

Cost Estimation for Software Projects - Complete Guide

Software projects, like all plans, need a lot of [budgeting](#) and repairs done before it can be started. After all, software and programs actually cost a lot despite being intangible tools. In today's world, a lot of businesses operate with the help of computer systems, most especially those that are located in urbanized areas. When it comes to [starting a business](#), it often includes the need to incorporate software in order to get certain tasks done efficiently, so it is vital to include the budgeting for your software needs in your [business plan](#).

What Is Cost Estimation?

Cost estimation is the calculation of the cost/budget of services and assets you will need for your business. It is a necessary thing to do as it will allow you to commit a certain financial amount to the [estimate](#) that was made and manage the rest of your [budget](#) for other resources. One of the prominent needs in your business is IT Services such as setting up hardware, installation of programs, and maintaining the computer systems. Once you have figured out the cost estimation for them, you will be able to know what you want, and how much you are willing to spend on it.

Software Project Cost Estimates



Ballpark Estimate

A ballpark estimate gives you a rough measurement of the cost you will need for a business project. This is usually done by accountants and financial experts and is created when an exact amount is yet to be determined. After tracking all the costs, it is oftentimes rounded up so that you can account for any extra money needed. In the case of a software project, the [scope of work](#) is determined and rounded up to prepare you for the financial amount you need to set aside.

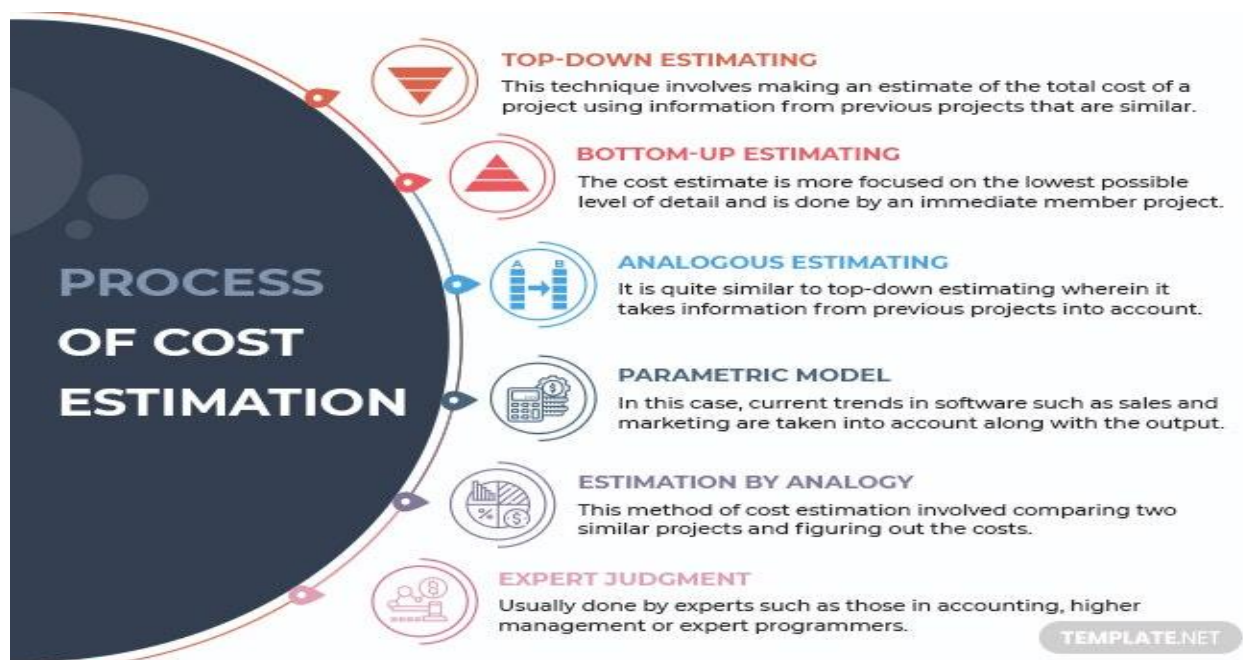
Budget Estimate

A budget estimate provides you a view on how much you have for a software project. The key difference between this and other kinds of cost estimates is that this report states how much you have to spend, whereas the other states how much is required based on the established costs.

Statement of Work or Software Requirements Specification

This type of cost estimate is a description of the requirements needed for your software project. It typically includes the layout of the software as well as its functional and non-functional requirements. This is typically made by a programmer since they would know what is needed for the software itself.

Process of Cost Estimation



Define the Estimate Purpose and Gather Information

Think of the reason why this software project is necessary and worth investing in. Do some research and gather more relevant details in order to reinforce it. Once you figure this out, you will be able to acquire the budget that is deemed necessary for the software project.

Develop an Estimate Plan

One way you can start is to do a breakdown of your software project and determine what is a high priority and a low priority. List down the total budget you have for the whole project and allot them accordingly. Know the limits of your budget so you can avoid overspending.

Determine Estimating Approach

Make a decision on how you are going to approach the project in financial terms. Are you going to stick to a strict budget? Will you be willing to spend more to make it better? Are you on a schedule to finish the project soon? Thinking about the project's situation will help you decide on how to make an estimate for this.

Collect Data

Before you initiate your project, do some research beforehand. Be prepared. Gather as much information as you need regarding your software project, such as the logistics, your budget, the cost of the equipment and services, etc. Once you've done all of this, you can use the information to get the project moving smoothly and efficiently.

Conduct Risk Analysis

Running [risk management](#) is vital as it allows you to detect factors that could have a negative effect on your software project. Some factors that you will need to determine will include how vulnerable your software could be to hackers, potential bugs, hosting issues, and the software's own limitations. This will enable you to have a [contingency plan](#) and mitigate these problems.

Final Adjustments

Finalize all of your findings, and make sure every detail in the cost estimate is as accurate as possible. See if everything goes along with the policy of the company and if the costs can accommodate the timeline of your project perfectly.

Document the Estimate

Make a physical copy of your estimate and store them for reference later on. Contents of it would include the job description, a list of the resources, a list of the services needed, a timesheet of the project, and the contact details of everybody involved.

Software Cost Estimating Techniques



Top-down Estimating

This technique involves making an estimate of the total cost of a project using information from previous projects that are similar to the current one. This technique helps determine what went right and what not to repeat when it comes to figuring how much to spend on a software development project.

Bottom-up Estimating

The cost estimate is more focused on the lowest possible level of detail and is done by an immediate member of the project. This technique is often preferred since it is done by someone who knows the project well enough to take into account where the costs should go exactly.

Analogous Estimating

It is quite similar to top-down estimating wherein it takes information from previous projects into account. What differentiates them is that Analogous estimating allows you to also take the timeframe of the project as a factor in estimating the cost of your software project and allow you to create a convincing proposal for it.

Parametric Model

This type of cost estimating involves figuring out future costs based not just on information from previous projects but from current trends as well, allowing you to predict the possible costs and output of your project. In this case, [current trends in software](#) such as sales and marketing are taken into account along with the output of the software projects done before.

Estimation by Analogy

This method of cost estimation involved comparing two similar projects and figuring out the costs for the requirements of one of the projects. Doing this allows those who manage the project to prepare for any possible costs before making any [official agreement](#).

Expert Judgment

Usually done by experts such as those in accounting, higher management, or expert programmers. Expert Judgment is a technique in cost estimating wherein a strict set of specifications and criteria have to be met in order to make a decision on the budget of the software project. These allow for a more accurate estimate of the cost to be made since there is already an established set of rules to guide them.

Being an aspect of [project management](#), financial handling, and with so many ways to estimate the cost needed for your software project, it can certainly be a daunting task. But it is something that has to be well thought of in order to have the best IT department and achieve a great [IT infrastructure management](#) once your business becomes operational.