **Redemption Tip:** Introduce buffer time where necessary, but avoid excessive padding that leads to inefficiencies.

3. Critical Path Method (CPM) – Identifying What CAN'T Slip

The Critical Path Method (CPM) is your alarm system for project delays. It identifies the longest path of dependent tasks that determines the project's total duration. Any delay to critical tasks will directly impact project completion.

- Identify tasks that have zero float/slack—these are high-risk for delays.

- Explore **fast-tracking** (parallel execution) and **crashing** (adding resources) to shorten the path if needed.

- Ensure that contingency plans are in place for critical tasks.

■ **Common Pitfall:** Failure to identify true critical activities, leading to missed contractual deadlines, triggering penalties, liquidated damages, or legal disputes.

💡 **Redemption Tip:** Double-check that dependencies reflect reality, not just a theoretical sequence. If the critical path is too tight, reassess task durations, re-sequence where possible, or allocate additional resources to shorten it.

4. Resource Leveling – Avoiding Over-Commitments

Once the schedule is built, check whether resource assignments are realistic. Overloading labour, equipment, or machines leads to burnout, inefficiencies, and inevitable schedule slippage.

- Identify over-allocations—if a team is scheduled on multiple tasks at the same time, that’s a problem.
- Stagger task start dates or add lag time to avoid conflicts.
- Consider alternative work crews or additional shifts to balance workloads.

Common Pitfall: Assigning resources without checking their availability, leading to delays when key personnel or equipment are double-booked (over-allocated.)

💡 **Redemption Tip:** Use **resource smoothing** to maintain the original schedule when possible, and **resource leveling** when adjustments are unavoidable. Resource smoothing keeps deadlines the same while redistributing workloads, while leveling may extend project duration to accommodate resources. Choose wisely!

5. Final Check – Is the Schedule Practical?

Before signing off on the schedule, conduct a practicality review with key stakeholders:

- Can the sequence actually be executed on-site?
- Are duration estimates reasonable based on real-world performance?

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- Are critical path risks well understood?
- Are resources realistically distributed and available?
- Is the schedule achievable based on past performance?

Common Pitfall: Finalising a schedule without team input, leading to confusion and impractical expectations.

💡 Redemption Tip: Conduct a schedule review meeting with field teams, procurement, and stakeholders before finalising.

Conclusion

Planning a project the right way isn't magic—it's method. By following the **6-Step Planning Model**, you stop reacting to disasters and start preventing them. Sure, it takes time to do it properly, but remember: a well-planned project saves more time than a rushed one ever will.

What's Next? "Surely, There's More!"

We introduced you to the **6-Step Planning Model** at beginning of this chapter —now it's time to dive deeper! In the following chapters, we'll break down each step in detail, exploring practical applications, common pitfalls, and best practices Whether you're refining your scheduling skills or looking for ways to streamline your process, this deep dive will equip you with the tools to turn plans into reality. Let's get started!