

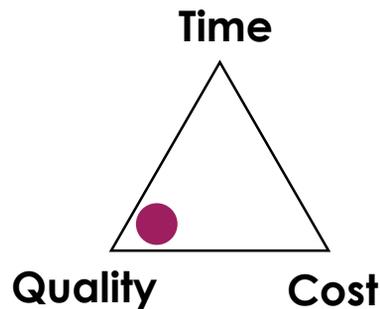
Project Variables

There are up to six variables recommended to control a project. Lock them and the prioritization of them before starting the project. Different project approaches uses the variables in different ways.

When starting up a new project, it's needed (and a great exercise) to define the variables used to control the project.

Traditional variables

In traditional projects there are 3 variables – time, cost quality. The 3 variables are usually visualized as a triangle where a dot marks the most important variable:



Examples

Example of projects that have different importance:



Arranging a Christmas eve dinner. Time is crucial, the date can't be moved.



Producing the cheapest smartwatch ever. The price must be the lowest on the market.



Placing a new telescope in space (which can't be repaired once it's in space). It must have the right quality before being sent to space.

There are cases where two of the variables are more important than the other, e.g.:



Arranging a super fancy Christmas eve dinner. Time and quality is crucial, but the date can't be moved.

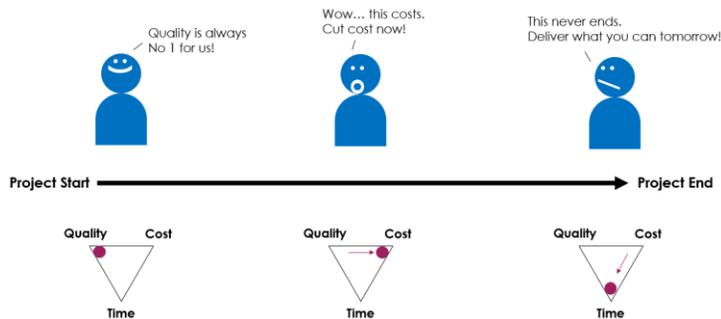
It's always recommended to prioritize the variables if several are chosen. In the above example it's likely that the prioritizing would be:

1. Time
2. Quality
3. Cost

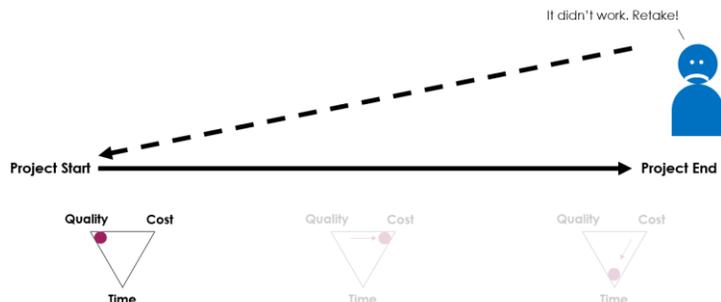
Christmas eve is on the 24 of December after all.

A challenge with variables (or the client...)

One of the challenges with variables is that the client usually wants to shift the prioritizing over the period of the project. In the beginning the client wants the best quality. After some time they think that the cost must be lowered. By the end they are so eager to complete the project that time is the most critical:



This usually ends up with a retake of the project:



Make sure to lock the variables before starting the project. If they need to change over time; make an informed decision on the impact of this.

More variables

One of the world leading project management methods uses six variables and recommend having tolerances to each:

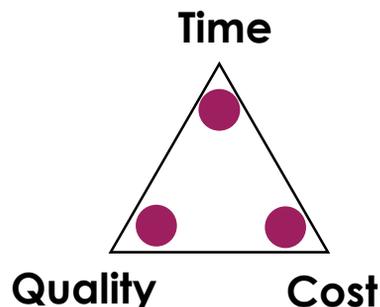
Variable	Definition	Example of building a bathhouse in a city	Tolerance examples
Time	The deadline of the project.	23 March 2021	+/- 2 month
Cost	Cost of the project.	1 M\$	+ 0,2 M\$
Quality	Expected quality of the output.	Capacity of 50 swimmers at once.	Capacity of 40 swimmers at once.
Benefits	The overall benefits justifying the project.	9/10 persons in the city finds the bathhouse great when asked in survey.	7/10 persons in the city finds the bathhouse great.
Scope	The work that needs to be accomplished to deliver the result.	Build house with pool and sauna, but not the parking place outside.	Without sauna.
Risks	The effect of uncertainty on objectives	No risk with a high value after risk assessment.	One risk with high value.

This approach is great for small to huge projects.

Agile variables

In agile development the 3 traditional project variables are fixed. One never take more time, exceed budget or reduce the expected quality.

This is done by deliver features (with the right quality) in a prioritized top-down backlog. When the time is up, nothing more is delivered. Cost is managed by calculating the cost of resources times the time they spend.



Backlog

Prio	Feature
1	Lorem ipsum dolor
2	Ut enim ad
3	Duis aute irure
4	Lorem ipsum dolor
5	Ut enim ad
...	...

This approach is great in IT development when you can realize ideas (maybe not all the way at first) at a certain date without overspending.