

# Creating a Project Budget

**A Complete Guide for 2020**



# Foreword

A project without a budget is like a car without fuel. Funding is essential to get the project started and set all your resources in motion. If you work in a project-based company as a manager, creating a project budget and helping those wheels spin will most likely be your full responsibility.

At first glance, the whole budget thing might seem intimidating, but eventually, you'll realize that all you need is to iron out the plan. This guide is for everyone who'd like to discover what goes into making a project budget, and how to calculate one (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 is 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 till 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 a project budget is important

There are at least three reasons to explain the importance of having a project budget plan.

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

The numbers will tell stakeholders exactly how much money is needed to button up the project and when the money is needed.

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

Having an end budget estimate helps you measure the project's actual cost against the approved budget and see how much costs 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 the operating margin 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 in mapping out a project budget. To do so, you'll need to create a list of timely line items that are relevant for the project. Here's a table with common project cost categories to help you get started:

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.

Project cost category	Example
Human resources	Salary rates of full-time and temporary workers
Travelling spendings	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



# 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:

## Bottom-up estimation

**Rate the individual parts of the project plan and tot them up**

Bottom-up estimation is one of the best and foolproof ways to prepare a project budget. It anticipates estimating individual parts of the project, such as tasks, milestones, or

phases and totaling them to get 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 plenty of 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.



## 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.

## Analogous estimation

**Analyze the data in similar projects to decide the cost**

If you're not totally new to project management, you've probably managed a few projects before and can tell what works and what doesn't. Using analogous estimation, you would 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. In case you haven't managed projects before, you can often find usable examples with a quick search.





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.

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.

## Parametric estimation

### **Using data and project variables to suggest the total**

In contrast to analogous estimation, 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.



## Three-point estimation

**Take the best, worst, and most likely case estimates to do the average**

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 help you with project cost management. If you already have a task list, that's fine, and you can start right off. But if you don't, start [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 optimistic 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.

Talking to your manager to approve project costs would be the last thing in the project budget creation process.



## 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 and they shared their best practices and things to count in when creating a budget for a project.



*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



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

- 1. Project scope: It should be very clear about customer expectations to avoid any scope changes throughout the project.*
- 2. 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.*
- 3. 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.*

**Rogerio 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.*

**Rogério Manso**  
Senior Project Manager



*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.*

**Neil Woodger**  
Global Transformation Leader



*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.*

**Charles W. McBride**  
Project 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 tons of milestones and dependencies you're running.

PSA systems like Forecast would 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, everything's ready to start working.

Forecast will provide you with a visual budget that has a fast overview of cost, revenue, and profit. You would be

able to see how the time entries and invoices affect the budget and spot if you are on track or not.

Now, just for a minute, forget about adding costs to tasks manually. The only thing that you need for starters is the task list and your team members' rate cards and internal hourly cost specified in the system.

- 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

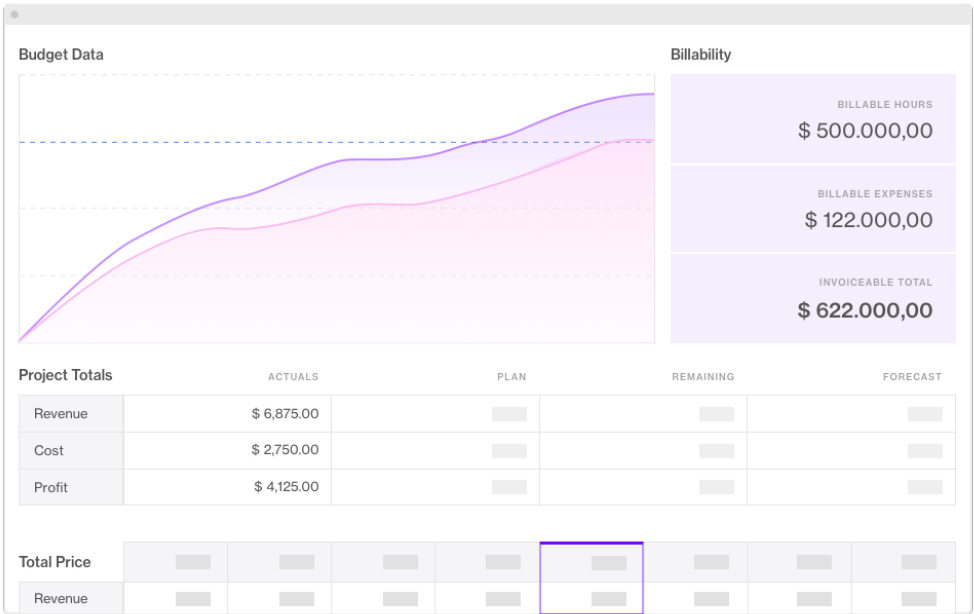
As long as you have these, you're good to go. Here are five simple steps you need to follow in Forecast to create a project budget fast:





1. Scope out a project with milestones and tasks.
2. Hit the [Auto Schedule](#) button and Forecast's AI will estimate tasks, assign resources, and suggest a deadline for the project end date, creating a solid project plan and doing all the scutwork for you.
3. Take a look at your timeline. Below, you'll see how the new project affects your employee's workloads in the heatmap. Adjust it if any changes are needed in terms of resource allocation.
4. Apply Auto Schedule, go back to the Scoping page, and enable the filter Plan Price. Voila – you've got your budget estimated.
5. After that, if necessary, go to the [Budget](#) page (available as part of the Premium plan in Forecast) to add expenses or simply a markup percent to account for unexpected costs.

This is the fastest way to create a realistic project budget and it saves you a lot of time on unnecessary administrative work. Here's a sneak peek into the platform to show you how your budget is supposed to look like:



In case you're not interested in using Auto Schedule and prefer to estimate tasks and assign resources manually, Forecast will provide you with the estimated budget anyway. You can try it out for free [here](#).



## What's project budget management like in Forecast?

Forecast connects every part of the project data, such as estimates and time entries, and applies them to generate a project budget. The budget maps out the cost, revenue, and profit in real time and keeps you updated on critical spending metrics. The main advantage C-level executives get from the overview are insights into each project's profitability, so you know which projects are making money and which are lagging behind.

Designed with flexibility in mind, Forecast offers visibility into the financial aspect of the project in one single view. What you'll see is how the project is progressing based on two important cost measurement units – the planned

and actual cost. This way you'll be able to track the budget against the original plan and, more importantly, drill down and understand what's costing more money than expected.

Additionally, the software lets you work with fixed-price projects or invoice your clients underway and makes it easy to follow the billability of the projects. If invoices were created in Forecast, the platform shows how much has been paid and invoiced. Syncing with your favorite accounting tools, like [Quickbooks](#), [Xero](#), or [E-conomic](#), is also an option as Forecast integrates with them all.



## Creating a project budget in Forecast

In Forecast, creating a project budget goes hand in hand with having your team members working on the tasks. In order to determine the actual revenue, cost, and profit, it's essential to know how much you bill for their time and what you pay them.

When adding a fixed price, the planned revenue will show up, based on the roles and team members you've assigned. This number can be used to get an understanding of how much the company should earn by doing this particular project.

Additionally, Forecast provides a field to enter markup percent to your budget. Use it for giving discounts or adding a buffer so you know no money will be lost on delivering the project. Forecast's AI helps you estimate the length of the task and suggests people who are able to complete them, so if some tasks were forgotten, the system will remind you to add them to the scope.



## The case for keeping your project budget under control

Imagine it's the end of the month, and the management team is having their status meeting discussing how the projects are, what is going on, and what to be aware of. The focus narrows down to profitability and where the company is earning money.

At the meeting, senior managers look at the budget list and project list in the reports section. They first talk about the project status. It is added by the project manager responsible for the project who reports to the lead project manager who is now in charge of communicating about the project health.

Management is most curious to see if things are on track – looking into the following three metrics:

- **Revenue:**  
The income the business will get from each project.
- **Cost:**  
The total funds needed to complete and deliver the project, including the salaries.
- **Profit:**  
The difference between the amount earned and the amount spent.

Tied with the discussion about different projects and their progress, the talk turns to the budget list. Here they would like to know how the numbers correspond. If something doesn't look good, they would drill down to inspect the numbers.



At the budget page, they can look at the overall graph, especially at the actual variance, compared to planned. It illustrates how the time entries correspond to the plan and how it all affects the revenue.

So let's say we have planned the project and estimated it will take approximately 100 hours. When we actually start working on the project, and people begin to make time entries, in the middle of the project we realize that we have already made entries that are 70 hours in total.

This will make the planned vs. actuals on the graph look not so good as expected. Most likely, in this case, we'd want to find out why people have registered more time. The platform allows you to go down to the smallest work detail, catch sight of the milestones that went crazy, and thus figure out what role registered more time and needs

help. If they want to hold the numbers up against each other, they'd look at the total price of work and expenses.

In short, [effective project cost management](#) never goes without two things: accurate estimation and budget tracking. Both can be done with the help of project management systems that keep all the data connected in one place to benefit from seeing every single aspect of work involved as it contributes to the bigger picture. At Forecast, we've made sure you can 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?



Want to know more?

Forecast is an AI-powered platform that helps project-based companies look into the future by connecting people and projects with insights and profitability.

Sign up for a [free 14-day trial](#) to get a better understanding of how you can put all your data to use.

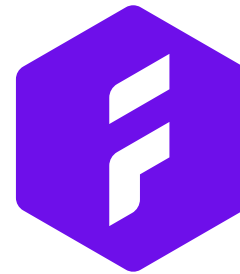


*Forecast automates a huge part of our financial reporting, which allows me to spend more time looking into where we can optimize to be more profitable.*



**Stacey McKinstry — Finance Manager**

Etain Software



**Forecast**<sup>™</sup>

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