# Project Cost Management

There are four cost estimates that are recommended for a projects budget: Development, Change, Risk and Administrative. There are two different costs – CAPEX and OPEX.

There are four cost estimates that are recommended to be in the budget for a project:

1. Development budget
2. Change budget
3. Risk budget
4. Administrative budget

Project budget

Administrative budget: ≈ 20% of

Risk budget: large in risky projects

Change budget: sets the limit of changes

Development budget
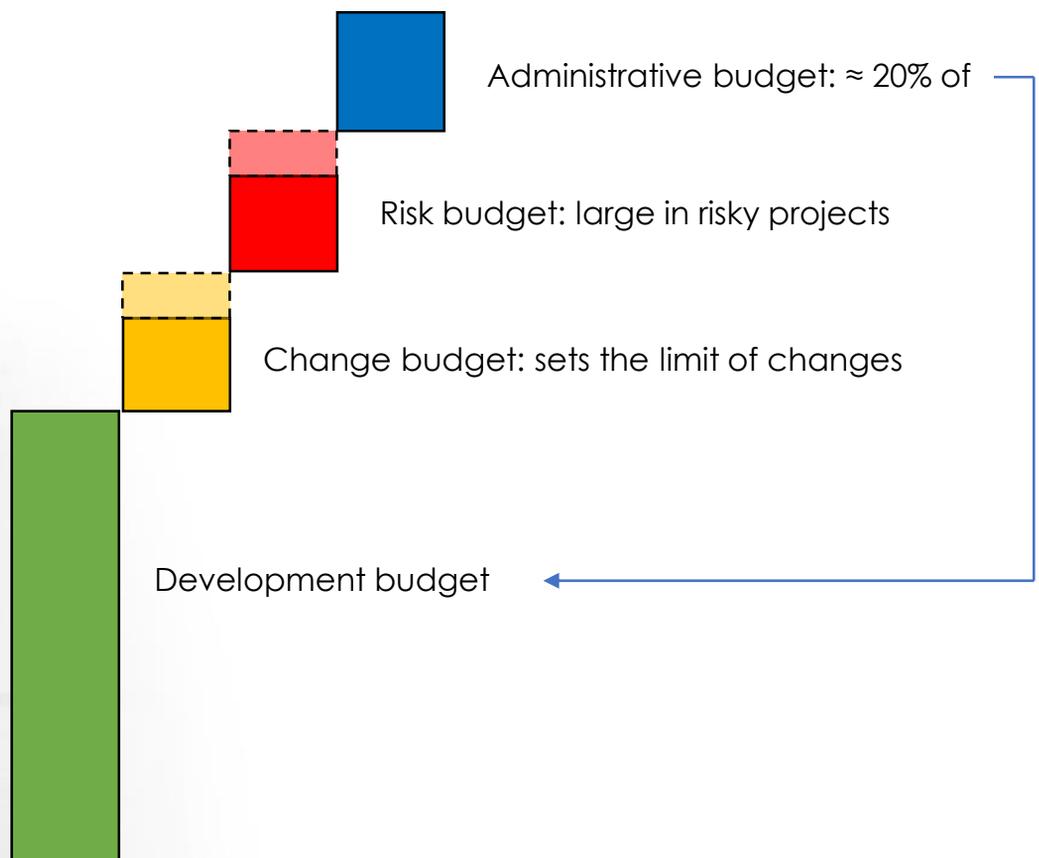
Development budget

There are many ways one can break down the project into deliverables that can be estimated. Dependent on how much experience you have with what's to be produced and the team that is producing; it can accurate or not.

When you know you have little experience of what's to be produced and low experience with the team, a wise man said that you should always multiply the estimate by pi (3,14) before handing it over to anyone.

A rule of thumb when it comes to development project: validation (including corrections) usually takes longer than expected - generally ending up in two thirds of the development.

Change budget

If you expect changes in the project you need to plan for it. History shows that there are extremely few project that don't have changes; so don't take this budget easily. This budget is also very good to set together with the client; it shows in an easy way how much they can change during the project – when the change budget is gone there can be no more changes (so the client will immediately have priority of change requests in their mind).

Risk budget

There is a huge risk building a house in a swamp, in the middle of the Amazonas, where there have been no humans before, vs building a house in the same area as you have built 10 similar houses. You can use the development budget's breakdown to determine the risk of the different deliverables individually:

Id	Activities	Uncertainty %	Estimates		
			Min	Estimate	Max
1	Meet and approve project plan	10%	4,5	5	5,5
2	Source suppliers	10%	18	20	22
3	Write specifications	20%	40	50	60
4	Develop	30%	70	100	130
5	Test and correct	50%	100	200	300
6	Release	5%	9,5	10	10,5
7	Hand over and project closure	5%	14,25	15	15,75
	Total	19%	256,25	400	543,75

Administrative budget

This budget cover all the administrative costs that will appear in a project, such as cost for project management, technical lead and various things not connected to the actual development itself. Regarding the project management cost; a rule of thumb is that it's usually a good idea to estimate it to 20% of the development budget. The technical lead cost is usually harder to predict, it all depend on how complex the project is and what project approach is chosen.

If the project uses the risk and/or change budgets the administrative budget is likely to increase, due to that it takes time to manage this.
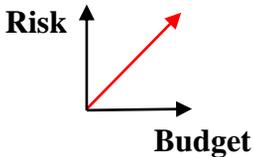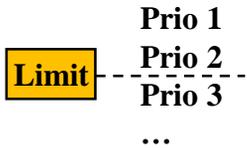
CAPEX vs OPEX

When dealing with cost management a project manager is usually required to separate two different costs – CAPEX and OPEX.

CAPEX: Capital Expenditures (Swedish: Investeringskostnad)
OPEX: Operational Expenditures (Swedish: löpande kostnader)

Capital Expenditures (CAPEX) is the money a company spends to buy, maintain, or improve its fixed assets. They can be seen as investment costs that results in a value that can be sold, e.g. a house or a system. It's something that the company can make depreciations of.

Operational Expenditures (OPEX) are ongoing expenses that are inherent to the operation of the asset. They can be seen as costs that are needed to maintain something, e.g. cost for heating a house or server hosting cost for a system.

CAPEX costs are usually considered "good" costs, due to that they are actually increasing the value of a company. In order to regulate that not all cost in a project isn't booked as CAPEX there are laws in place for what can be "CAPEX:ed" or not. As a project manager it's best to consult with the finance department before booking any cost to one or the other.