VISUAL PROJECT PLANNING: A Practical Guide to Achieving Alignment on Requirements and Scope
Introduction

IT'S NO SECRET that successfully planning and implementing complex technical projects is very difficult. Most project and program managers know from experience that getting a technical project over the finish line can be a herculean task. In fact, in a report by PricewaterhouseCoopers, researchers found that only 2.5% of the companies they interviewed successfully completed 100% of their projects.¹

The statistics are grim. Researchers from the Harvard Business Review also found that the average cost overrun for 1,471 IT projects was 27%, with schedule overruns reaching 70%.¹ That means projects usually miss deadlines and cost more money than originally budgeted. The financial impact of project overruns is significant. Multiple sources estimate the losses due to IT project failures to be $50-$150 billion per year¹. That’s like losing the GDP of a small country every year to project overruns.

So, how can we improve success rates for IT, Engineering, Research & Development, and other complex projects?

Many experts point to the start of a project as the foundation for success. Getting the project plan right before the work begins is critical to getting projects done on time and on budget.

Before starting work, engaging with team members and stakeholders to align on the goals and processes is key. As a matter of fact, Gartner² researchers looking into why projects fail came up with the following recommendation:

Invest in truly capturing and understanding the business expectations and functionality sought from the project, and ensure that there is initial, adequate allocated funding, as well as good processes in place for revisiting the expectations and required funding at multiple points during the project.²

In other words, getting teams and stakeholders bought into the goals and on the same page in terms of the expectations of the project is
essential. A *Gallup Business Journal* article also emphasizes “… an approach to project management [that] works toward optimizing performance by actively measuring, managing, and aligning project team member engagement and stakeholder engagement.” The author of multiple *Gallup Business Journal* articles on project success, Benoit Hardy-Vallee, PhD. and advisor to IBM and other clients, goes on to highlight three key principles for success:

1. **Stakeholder engagement**
   A project team must have strong emotional bonds and partnerships with its stakeholders to succeed.

2. **Project team member engagement**
   Just like any workgroup, a project team needs to be emotionally engaged to achieve its objectives efficiently and effectively.

3. **Optimizing performance**
   Highly engaged teams with highly engaged stakeholders are much more likely to achieve objectives within scope and budget and with high quality.

Gaining alignment with everyone involved in the project is fundamental for project success.

The good news is that MindManager’s visual format is uniquely suited for validating requirements, aligning teams and laying the groundwork to execute a successful technical project.

Many Project Managers, Engineering teams, R&D groups, and IT Departments have selected MindManager software to implement a standard project planning process. Using an established template, for example, ensures requirements are thoroughly gathered and validated at the start of a project. MindManager maps and diagrams are also used to bring stakeholders into the project planning phase, document their input, and keep stakeholders engaged in the process.

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**Customer Insight**

Ekso Bionics uses MindManager to collaborate on defining research goals with hospitals and clinics, thereby securing their participation in the trials of Ekso’s bionic exoskeletons, which help people with spinal and brain injuries stand and walk. Karl Gudmundsson, Ekso Bionics VP of Marketing, said, “When you walk into all these hospitals… you have to have all this information organized. It’s impossible to do in a PowerPoint format because the conversation jumps around, back and forth. So I edited a MindManager map based on the input I was getting. People could see their involvement, and it helps gain their trust. It’s been a great tool to help us see and organize the information and put it together in a plan.”
This Guide

**This Guide** documents best practices for engaging with stakeholders and team members to validate requirements and project scope using Mindjet’s MindManager software for visual project planning.

To make it easier to follow the guide, we’ve also included the following downloadable content:

- The project planning map used for all the illustrations in this guide
- A blank project planning template that includes the framework of the project planning map
- A full project map developed by a MindManager customer to guide complex implementation projects for a Global 100 systems corporation. This sample map is used as a template for every customer implementation they undertake (a six-month process). It’s included to show you how MindManager can be used to create repeatable templates that guide an entire project.

If you’re not a MindManager user, we recommend you download a [free 30-day trial](#) so you can follow along with the project planning map and view the detailed customer map.
**SECTION ONE**

Creating a Reference Map

MINDMANAGER MAPS are organized around a central topic, with topics and sub-topics branching off the central topic. Because it’s easy to open and collapse sub-topics, MindManager maps can contain a lot of information and still show the big picture. It also gives you the ability to drill into the details, either by opening sub-topics or viewing attachments and links in context, using the embedded browser pane.

To take advantage of this, we recommend adding relevant information to your map at the beginning, so you always have all details handy.

The initial Project Planning Map looks like this.
Expand the Project Personnel topic to add information about stakeholders and team members so it’s always at hand. This can be especially helpful in keeping track of contact information for outside vendors.

Use icons as you add information to display confirmation (green flag) or information that’s not confirmed (yellow flag). These visual icons help make MindManager maps easy to navigate at a glance.
Next, use the Relevant Documents topic to collect important information. To add a PDF, for example, just click on “Attach Files” in the home menu and select the files you want to include.

Adding links is just as easy – click on “Link” in the home menu. Once a link is added, you can click on the link and view the content in the embedded browser. (In this case, the example is a link to the IBM website.)

Using attachments, links and notes means that you’ll have all relevant information at your fingertips, not only for your own use, but to answer questions in meetings and to share with others.
SECTION TWO

Gathering and Validating Stakeholder Requirements

In order to fully engage stakeholders in defining requirements, Mindjet recommends a multi-step process:

- First, interview stakeholders in an interactive brainstorming session that surfaces requirements as well as issues or concerns.
- Second, organize and prioritize requirements in a format that drives clear decisions about tradeoffs and risks.

The next section shows what this looks like with MindManager.

We often say that MindManager is like a virtual whiteboard that enables the freeform collection of ideas. MindManager’s floating topics let you quickly add stakeholder input, separate from your formal map structure. The example here is a floating topic for the CFO’s input. Select “Floating topic” from the home menu. In this example, comments from Mary James, the CFO, are typed in during the discussion. You can then review the visual notes with the stakeholder for completeness and correctness.

Note: You can also use a completely blank map for each interview and then simply copy topics into your primary project map.
Either floating topics or multiple maps can be used to collect and verify the completeness of each stakeholder's input.

To keep a record of which stakeholders contributed which objectives and desired outcomes, create color-coded tags. Click on Tags in the home menu, then choose “Add New Tag” to define tag name and color. (It’s easiest to keep new tags in the General Tags Group when you’re first using MindManager.)
The next step is to drag-and-drop all the input into the primary map structure. In this example, all of the tagged objectives and desired outcomes are copied from the floating topics into a single sub-topic called Objectives and Desired Outcomes. Copying everything into a single list makes it easy to identify and eliminate duplicates.

As you can see, using MindManager’s drag-and-drop capabilities is much easier than trying to rearrange information in typical office applications.

The next step is to define high level goals. In this example, subtopics are created for “Reduce Costs”, “Improve Experience”, “Streamline Globalization” and “Reduce Errors”. Now the objectives and desired outcomes can be dragged and dropped to connect to the matching goal(s). For example, “Fewer contractors required to run the system” is moved to the “Reduce Costs” Goal.
This next step is where MindManager’s visual format can really help validate requirements and drive decisions on priorities. Preferably with the entire group, ask the stakeholders to agree on the priorities, with the understanding that you’ll report back after further scoping on how many priorities can be addressed in the desired timeframe. To do this, add priority markers in one or more live sessions so all stakeholders are fully engaged in making the trade-off decisions.

It’s easy to update priority numbers – just click on them to advance. Use callouts or sub-topics to add comments and clarity to the requirements. As you become familiar with MindManager, you’ll see how much easier it is to engage participants in interactive discussions than with standard presentation tools or spreadsheets. This is essential for gaining true buy-in during requirements validation.
If the budget for the project is also in question, make a high-level budget review part of the Stakeholder validation review.

*Note:* The template that accompanies the guide includes a basic budget framework. You can create your own financials using the Advanced menu tab tools.

As you enter information into the individual budget items, MindManager will calculate and display the totals, making it easy to conduct “what-if” tradeoff discussions. Everyone can immediately see the impact of changes to individual line items.
Once you’ve completed the high-level stakeholder review, use the topics and sub-topics in the map to fill in the Success Criteria and Detailed Requirements. Included in the sample map are examples and notes about the kinds of questions that can help create the detailed requirements.

This completes the first phase of actively engaging stakeholders in requirements definition. There are several ways you can share the map in process with stakeholders if you wish. These include:

- In the Home tab, select one of the options in the Share menu to send an interactive PDF or save an image.
- You can also export to Microsoft Word or PowerPoint (from the Share menu).
- If you’re using MindManager Enterprise, you can also share interactive maps via Microsoft SharePoint or using the MindManager Reader for Windows.
SECTION THREE

Gaining Buy-In on Tasks and Assignments

SIMILAR TO THE requirements gathering and validation process, MindManager’s visual format can help project team members clearly understand all elements of the project, including tasks, resource assignments and dependencies. Even for larger projects, where it may be desirable to export to Microsoft Project or SharePoint or to cloud-based applications for project coordination, outlining the project plan in MindManager can help project managers communicate clearly with project team members and avoid the lack of clarity that can derail a project down the line.

Note: MindManager for Windows provides export to Microsoft Project. MindManager Enterprise is required for SharePoint synchronization and for export to cloud-based applications using Zapier integration.

Begin by entering the tasks or task summaries (for larger projects). In the template, these are organized into Phases and then sub-divided into Tasks and sub-tasks. Simply replace “Task 1.1” and so on with actual tasks to be completed. Remember that you can always drag and drop sub-topics, to reorganize project phases or task priority.
In the Task tab, select Show Task Pane.

When the Task Pane opens on the right, simply select a topic and then enter the relevant task information, including Priority (optional), Progress to date, Start date and Due date. MindManager will automatically calculate the number of work days between start and due date. Then enter the name of the team member assigned to complete this task in the Resources field.
If the next task is dependent on the completion of the previous task, click on the first task, hold shift and select the second task and then identify the dependency.

**Note:** dependencies can always be added later

If you select Finish to Start, the next weekday after the due date of the previous task will be entered. Otherwise, simply enter task information manually for each task. You can also bring up a calendar by clicking on a date, making it easy to change due dates.
MindManager will calculate duration for project phases or for the entire project. Click on the Phase One topic, for example, and then select Roll Up Task Info. The total time for Phase One will be added.

Seeing the big picture of a project can help the team understand the impact of changes on individual dates. Click on Gantt view to see a line view of the tasks in the map.
Dependencies, milestone and duration are shown in the Gantt view. Any changes made in Gantt view will automatically be made in the map.

Controls to adjust the width of the Gantt View, as well as an icon to turn off Gantt view, are located at the bottom of the MindManager screen.
Several tools can help you adjust schedules — use “Move Project” to change the earliest start date, and MindManager will adjust all other dates in line with the number of business days needed. “Remove slack time” adjusts dates relative to dependencies.

As your map becomes larger, use filters to display only certain information, for example, show tasks assigned to one individual to help estimate workload.
Here you see the tasks assigned to Jonathan Jones. Just click “Remove Filter” to view the entire map.

As noted earlier, once detailed requirements are completed and both budgets and schedules have been determined, we recommend presenting the map in progress to all stakeholders to confirm the project plan. Given the flexibility of MindManager, it’s easy to make changes to the planning map during review sessions. This will help keep everyone “on the same page”.
Conclusion

**This Guide** highlights key MindManager capabilities for gathering and validating stakeholder requirements and for working through project assignments and timeframes with team members. Because so many customers use it to plan and manage projects, MindManager includes many more features for projects than are shown here, including the ability to create flow charts and swim lane diagrams to validate project workflows. We encourage you to register for one or our project-focused webinars or watch one of our many recorded webinars to learn more.

While this guide focuses on the critical upfront planning elements identified as critical in analyst reports, MindManager is frequently used to coordinate all phases of a project, from planning to execution to lessons learned. The customer project template map included with this guide is one example that demonstrates how MindManager can be used effectively to guide all phases of complex projects.

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**Customer Insight**

At DuPont™ Genencor®, MindManager is used for R&D and IT project planning, where the ability to quickly see how one project relates to another is key. “If you can develop a standard method, then you could use the same technology platform for all similar projects,” said Scientist Todd Becker. “[MindManager] helps us leverage this kind of synergy. We brought it into the R&D department, showed how it immediately increased our productivity, and now other departments like IT are seeing how quickly it can improve their productivity, too.”

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