

# Pugh Matrix

## Definition:

- A scoring method used to compare and select the best solution from a set of alternative proposals.
- A form of prioritization matrix.
- Alternatives are compared against a **standard**.

## The standard can be:

- The current solution that is already exist (the baseline).
- A goal or benchmark to reach in the near future.

## Benefits:

- It does not require a great amount of quantitative data.
- Subjective opinions about one alternative versus another can be made more objective.

## When it is used:

- Often used when making design decisions during the product development cycle (based on VOC).
- When designing or redesigning processes to achieve faster and more efficient performance.
- When deciding which investment to take.
- When deciding which vendor to select.
- When deciding which improvement project to initiate.

## How to construct and use?

- Identify the alternatives and the relevant criteria.
- Select the baseline solution, goal or benchmark.
- Draw a table, then place the criteria in the left hand column and the alternatives in the top row.
- Indicate how the baseline solution is compared with each alternative (place a plus, minus or zero):
  - '+' means better than baseline, '-' means worse than baseline and '0' means the same.
- Notice the strongest solutions, the one with the most pluses and the fewest minuses.



Criteria	Wt.	Baseline	1	2
1				
2				
3				
Score				
Rank				

Further solutions can then be developed by mixing the positive aspects of a number of solutions.