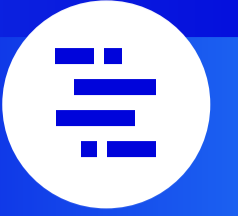


Creating a

Project

Budget

A Complete Guide



A project lifecycle is more than a collection of tasks. In order to manage a project from end-to-end, you also want to consider the resources required to complete those tasks and their financial impact.

Creating a project budget is a fundamental step to ensure that you stay on track, protect your margins, and set yourself up for success. This guide explores how to create a project budget: what to incorporate, factors to consider, and how to calculate the budget - with or without professional tools.

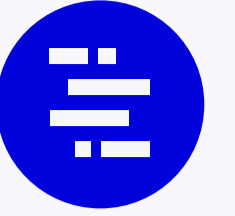
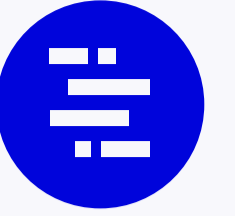


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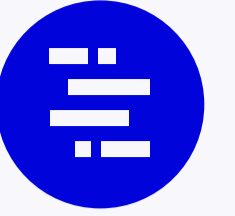


What is project budgeting?

Before we jump to the ins and outs of creating a project budget, let's define what a project budget is in the first place.

The budget for a project contains the combined costs of all activities, tasks, and milestones that the project must fulfill. In short: it's the total amount of money you'll need to finish the project that should be approved by all the stakeholders involved.

You start creating a project budget during the kickoff phase of the project and continue monitoring it until the project reaches the finish line. A meticulously planned project budget is the holy grail of the new service economy, where scaling smoothly and sustainably is critical to company survival.



Why project budgets are important

There are several reasons why it's important to have a project budget plan. To start:

First, it's an essential part of securing project funding.

The numbers will tell stakeholders exactly how much money is needed to successfully deliver the project, and when the money is needed.

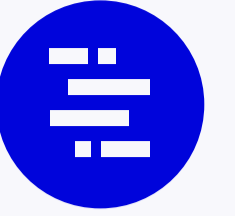
Second, a well-planned budget provides the basis for project cost control.

Having a complete budget estimate helps you measure the project's actual cost against the approved budget and track how much you've burned already. It will give you an understanding of how the project is progressing and if any changes need to be made to the plan.

Third, a project budget has a direct effect on the company's financial viability.

When calculated feasibly and with resource constraints in mind, a project budget will increase margins and improve overall project success.

Now that the purpose of a budget is clear, let's switch to the mechanics.

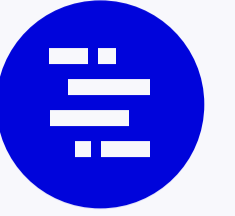


Typical project cost categories

Planning project costs is an essential step to mapping out a project budget. To do so, you'll need to create a list of line items that are relevant for the project. Here's a table with common project cost categories to help you get started:

Project cost category	Example
Human resources	Salary rates of full-time and temporary workers
Travel spend	Anyone who travels from one location to another to do project work (including budget for meals and lodging)
Training fees	Conferences, workshops, outside contractors
Material resources	All the items your team might need to perform the work, including software, equipment, or other unique materials
Research expenses	Studies or data to support your project and deliver the best value
Professional services	Legal advice, consultants, market research firms, etc
Capital expenditures	Equipment or technical upgrades to complete the project
Contingency reserves	Contingency funds to allow for flexibility and reduce risks of budget overruns, usually 5-10% of the budget

Some of the costs, such as training costs to teach users to use a product or maintenance costs, are often overlooked by managers, so it's important to think ahead if there are costs related to the project that will come up once it's complete.



Approaches to estimating a project budget

We all know that it can be extremely challenging to estimate the size and cost of a project, since a project by definition is unique in nature, often a new product, service or business change. The greater the size and complexity of the project, the harder it can be to do this properly. Here are five techniques that can greatly improve the project estimation process and accuracy:

1 —

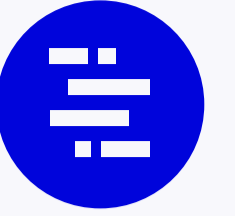
Bottom-up estimation

Rate the individual parts of the project plan and total them up

Bottom-up estimation is one of the best and foolproof ways to prepare a project budget. It estimates anticipated individual parts of the project, such as tasks, milestones, or phases and then totals them to get to the total project cost. This method can be applied if you're at the point of creating a statement of work. If you're sure you know every grain of the project, bottom-up estimating is the way to go.

The downside of this approach is that it takes time to go down to the smallest detail of the project. Also, because it's very granular, at some point you might suffer from inflation affecting the cost of your estimates.

Since project estimation is a process, the estimate will always undergo several iterations of refinement throughout the project's lifespan. The estimation accuracy will thus improve as the project scope is more thoroughly understood. This also means that the uncertainty will lessen the further the project progresses towards completion.



Approaches to estimating a project budget

2 — Top-down estimation

Figure out the total, and then split it into tasks or milestones

Top-down estimation is opposite to the bottom-up approach mentioned above. It starts with the project budget total and involves breaking it down into smaller chunks to allocate a number of hours to milestones.

Top-down estimation might be useful as a method of figuring out whether a project/client is worth accepting in situations where the budget is set in stone.

Otherwise, the main disadvantage of this approach is loose estimations. It is difficult to accurately predict the budget before you understand the scope of work and have a project plan.

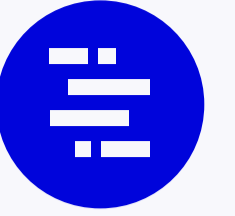
3 — Analogous estimation

Analyze the data in similar projects to decide the cost

Your organization likely has some historic information and data on previous projects, which can help guide you in understanding what works and what doesn't. Using analogous estimation, you rely on the budget data and best practices from your previous projects to form an opinion about how much the current one could cost the client.

There are always similarities between projects, but it doesn't mean that you should make decisions based solely on them. Every project is unique. So it's important to consider where there may be variations from the comparable projects.

It goes without saying that analogous estimation is not as accurate as other techniques like bottom-up estimation. But the advantage of analogous estimating is that it's super quick and is especially useful when there's limited information about the project.



Approaches to estimating a project budget

4 —

Parametric estimation

Using data and project variables to suggest the total

In contrast to analogous estimation, the parametric approach is more accurate. It takes cost variables or data points from specific parts of specific projects and applies them to the current project, so you make more decisions based on data.

The advantage of this process is that it's more accurate than the analogous estimation because it employs more than one data set and uses the statistical relationship between historical data and variables.

The disadvantage is that with digital projects it's often hard to find useful data points.

5 —

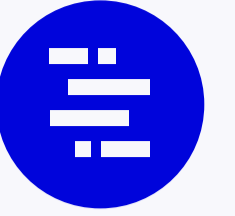
Three-point estimation

Take the best, worst, and most likely case estimates

Three-point estimation is one of the most sensible and pragmatic techniques as it takes into account a weighted average based on the best, worst, and most likely case budget scenarios and encourages you to think from multiple perspectives. Thus you can figure out a realistic cost estimation.

The upside of the three-point estimation technique is that you can reduce the risk of going over budget, as it will be indicated in your plan, and eventually deliver on expectations.

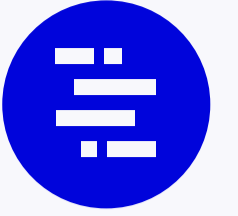
There are no substantial disadvantages of three-point estimation. Sometimes it takes longer to create a budget using this approach, but at the end of the day, it's worth the effort spent.



How to create a basic project budget in five easy steps

You can use project budgeting methods above, or stick to a simple project budget planning routine. Essentially, these five steps can help you put the finances together and create a project budget summary:

1. Break down your project into tasks and milestones. Working with your task list will give you an understanding of what you'll need to accomplish and what it might cost to get things done. If you don't already have a task list, start by **creating a scope** and writing down everything that your team needs to do.
2. Estimate each item in the task list. Now it's time to give each item that you've written down an estimation. At this point, identify all the resources and materials you'll need to perform well and include them into your estimate when calculating the price.
3. Add your estimates together. This is probably one of the easiest parts of the project budgeting process, especially if you have a spreadsheet with two columns: Tasks and Costs. Then, you'll be able to calculate the total fast.
4. Add contingency and taxes. Better safe than sorry. Of course, you can't be 100% confident about the final estimate, as things change all the time. By adding contingency and taxes, you make sure that the project doesn't go over budget and your estimate number is closer to the final costs you eventually spend. If you don't know how much contingency to add, project management experts recommend going for 10% of the total.
5. Get approval. There needs to be agreement on the project budget, whether aligning with leadership, finance, or even your clients.



Learn from the experts: The best budgeting practices

Now that you know the basics, it's time to learn from the experts. We've talked to experienced project leaders and researchers who shared their best practices for creating a project budget.



Many budget slippages come from not taking the project risks seriously. Therefore, I would recommend a discussion with the risk manager to go through all eventual risks and potential opportunities, evaluate them by probability (likelihood to happen) and impact by value (if the risk happens, what would be the impact on the project in monetary value?). Also, evaluate the different strategies to handle the risk (accept, avoid, transfer, mitigate, exploit), define mitigation activities, reserve a contingency to handle your risks that are to be addressed. Project managers need to re-evaluate the risks on a regular basis and update the budget accordingly. A methodic risk management approach would help you cover risks related to all project process groups (most importantly: scope, schedule, cost, quality, resources, stakeholders).

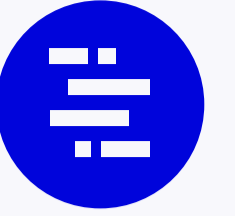
Taufik Samaka, Doctorate Researcher at Toulouse Business School



Besides using an appropriate estimation technique, like bottom-up, it is generally recommended to consider “contingency reserves” for known risks, and “management reserves” for unknown risks. So, for the first one, it is enough if you do good risk management by focusing only on risks that really matter and need a response plan. For the other one, it would be enough if you assign a % according to your company or business. For example, global companies usually put 5% for that.

Marco Donoso, IT Project Manager





Learn from the experts: The best budgeting practices



To budget a project it is critical that the project manager has clarity on three points.

- **Project scope:** It should be very clear about customer expectations to avoid any scope changes throughout the project.
- **Resource availability:** One of the biggest causes of budget failure is due to poor planning of resource availability. Holidays, illness, layoffs, resource replacements, working on multiple projects at the same time always have an impact on the budget.
- **Risks:** As already mentioned, it is important to pay close attention to risk management. No project is free of risks and impacts on budgets.

Finally, it is important to have good control of the project plan so that deviations are fixed quickly and not to have a major impact on the final budget.

Rogério Manso, Senior Project Manager

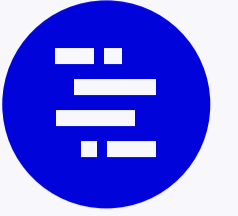


Step away from the budget, sleep on it for a night, and take a hard look at each of those numbers again when you are fresh, asking a simple question: What did I/we miss?

We all miss something at one time or another, sometimes it's big, sometimes it's small. Strive to take the appropriate amount of time to always double-check all of your budgetary assumptions. Your reputation and your blood pressure will thank you later.

Cassandra Mack, Senior IT Leader





Learn from the experts: The best budgeting practices



Ensure that you have very strong requirements and that they are fully agreed and signed-off. Scope creep is the biggest eater of the budget as a project moves forward.

Rogério Manso, Senior Project Manager

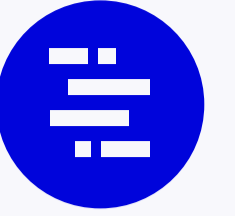


Take the time to find out who the "missing" stakeholders are. They are the ones that never hear about the project until later on and are indeed key to either getting something done or knowing where the bodies are buried that will cost you money, time, or some kind of resource tax later on in the project if you don't know about it upfront. You want to eliminate as many of those surprise eaters of contingency as possible. Don't be lazy with the risk management process. If you are lazy, you will end up eating your management reserves and will have to go back to the well to beg for money later on.

Don't be afraid to chunk the project into phases. You can't realistically budget for any known issues/risk farther out than the reasonably foreseeable future (depending on your line of work and forecast capabilities). If you are forced to do a multi-year budget, then add a confidence level for the pieces that are further out so you can quantify how much and what quality of data you have on hand. Chunk it up and you'll get better budget estimates and be able to adjust as you go with reasonable certainty.

Cassandra Mack, Senior IT Leader

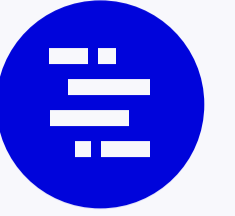




Questions to ask when creating a budget

There are many factors to take into account during a project budgeting process. Make sure you can answer the following questions:

1. Can I define the project and its end goal?
2. Are there any ground rules, constraints, and assumptions I should consider?
3. Do I have sources of data (Task List, WBS, Cost Estimates, Schedule) to rely on?
4. Is the estimating methodology in use acceptable?
5. Do I know who is going to work on the project?
6. Do I have a list of resources and their rates to complete the project?
7. Can I compare my estimate against the best practices industry standard?
8. Do I have contingency reserves to account for risk?
9. Who are the key project team members to help me in estimating/budgeting process?
10. Am I on the same page with Project Stakeholders?
11. Can I compare the budget with original estimates and reconcile differences?



Automating project budget creation

As you can see, the budget is an important part of planning and controlling your project. While you can manage to create project budgets manually, you'll be more precise using **Professional Services Automation software** with finance and billing features, especially if it's a large project with a significant amount of milestones and dependencies.

PSA systems like Forecast calculate the budget for you based on the scoped out project. As soon as it's approved by stakeholders and you have the **Statement of Work** defined, you can get started.

PSA solutions provide a visual budget so you can get a fast overview of cost, revenue, and profit. You can see how time entries and invoices affect the budget, and spot if you are on track or not.

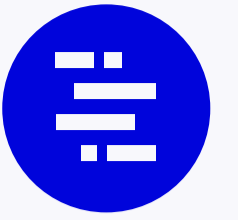
Project budget creation is simplified as well, with the system leveraging the task list and your team members' rate cards and internal hourly cost.

- Rate cards – a number reflecting how you trade your employee's hours to the client on a specific project
- Internal hourly cost – the hourly rate you pay your team members

As long as you have these, you're good to go. Here are four simple steps to create a project budget fast using a PSA solution:

1. Scope out a project with milestones and tasks.
2. Advanced PSA systems will leverage AI and automation to estimate tasks, assign resources, and suggest a deadline for the project end date, creating a solid project plan and saving you time.
3. View a timeline and heatmap to see how the new project affects your employee's workloads. Adjust it if any changes are needed in terms of resource allocation.
4. View the budget and add expenses or simply a markup percent to account for unexpected costs.

By leveraging automation and AI, you can quickly create a proper project budget and save significant time on administrative work.



Project budget management with Professional Services Automation

Once you've created a budget, you'll be responsible for maintaining it throughout the lifecycle of the project. Professional Services Automation solutions connect your completed tasks to the budget, so you can see progress against your budget in real time. Leadership gets insight into each project's profitability, so you know so you know which projects are making money and which are lagging behind. You can also see profitability across a portfolio of projects.

As the project progresses, you can measure actual costs against the budget, as well as project the future final costs. budget against the original plan and, more importantly, drill down and understand what's costing more money than expected.

The screenshot displays a project management interface. At the top, a task list includes 'Discovery Workshop' (12 Feb, 2022 - 15 Feb, 2022), 'Workshop Debrief' (12 Feb, 2022 - 15 Feb, 2022), and 'Gather Insights' (12 Feb, 2022 - 23 Feb, 2022). The 'Discovery Workshop' task is highlighted with a yellow warning icon and a tooltip. The tooltip reads: 'The task is predicted to overrun. Similar tasks took longer than estimated.' It contains a table of similar tasks:

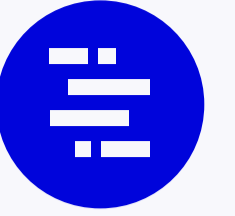
SIMILAR TASKS	ESTIMATED	ACTUAL	
P444 What was the actual Project D...	3h	6h	Not Similar?
P200 Discovery Workshop	5h	6h	Not Similar?
P284 What was the actual Project O...	5h	10h	Not Similar?

Below the task list, a 'Budget' summary shows:

- Profitability: 12% ⚠️
- Total spend vs revenue: Surplus ✅
- Recovery rate: 90% ✅

Additional summary cards show:

- Total spend vs revenue: Surplus ⊗
- Profitability: 12% ⊗



Keeping your project budget under control

In short, **effective project cost management** never goes without two things: accurate estimation and budget tracking. Both can be done with the help of work management systems that tie financials and resources to projects, connecting data in one place to see the bigger picture.

You'll want to be able to answer three key questions related to the project finances.

- Where do I earn the revenue?
- What is costing me more money than I expected?
- How do I ensure more profitable projects?

By establishing budgets up front, and managing your costs throughout the project lifecycle, you can ensure you maximize profitability and deliver your best work.



Forecast

A dynamic map for your business, Forecast centralizes work management, resource management and financials into one easy-to-use platform, driven by powerful AI.

By connecting projects to resources and the bottom line, Forecast eliminates busywork and spreadsheets. The solution predicts outcomes, enables teams to deliver on time and in budget, and guides projects to success. Technology doing what it does best, so humans can do what they do best.



Forecast automates a huge part of our financial reporting, which allows me to spend more time looking into where we can optimize to be more profitable.

Stacey McKinstry
Finance Manager, Etain Software

