

Selecting Project Management Software



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Summary: Scheduling and tracking with PM software are two key steps in our [5-step project methodology](#). We take teach people to use project software so they can build schedules quickly and update them in minutes a week. We also match the project software techniques to the scale of the projects people manage. You need different software for small projects in your department versus cross-functional projects and managing a portfolio of projects requires different software and techniques.

Project management software comes in many different levels of sophistication with prices ranging from \$50 to \$20,000 or more. Software itself does not make project managers more effective; it just makes them more efficient. PM software does not teach you how to define scope, communicate to the project sponsor or make clear assignments to your team members. It just let's you accomplish these and many other PM tasks more efficiently. So, before we look at the different kinds of PM software let's talk about the kinds of projects you manage and the levels of PM skills. This will enable you to pick a PM software tool appropriate for you and the organizational setting in which you operate. Decide which of the following three categories of project manager fits you best.

Managing Smaller Projects (View Project [Courses](#) & [Books](#) at this level)

PMs in this category often plan and schedule with only durations rather than work estimates and resource capacity. Many times these PMs have no need to develop or track a project budget, as status reports are limited to assignment and completion date tracking. At this level, the organization usually does not consolidate or "roll-up" all of the projects in the portfolio nor does it manage the overall utilization of the people who work on project.



In this situation, your range of choices is very broad and many packages will meet these limited needs of Gantt and PERT charts. If this is all you want, there is not much sense in spending more than \$25 nor investing in a long learning curve that covers a lot of features you will never use. On the other hand, if you or your organization intend to move toward the greater precision of work estimate based project plans and portfolio management then learning the basic packages will prove to be a dead end and you are better off buying and learning a more sophisticated tool into which you and the organization can grow.

At this level, project managers who want to automate the process of laying out plans, prepare occasional status reports and produce some simple Gantt and PERT charts, the low end PM software tools are just fine. Without investing the time to master the more sophisticated tools, there are plenty of packages that will automate the basics for you. There are also a host of web-based products that operate at this capability level. For under \$125 there are products like: TurboProject, Milestone Simplicity, Quick Gantt. Most computer and business supply stores carry these less expensive products. If you think you'll be managing larger projects in the future, then Microsoft Project 2003 and Primavera's SureTrak may be a better choice as a starting point.

Managing Larger Cross-functional Projects

(View Project [Courses](#) & [books](#) at this level)

As the scale of projects grow and their impact reaches beyond one functional unit, the demands on the PM's techniques grow, as does the required capability of the PM software tool they need. Rather than working with PM software that is a static representation of start and finish dates, we move up to software tools that simulate the project and that reschedule and optimize it every time we make a change. Budget is now an important issue in planning and tracking. Accordingly, we build project plans based on the estimated hours of work and predecessor relationships, not just start and finish dates that are "plucked from the sky." The software needs to give us the capability to budget and schedule not only internal employees but also external consultants and vendors as well as budgeting for equipment and travel expense. Because PM's working at this level of complexity are building more precise work based plans, the software should provide more sophisticated earned value reporting, slack and delay reports for fine tuning as well as the usual critical path and resource level capability.

The software cost takes quite a jump in price to the \$300-\$500 level and the learning curve for these software tools are much steeper than the first level. The big market shares belong to Microsoft Project 2002-2003 and Primavera products.

Managing in a Multi-project Environment

(View Project [Courses](#) & [Books](#) at this level)

At the high-end, are PMs managing multiple projects or operating in a mature project organization where utilization is managed across all projects (as opposed to the typical resource "free for all") and there are executives with accountability for portfolios of projects. Here we need project management protocols to bring consistency to project planning and tracking (see our AdPM section). While software never ensures a consistent PM process (despite all the people who think it can) this environment adds to the requirements of the previous levels. We now have the need to consolidate (roll-up) multiple projects and require consistent information so decision-makers can prioritize projects, allocate resources, schedule and track a pool of people working on multiple projects. This process is a lot more complicated than it

sounds. It requires organization processes for portfolio management and software that can identify conflicting demands for the same resources as well as allow the executives to set priorities among projects that require the same resource. This category of user also generally wants to create detailed project budgets and have the software come pretty close to mimicking the company's cost accounting system. However, they want actual cost data a lot sooner than the accounting department provides it. In this category, users often want sophisticated risk assessment tools, learning curve and resource loading features as well as detailed performance tracking.

If you want a lot, you have to spend a lot. Software for these multi-project users runs from \$400-\$20,000 with network versions to run on your LAN and team communication capabilities galore. There are dozens of products in this range and some of the packages from the second level provide the needed capabilities. They include: Microsoft Project 2003 (with Project Server) Primavera Project Planner and other products, Enterprise PM, Micro Planner X-Pert. At these prices, I'm sure you'll get a call back from the vendor very quickly!