

# Selecting Technology for Your Team

The good, the bad, and the requirements

Teams today have hundreds of technology choices for communication, tracking, and delivery. What works, what doesn't, and what's crucial.



## Get it done!

Has technology made it easier to manage projects? There are some who feel that a Gantt chart and a dedicated notebook is all it takes to manage a project effectively. Others couldn't live without email and MS Project.

Why incorporate technology into managing projects – and which technology?

# Selecting Technology for Teams

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## Introduction

Technology has always been a part of project teams. Since the first Gantt chart was mounted on the wall and small pieces of tape affixed to each task to mark the dates, project teams have leveraged assistance in getting their tasks done and the project completed.

Out of all the technologies available to our project management teams, which are the most effective? And which technologies sound like a great idea, but in practice might be more trouble than they're worth?

And the biggest question: How do I choose the right technology for my team?

There are plenty of ways to select the best solution for your company. It's a matter of documenting the requirements, selecting a few candidates, testing the contenders, working out the details, and making a final selection.

Selecting software is a bit like planning a vacation somewhere you've never been. You can research the place to death, and still be surprised once you get there.

## Current technologies available to project teams

The number of technologies available to teams in this century has exploded. As of October 2016, doing a web search of “team technologies” returns over 13 million hits – searching “technologies for enabling teams” finds over 60 million entries.

Focusing on project team technologies yields almost 14 million results. So many potential answers – so little time.

Team technologies include those for communication, project schedule development and management, project task assignment and tracking, budget development and tracking, risk management tracking, and tools to help with project tracking. It’s overwhelming to review so many different products and select what works best for your team.

My suggestion is to determine where you want and need the most help. Is it project schedule tracking? Budget management? Communication technologies?

Let’s stick with finding project tracking software as an example of how to approach the selection process.

## Project task tracking

Every organization needs some type of project task tracking for project management. For many companies, Microsoft Excel works quite well for this function. As organizations grow in maturity they start looking at other solutions.

The first step in the search is to define the organization’s requirements for a new solution.

### Requirements

Each organization has different requirements for project tracking. Before attempting to find the right software for your organization, it’s critical that requirements are defined correctly and succinctly. Review the current frustrations with your current process and note how you’d like to correct that issue.

For example – Your plan doesn’t automatically update when a date changes. This causes your staff to spend hours updating dates and communicating new dates to the team.

Every day.

You’d prefer your professional staff spend less time on data entry.

As a manager, one requirement for your new project tracking system might read like this:

*The proposed solution must correctly and automatically update the start and end dates for each task subsequent to the task manually updated.*

When reviewing proposed solutions, the dates either change automatically or they don’t.

This paper doesn’t go into depth on the requirements definition process. For more information on the requirements definition process, see the [References](#).

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**Commented [MG1]:** You might consider at least adding a couple of sample requirements for project tracking so readers understand what “requirements” means.

If you don't define your requirements well, you won't buy the right software. This does take time and effort. Many companies initially skip this part, figuring they know what they need – then go directly to the marketplace and buy something.

### *Ready – Fire – Aim*

This rarely works out well. It is nearly guaranteed that the company spends money on something that doesn't really fit their needs. So, they do finally detail what they want in some type of requirements document.

It's cheaper to document your requirements before you spend money.

Need more help in defining requirements? Review this blog post: [Getapp.com](http://getapp.com).

### The First Cut

After the requirements are agreed upon, it's time to [figure out which software vendors](#) make the first cut. This can be the most overwhelming part of the search process. Let's make it a bit easier by using an industry leader to help us narrow the field.

According to [Capterra](#), a company that specializes in helping companies research software, here are the 10 most popular Project Management software tools<sup>1</sup> as of August 2016.

1. Microsoft Project
2. Atlassian (Jira)
3. Podio
4. Wrike
5. Basecamp
6. Asana
7. Teamwork
8. SmartSheet
9. Freedcamp
10. Trello

These top 10 companies have around 92 million users in total. Atlassian alone claims 45 million users from a customer base of 35,000. How does a small company that's currently outgrowing its current project tracking solution decide where to start?

At the beginning.

One way to winnow down the tools to review is to find out which tools are most often used in your industry. Many companies prefer the rigidity and complexity of MS Project, and others prefer the flexibility of a Trello or Wrike. Somewhere in the middle is Jira. If many of your projects are with the government, you may not have a choice – the U.S. government tends to use MS Project.

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<sup>1</sup> <http://www.capterra.com/project-management-software/#infographic>



Check with those vendors or suppliers as well as your customers. Most folks are happy to talk with you about what tools they prefer and why. Using the same tools as your customer may make communication easier.

You have your requirements. Somewhere in the document, you have detailed the absolute must-haves for the new solution. These are the deal-breaker requirements. You know what your company values. Make your first cut with these criteria in mind. If you can get the field down to between three and five companies, your selection process is easier.

## Testing your contenders

Once you've got your list narrowed down to a few companies, it's time to evaluate the leaders. Here are some criteria to review.

### How does the software enable collaboration?

To determine this, have a few of your staff members sign up for a trial and use the software for a few days. Have them evaluate it using the requirements as a baseline. How easy was it to set up the tasks and deadlines? Did it make their jobs easier, harder, or about the same? Look at your requirements and compare their experience against your expectations.

### What features available in the software are also on your must-have list?

It is unlikely that any software package can meet all of your needs in the way you envision. So, while your staff is trying out the various packages, can they find your must-have requirements within those packages? Do they feel that the software can handle those requirements and if not, why not? Keep a list of these. If you like the software otherwise, talk with the company. They may have ways to handle your requirements – or that function or feature might be planned.

### Does the product enable good process?

As your staff is working with the contenders in your list, can they see if the software enables good process? Not just your company's process – but good project management processes. Maybe your company already has a mature project management process – is that supported?

Overall, try to rate each trial with the same criteria. Pick your most important requirements and rate each package against those features. Don't make this too complicated – adding complexity doesn't add value. Pick your top three to five requirements and start there.

If a package can't meet those satisfactorily, then the rest is moot.

If you're interested in the entire evaluation process, check out this article by the SEI<sup>2</sup>

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<sup>2</sup> <http://www.sei.cmu.edu/reports/O6tn026.pdf>

## Downsides of the major technologies

### **Dependence on technology can lead to sloppy process.**

When evaluating software, be aware that in some cases poorly designed software can lead to sloppy process. If the software is too hard to set up and/or maintain, busy professionals find ways to undermine the effectiveness.

Of course, it's unlikely that any poorly designed collaboration software will lead to planes falling out of the sky or boats sinking. But it could lead to deliverables that are late because the team member responsible didn't get a reminder notice.

Is this an acceptable risk for your company?

### **There are very few one-stop shops. What can you live without?**

One of the downsides of technology is that very few software packages are designed to do everything you want to do. There are always a few weak areas, even in Enterprise software packages. Great software takes time and money to develop and maintain. The more features that the software supports, the more complicated implementation and maintenance becomes. Consider how long you can wait before the software is fully implemented.

Will you begin using all the features right away, or save some until later? All good questions.

It's best to know what you can live without. Focus on what's most important to you, your team, and your company. Find something that meets that need today. Your company can grow into the additional functionality.

### **Software investment lock-in. How easy is it to change vendors?**

If you're a young company making its first investment in collaboration software, consider evaluating how easy it is to change vendors. Does the software keep the database in a proprietary format? If your company outgrows this solution, how hard is it going to be to implement a new solution?

Part of your evaluation process needs to be your exit strategy. Very few software packages can scale from very small to very large. It's important to keep your company's growth trajectory in mind as you select your software.

Avoid any vendors that insist on proprietary formats without good reason.

### **How much customization needs to be done?**

In the software world, customization is a dirty word. Anytime you customize software by changing the underlying code or creating code that interfaces with the original, you make it much more difficult to maintain the software as a whole. As the software company releases patches and updates, your IT department must test each update separately with the software as your company has modified it.

Depending upon how extensively you've modified your version of the software, testing and loading patches and updates can take several weeks to several months. In contrast, unmodified software takes much less time to update because the software company has already done the testing.

As you determine which software meets your needs, consider how much customization you'll need – if any. For most companies, the best scenario is no customization aside from what the software already supports. Unfortunately, many companies feel compelled to add or change what they buy. Sometimes, it's necessary.

Many times, the changes are made because the company's management wants to feel that they are special – and their special processes need to be accommodated.

Be very careful. Inevitably, processes and people change. Then all the time and money put into modifying the software to accommodate those processes have been wasted.

## Upsides of the Major Technologies

With all the challenges that go into finding the right technology for your team, why even try? There are lots of reasons.

### Increasing profitability

When organizations are able to streamline their operations, the savings have a direct impact on profitability. If your team can get that project done or that product on the market even 10% faster, your company's profit margins go up.

Don't pay people to manage Excel spreadsheets instead of getting products out the door or software implemented so that the company can get paid faster. If you're a professional services firm, using software that allows project teams to better track billable hours could increase profitability without taking on any more projects. Just bill all the hours your company is spending on current projects.

### Ability to track tasks

If your company is ready to upgrade or even buy their first project management or team collaboration software, the pain of tracking the tasks, progress, and budgets must have gotten intense. Many companies try to manage projects using email and Excel and find out that the maintenance hassles are just not worth it.

Great tools can help managers understand which tasks are underway and which are due soon. If your projects have interdependent tasks, handling those dependencies manually can be very time intensive.

### Reporting

Very few individuals get jazzed about reporting, but reporting is one of the most important aspects of managing projects.



Getting great reports out of your project management or collaboration software should be on your must-have requirements list. If you're going to take the time to enter the data into the system, there must be a quick and easy way to get the information back out.

Pull together a list of your favorite project tracking reports. Can you get this information out of the software you're testing? How easy, or hard, is it to produce the report? Are there more useful reports you could use?

Most of the top software packages have great reporting – but check to make sure the reports work with your organization. Just having lots of reports doesn't mean those reports help you. Keeping your management happy with great reports is an excellent reason to get new software.

### Project history and archives

One aspect of project management and collaboration software is the ability of companies to archive their project documentation. Historical records are very helpful for project estimation of future projects. Most organizations tend to run similar projects periodically. Understanding what went wrong and right during previous projects helps to avoid those same pitfalls moving forward.

But having historical records is irrelevant if your staff can't find or access them. Make sure any software packages you consider give your company the ability to retrieve past project records. Your project managers will thank you.

### The Choice

Selecting the right package for your company is part skill and part luck. Because the market is constantly moving – more features are being introduced and enhanced – whatever you buy today may seem outdated by tomorrow.

That's not the point.

You're looking for a tool that helps you and your teams be more productive. Buying a software package is a bit like buying a car. A brand new car has all the bells and whistles to date. In a few years, there will be new bells and whistles but your older car still gets you where you want to be in fine style. Don't trade it in until there's a real need.

If your search team has the list of must-haves and has been using each of the few final contenders for a month or so, they know what they like. The next step is to pull the team back together and ask for their recommendations. If there are multiple choices, create two teams that present why each package should be considered.

Since no packaged software is perfect, the presentation should include what the package doesn't offer. Which features are not available or are promised but haven't been released yet? Each presentation needs to be well-rounded, with all possibilities presented.

### The Final Decision

At this point, each company's purchasing process takes over. Who makes the final decision and why?

For some companies, completing a matrix with wants and needs complete with scoring helps with the final decision. In others, the relationship between the managers in the client company and the management of the software company plays a crucial role.

Make the decision and move on.

## Conclusion

Which tools are necessary for your project teams to do their work? If Excel spreadsheets and email work for your organization, don't fix what's not broken. For small organizations, this can be just fine.

Buying tools to assist your teams with completing their projects and producing their deliverables is a multifaceted project. It takes thought, commitment, and resources. If your organization is lacking in one of these areas, your process may be at risk. No one has money to spend on tools that don't solve the problem.

Successful implementation of the right tools can increase productivity as well as the bottom line. Remember the steps to a great pick:

- Define your requirements carefully.
- Research the tools that are most often used in your industry space. Pick the top 3 to 5 to review.
- Use the tools for at least 30 days. Record your findings.
- Prepare documentation to detail how each tool fits your requirements. Present findings.
- Select the best fit.

The quicker deliverables are complete, the more profitable your company can be.

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# CHOOSING PROJECT SOFTWARE



The basics of selecting the best project software for your company

## DETERMINE REQUIREMENTS

Figure out the problem that needs solving. Write statements that are specific to the result wanted. For example: "A project task is entered in the database with at least the following fields:xxxxxxx"



## SELECT CONTENDERS

Research the major software packages that resolve 80% of your requirements. Pick three to five contenders to test.

## TEST THE SOFTWARE

Have the staff sign up for free contender accounts. The staff uses the software for 30 days, making notes on how well the software meets the requirements.



## RECOMMENDATIONS

The testers bring their notes and their opinions to management. Consider having staff present their findings and recommendations to management.

## THE SELECTION

Using the requirements and the staff recommendations to determine the final selection.



[PROPROJECTMANAGER.COM](http://PROPROJECTMANAGER.COM)

## References

Requirements definition:

<http://its.ucsc.edu/drb/sdlc/req-def.html>

<http://pmtips.net/blog-new/ninestep-process-requirements-definition>

<http://www.csee.wvu.edu/~katerina/Teaching/CS-230-Spring-2006/CS-230-Sample-Formats.pdf>

[Project Management Software Features Guide: Things to Look for When Choosing a Solution](#)