Building the Ultimate PM Toolkit

Michael Wood

March 3, 2008

Ever stop to think what the perfect Project Management Toolkit would contain? If there were a single solution that contained all the features you could ever what would those features be?
Go ahead, dare to dream. Along the way you might find the information in this article a great place to start.
Today's project manager needs more than mere tracking and reporting software. They need a toolkit that integrates all facets of a project, from request through post-implementation review. In addition, they need repositories rich with past project information, predefined project templates and work plans. And like the old *Mission Impossible* series, they need a database of internal and external resources that they can pull together the optimum team for each project.
Finally, they need tools that allow them to collaborate and communicate on any and all aspects of a project in ways that are appropriate to their culture, complexity, geographic dispersity, etc. And while we're at it how, about some team management, score carding and PPM support, too? Hey…a guy can dream, right?
So let's take a deeper look at the components of the Ultimate Project Management Toolkit and explore what technology solutions are available in today's market. Everything has a beginning, middle and an end. Projects are no different, and can be broken down into three distinct phases:

- Project Planning
- Project Execution
- Project Process and Outcome Evaluation

Project Planning

When planning a project, the PM and project analysts are likely to perform the following activities:
Impact, Benefit and Risk Analysis – implications of doing the project on the organization
Resources and Budget Analysis – What people, facilities, tools, etc. will be needed
Scope, Charter and High Level Work Plan Development – What the project is all about, where its boundaries are and what type of effort will be needed to achieve its successful completion
Business Case and Proposal Development – Value of project deliverables to the organization and stakeholders (ROI, culture, compliance, etc.)

Having tools that actually assist in the project planning process and that feed into the Project Execution phase can not only improve the quality of the planning effort but also accelerate its completion.

Typically, the tools that are most often used during Project Planning are limited to word processing, spreadsheets and the like. While easy to use and modify, the output they help produce becomes static, and only limited amounts of the information developed is re-entered into the project management software being used. This transcription process costs time, money and is prone to errors creeping into the Project Execution phase. In addition, traceability is highly compromised.
A quick review of product offerings that assist in the project planning effort yielded the following:

Provider / Product	Project Planning Support Features
Atlantic Global - Project Portfolio Management Software Offers a comprehensive and integrated portfolio and project management solution	• Centralized Project Planning • Resource Optimization • Role Based Dashboards • Resource Planning • Scenario Modeling • Budgeting & Planning • Financial Management • Risk Management • Contractor Management • Business Info Tracking • Capacity Planning
Primavera One of the most popular solutions in the PM industry; very comprehensive.	**Resource Management** • Resource requisition & staffing • Capacity Planning • Top Down/Bottom Up Allocation • Role Management • Resource Proficiency Management • Role & Resource Teams **Planning** • Project Proposal Workflow • Centralized Project Repository • Enterprise Project Structure & Codes • Cross-project Analysis and Reporting • Float Path Analysis • Master Program Integration & Collaboration • Cross-Project Dependencies • Resource Assignments & Leveling • ERP or Accounting Integration • Graphics & Report Writing **Collaboration & Content Management**

Provider / Product	Project Planning Support Features
	- Communication Center - Alerts & Automatic Email Notifications - Discussion Threads - Document Management - Workflow **Cost Management** - Performing Organization Breakdown Structure Fiscal Calendars - Cost and Schedule Import - Rate Structure and Burden Templates
Project Insight Web based SaaS solution	- Intelligent project scheduling - One click import and export of Microsoft Project files - Resource management - Cross project resource allocation reports - Management project dashboard reports - Project templates and project management methodologies - Project budgeting and costing - "What-if" scenario support - Microsoft Outlook and Office integration
Microsoft – Project Server Environment Biggest benefit is the integration to all of Microsoft's SharePoint, workflow and other ubiquitous frameworks.	**Governance Workflow Engine** - Proposal Management - Activity Planning - Budget Management - Resource Costing - Proposed Resource Assignment - Multiple resource Skill Attributes - Resource leveling - Resource assignment - Materials Resource Management

While the above list of products is limited, it provides a nice overview of the types of tools already in the marketplace that have project planning support capabilities. While the tools out there are getting more and more robust, none are methodological or workflow-based in approach. It is still up to the user of these tools to use the features in meaningful and intelligent ways. Some day, perhaps an end-to-end solution that guides the user through all the project phases and provides exception and status reporting to insure that all the appropriate steps are completed related to the process of managing projects will be developed…some day.

Project Execution

The meat of project management is found in the Project Execution phase. It is this phase that project folks are most familiar. Developing the work plans, tracking progress, preparing and publishing status reports, etc. are the stuff that makes up this phase. Not surprisingly, this is where most project

management software solutions shine. Yet, more often than not I find practitioners constantly augmenting their PM tools with spreadsheets, word processing documents and other back-office tools, especially in the communication of milestones and status reports. It seems that no matter how robust the reporting facilities of the tools, they do not produce the kinds of output that stakeholders and management care about.

Using the same providers presented in the Project Planning section and not repeating features already listed, here are how they fared in the area of Project Execution:

Provider/Product	Project Execution (additional) Features
Atlantic Global - Project Portfolio Management Software	- Project Tracking & Management - PERT, WBS, Gantt chart support - Timesheet Management - Resource Utilization - Milestone Tracking - Seamless Integration with MS Project - Timesheet and Expense Management - Project Performance Analysis - Project Costing and Billing
Primavera	- Project Initiation - Issue Management - PERT, WBS, Gantt chart support - Interactive Web Gantt Chart - Status Reporting - Task Management - CPM Scheduling - Issues Management - Threaded Discussions - Collaborative Discussions Portlets - Project Costing - Centralized Document Management - Baselines & Comparative Analysis
Project Insight	- PERT, WBS, Gantt chart support - Gantt charts in multiple time scales - Change project schedules based on task relationships - Export projects out to Microsoft Project, Microsoft Excel, or XML - Import & Export directly to Microsoft Project. - Project Template Library - Centralized project history and discussions - Attach files of any type to a project, task or folder - Plan Use check-in/check out - Team member assignment to projects by group, department or company - Mass assign team members to tasks by skill set - View resource allocation on work scheduled across all projects - Drill down to see projects and tasks in resource allocation reports - Bill and burden rates at system, project

Provider/Product	Project Execution (additional) Features
	or task level • Dashboard support • Project, milestone and task level reporting • Earned value reporting
Microsoft – MS Project	• Project Plan Creation • Project Progress Tracking • Support of PERT, WBS, Gantt charts, etc. • Timeline Recalculation • Task Management and Conflict Analysis • Resource Management and Leveling • Import and Export Wizards to Excel and Outlook • Baseline Management • Smart Tags • Built-in online help • Standard Project templates • Interactive, step-by-step planning aid • Project Linking • Report Tailoring

In actuality, trying to list all the features leading products have in the area of project management would take far too many pages. Suffice to say, any of the above products provide very good project tracking support. It is in the totality of the solution (planning, execution, evaluation, portfolio management, etc.) that differentiates these offerings.

Project Process and Outcome Evaluation

Unfortunately, the area of project process and outcome evaluation is sadly lacking in integrated tools. While performance scorecards and the like are much talked about, the tools for integrating or even interfacing this project performance data into a cohesive post implementation evaluation process just aren't there yet.

But all is not lost as there are "standalone" tools that can help leverage the post-implementation review effort. Web-based survey tools can assist the PM or PMO in taking the pulse of management and stakeholders on how they felt the project process was performed. Metric-tracking tools can be used to gather outcome data from the results of the project for subsequent analysis to measure whether the project delivered the improvements and value it set out to achieve. Performance tracking and management software can be used to summarize team member project contributions for use in subsequent reviews.

Whatever your ideal toolkit expectations, know that much of the frameworks are there…but it will be up to you to develop the processes and methods for getting the most from the software solutions in the market today.

Developing your own repositories of templates, for example, will take time. I hope the research done in this article will help your understanding of how some top PM products compare and provide you with resources for finding post-implementation evaluation support tools. Of course there is a wealth of templates and ideas on www.gantthead.com, especially for premium members, so take advantage of that resource in compiling your bag of PM tools. And while you are there, be sure to check out JPACE and Project Headway. Each provides a comprehensive project management methodology that can really help expedite your standardization efforts.

Below are some sources for some online survey tools and for scorecard software:

Provider/Product	URL
Survey Software	
WorldAPP – Key Survey	http://www.keysurvey.com/
Vovici - Web Survey Now	http://www.vovici.com/
Zoomerang	http://info.zoomerang.com/
Survey Innovation – surveySwift	http://www.surveyinnovation.com/
Prezza - Checkbox	http://www.checkbox.com/land/default.aspx?a=7542606
BlueX - BlueSurveys	http://www.explorance.com/blue.htm?gclid=CPDxn9m0s5ECFQp7PAodhx_afg
Survey Monkey	http://www.surveymonkey.com/
Scorecard Software	
Spider Strategies	http://www.spiderstrategies.com/
Balanced Scorecard	http://www.balanced-scorecard-software.net/
PM-Express	http://www.pm-express.com/
Cognos	http://www.cognos.c
PerformanceSoft	http://www.performancesoft.com/
Active Strategy	http://www.activestrategy.com/
Axsellit – Dialogue Strategy	http://www.axsellit.com/balancedscorecard.aspx
QPR	http://www.qpr.com/