SmartPM[®]

10 Easy Steps to Build an Airtight Project Schedule

1. Utilize a Scheduling Tool and Gather Relevant Information

Consider using specialized construction scheduling software to avoid complications associated with paper or spreadsheet methods. Compile essential project information, including specifications, materials lists, and site tests, to ensure you have a complete overview as you determine the scope of the project.

2. Conduct In-Depth Research

Dedicate time to investigate all details of your upcoming project. Consult inspectors for permits required and associated timelines. Break down materials needed, their delivery schedules, and calculate available man-hours. Evaluate your budget, considering all possible expenditures, including material purchases, labor, and administrative costs.

3. Select an Appropriate Scheduling Methodology

Choosing the right scheduling methodology or scheduling type is pivotal to the project's success. These methodologies include:

- Line of Balance (LOB): This is ideal for projects involving repetitive tasks. It ensures consistent workflow by mapping out recurring tasks and maintaining a balanced schedule.
- **Quantitative Scheduling:** Employs bar charts to monitor the quantity of material, time, and location. This method is useful for tracking resources and aligning them with the project timeline.
- **Program Evaluation and Review Technique (PERT):** PERT manages the variability in task completion times. It calculates realistic time expectations by considering the differences between deadlines and milestones.
- **Resource-Oriented Scheduling:** This technique is designed to monitor resource availability, ensuring that the resources needed by different stakeholders are available at the right time.
- Gantt Charts: These charts provide a visual representation of tasks spread over the project timeline, providing an at-a-glance view of task sequences and durations.

- Last Planner System (LPS): This approach adds granularity when the project nears completion, focusing on weekly and daily planning to ensure no detail is overlooked.
- **Critical Path Method (CPM):** CPM identifies key tasks that must be completed and the necessary time to complete them. It helps identify the shortest possible duration to complete the project, considering dependencies between tasks.

4. Collaborate with Subcontractors for Task Durations

Reach out to your subcontractors to understand the time required for specific tasks and material delivery timelines. Ensure you add a buffer to some estimates that might take longer than initially predicted, preventing potential project delays.

5. Identify and Prioritize Tasks

Segment your project into distinct tasks and provide a comprehensive description for each, including the required work, labor, materials, and equipment. The level of detail in this step is crucial for successful project management.



6. Estimate Task Duration

After task identification, predict the duration of each task and note when key milestones will be reached. Create contingency plans and remain conservative in your estimates to account for unexpected complications.

7. Create a Work Breakdown Structure (WBS)

Develop a WBS to visualize tasks and their subdivision into smaller manageable parts. Do this by drawing a tree to separate every component of the project, with individual subcomponents following, with smaller and smaller breakdowns until you're at the final task, which is considered a work package. By including every task to meet the project's goals, a detailed and comprehensive WBS can help identify potential conflicts that may require management.

8. Review the Schedule with Key Stakeholders

Conduct a meeting with all key stakeholders to ensure your schedule is comprehensive and realistic. Be open to feedback and ready to adapt your schedule to accommodate their input.

9. Allocate Tasks and Begin Execution

Assign tasks to specific teams and make the allocation visually intuitive by color-coding. Monitor the progress closely to ensure the project is keeping up with the schedule, balancing resources across the project to maintain productivity.

10. Monitor / Track Your Schedule

Regularly compare your initial schedule with actual progress on-site. Leveraging modern technologies like construction schedule analytics can aid performance. Consider tools like SmartPM that provide intelligent resource allocation, making schedule analysis simpler and more effective. Interested in SmartPM? Schedule a demo to explore more.



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