

The Visual Approach to Improving Project Management

Saying that projects don't always go as planned is a bit of an understatement. Estimates from sources like the Standish Group and Project Management Institute show that **24% to 68% of projects fail**, with even more projects completed late or over budget. There are myriad reasons why a project may end up tanking or missing the mark; however, failure can often be attributed to deficiencies in the planning process itself.

One of the most common reasons for project failure is poor requirements management. Failing to gain agreement on goals and priorities from all of the stakeholders involved is sure to stop a project dead. When there's a mismatch on expectations, even projects that are delivered on time end up failing when it comes to meeting objectives. The challenge we frequently face is just getting people to truly engage in requirements validation, and traditional methods like emailing decks and holding unstructured meetings leave a lot of gaps.

Managing the mountains of information that come with every project also frequently impacts success. Information accumulates at a punishing pace, making it difficult to adhere to best practices that optimize project scheduling, costs, and quality. Project managers must be able track, organize, and communicate about everything from finances and scheduling

to risk scenarios, resource assignments, and project deliverables, and do so efficiently to prevent overload.

On top of this are the well-recognized challenges of project team communication and coordination. Achieving and maintaining alignment on deliverables and commitment on deadlines is critical—keeping everyone on the same page can make the difference between success and seeing your project run off the rails.

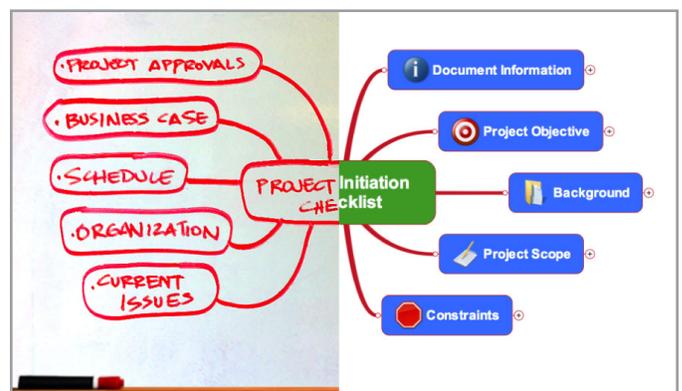
To successfully tackle these challenges, project managers have to find new methods of bringing project data together in a way that allows everyone to clearly see the project structure, key processes, resources, and timelines.

This whitepaper describes a methodology for improving project management, and thus project success, via software for information visualization and management.

Visual Project Planning: A New Way to Work

In this era of Big Data, almost everyone recognizes the power of data visualization. Spreadsheets are good for compiling data, but not so great at representing what it all means. But take the data and turn it into a chart or graph, and patterns begin to emerge that make it possible to communicate its significance, draw conclusions, and make decisions. Effective visualizations make complex data more accessible, understandable, and usable.

Project managers also benefit from applying visualization to the type of data they work with. Project descriptions, goals, priorities, resources, tasks, and timelines are much easier to communicate visually. Mind mapping software (also called information mapping) can help project managers create views of this project information in a way that is easier to understand and more actionable.



Mind maps are like virtual whiteboards

You can think of mind maps as virtual whiteboards. Starting with a blank mapping “canvas”, it’s easy to quickly gather ideas and information and then drag and drop to create structure.

Mind maps allow users to arrange information in diagrams that help everyone involved see the relationships between concepts and how they fit into the scope of work. Information can be arranged in spider diagrams, organization chart format, tree diagrams, and other frameworks useful for displaying

information in a hierarchical manner. As a means to structure and communicate the complexity of a project, it’s an ideal approach that allows project managers and their teams to clearly see the bigger picture and then drill down to view details in context.

In the next few pages, we’ll look at areas that are critical for project management and describe how using visual project plans and dashboards can make the difference between success and failure.

Ensure Stakeholder Alignment on Goals and Priorities

While many experts agree that achieving upfront agreement on project deliverables and scope is key to project success, it can be very difficult to accomplish. Typically, a slide deck describing project goals and priorities is sent around by email with a request for comments. The response rate is generally low and comments are vague. Given this, it is no surprise that the Project Management Institute estimates that approximately 70% of projects fail each year due to a lack of proper requirements management.

Management of requirements and validation can’t be done over email because accountability is limited and nobody can see the cascading impact of changes. To address this, mind maps can be used in a series of workshops (live or online), where participants can contribute and comment on the problems to be solved, goals to be accomplished, and priorities for resource allocation.

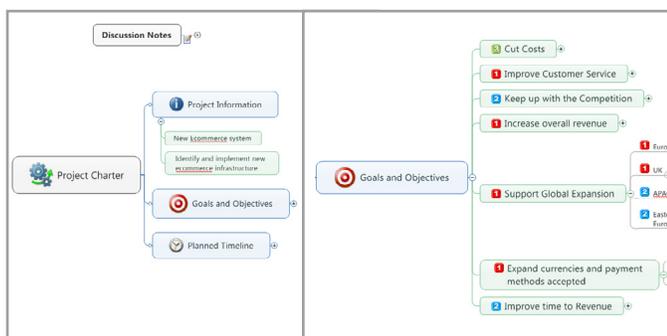
A mind map is the perfect tool for the brainstorming process, because participation and the ability for everyone to see all changes are critical. By creating and sharing a visual map of the discussions, everyone can see the implications of recommendations and decisions on priorities. After live sessions, the map can be immediately distributed, without the project manager having to transcribe notes.

The mind map format offers the flexibility to show the big picture and then drill down to show details, guiding focused discussions in context, all in a single view. Icons and markers clearly illustrate the results of live discussions, and it’s easy to capture discussion notes without switching applications.

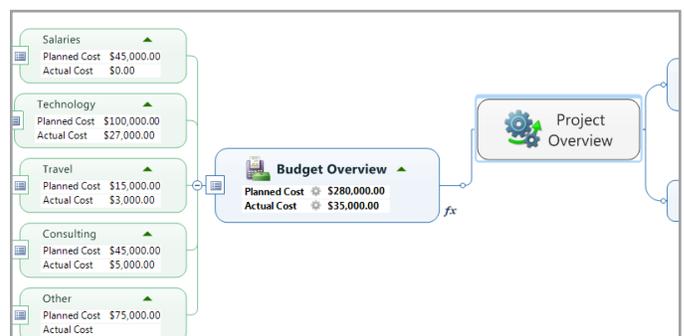
The value of having priorities and dependencies clearly labeled during a project mapping session cannot be underestimated as a tool for driving commitment. First, the fact that stakeholders must agree on the exact priority level of goals leaves no wiggle room, so ambiguity is eliminated. Second, the mapping process puts the project manager in the role of a facilitator who is recording decisions, rather than the person who’s left “holding the bag” when priorities aren’t clear and expectations aren’t met.

Advanced mind mapping software enables project managers to walk decision-makers through the impact of potential changes to the plan in a dynamic way. For example, the project manager may want to show the impact of changes to budget assumptions. The ability to display numerical calculations instantly within the master plan view and without switching applications, supports the kind of planning process transparency needed to ensure alignment.

By using visual, interactive mind maps to brainstorm goals, identify issues, and gain agreement on priorities, project managers can get the management buy-in they need to get projects started on a firm footing.



Mind map “topics” are organized in hierarchical layers to display levels of detail.



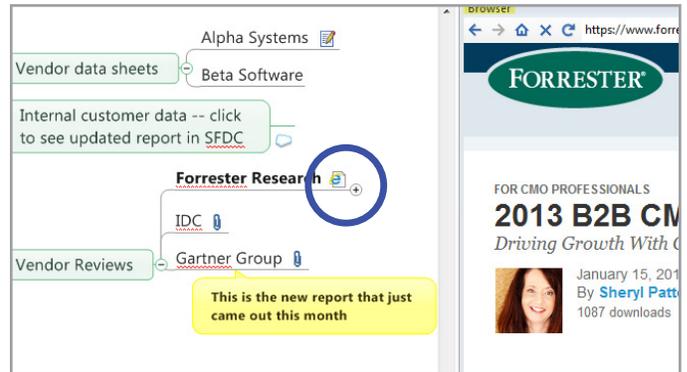
Changes made to “sub-topics”, such as budget categories, roll-up to show impact on the highest level topic.

Turn Disorganized Information into a Centralized Resource

One of the challenges for any complex project is maintaining an organized repository of the documents and web-based information relevant to the project. Within a project team, it's natural for team members to use different formats and systems for maintaining the information they use every day, and this can make it extremely difficult to centralize project data. Even when people use the same file management system, without strict naming conventions for folders and files, it's hard to maintain order.

The visual format of a mind map, and the ability to add attachments, notes, links, and annotations, make it easy to create an "information hub" for every project. Documents can be attached directly to the map or simply linked from their source location, and hyperlinks make it easy to organize web pages and reports in web-based applications. Annotations help guide team members to the information they're looking for. Mind mapping software like MindManager include an embedded viewing window, so documents, notes, and web information can be viewed in context.

The ability to add notes and links on the fly makes using project maps especially valuable for team meetings. Status updates and any new issues can be easily captured in the map and made available for review within the larger project map.



Attachments, notes, and links are used to aggregate project-related files and apps within the overall project map.

Gain and Maintain Alignment on Goals, Priorities, and Schedules

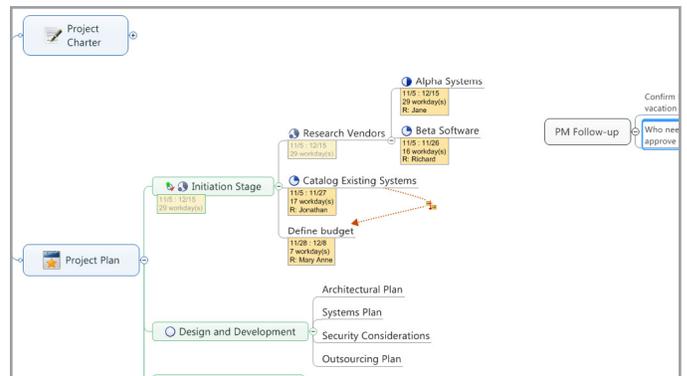
Once goals, budget and priorities for a project have been clearly defined, the next step usually involves laying out a detailed schedule that shows all the actions to be completed, by when, and by whom. Just as it's critical to gain stakeholder alignment on goals and priorities, it's equally important to get the commitment of the people who'll be doing the work.

Unfortunately, most project management tools are designed to track deliverables and schedules after they've been defined. Whether you're using traditional software, such as Microsoft Project or Excel, or newer project tracking software like Basecamp or Trello, these tools don't include features that will help you pull together the plan. It's a classic case of the cart before the horse: these all provide excellent support for tracking tasks, but no support at all for figuring out what those tasks are in the first place.

Depending on which product you use, mind mapping software will help you lay out tasks, resources, and schedules in a format that you can use to "sanity check" assumptions with the team. You can identify resources, illustrate dependencies, identify risks, and show schedules. Advanced mind mapping software like MindManager can display schedules for individual tasks and by project area, and can even include a Gantt chart view.

Visualizing assignments and deadlines in a mind map enables each member of the team to view his or her responsibilities within the scope of the overall project. This helps set expectations and brings clarity to dependencies and commitments.

The map becomes a visual blueprint for communicating project deliverables and timelines with the team, in a format that allows for changes in assumptions and dependencies to be instantly displayed.



Mind maps show each step of the plan and how each relates to all the others, including clear annotation of critical dependencies.

All the elements of the plan can be mapped out collaboratively, ensuring that everyone is clear on what their responsibilities are and when certain milestones must be reached

Once the plan is completed and agreed to, the project manager can use the map to update and communicate status. Some mind mapping software tools provide integration with Microsoft Project, Excel, SharePoint and other software for tracking progress.

Whether or not task tracking systems are used to coordinate team member activities, maintaining a visual project “dashboard” can be an especially valuable vehicle for communicating in update meetings with senior management. The ability to display the status of all deliverables and how you’re doing with costs or schedule compared to the original plan—and to drill down into the map to answer specific questions—is ideal for keeping senior management fully informed of project progress.

Summary: The Value of the Visual Approach to Project Management

This whitepaper describes several of the ways mind mapping can be used to improve project planning, communication, and coordination. Advanced mind mapping and information mapping software expands the range of benefits to be derived, especially with respect to communication and collaboration.

Just as geographical maps help people see where they’re going and anticipate any obstacles in their path, mind maps help people working on projects lay out ideas and

connect information in a way that helps identify connections, dependencies, and risks.

Best of all, mind mapping software lets people organize information in a visual way that mirrors the way people think, so it’s easy to learn and use. Whether you’re a full-time project manager or someone who’s coordinating a one-time project like an event or the agenda for a company meeting, using the power of visualization can help you achieve success.

MindManager®

is the world’s leading mind mapping software. In addition to core mind mapping functionality, MindManager offers:

- Extensive project management tools, including guided brainstorming tools (for project requirements gathering), task and topic schedule roll-ups, Gantt chart view, filtering, one-click timeline adjustment, and an extensive library of project-oriented map templates.
- Budgeting and forecasting tools with automatic calculations.
- Decision analysis tools, including SWOT, Cost Benefit, Balanced Scorecard, and more.
- Built-in “map parts” that let users add pre-configured topics for meeting agendas, budget analysis, and project processes.
- An embedded “content viewing” pane that displays attachments, notes, web pages or web applications within the context of the map.
- Presentation tools that create slide views of map topics and/or export map topics to Microsoft PowerPoint.
- Integration with Microsoft and Apple apps, including Outlook, Project, Word, and Excel.

For more information on how MindManager can help your organization take advantage of visual project management to improve your project success rate, please see [our website](#) or contact a Mindjet sales representative or reseller.

About Mindjet and MindManager

Mindjet is the global leader in enterprise innovation and mind mapping software, and our software is used by millions, including 83% of Fortune 100 companies.

MindManager Enterprise expands the power of visual business mapping to the entire organization, enabling effective collaboration on key business initiatives, including project

management, business and strategic planning, and information management. MindManager Enterprise leverages integration with Microsoft SharePoint to let project teams collaborate on project plans, maintain project dashboards, consolidate project-related files, and use SharePoint tasks (synched with tasks in MindManager maps) to manage project execution.