

PDCA

Continuous
improvement with
PDCA

Plan-Do-Check-Act is an iterative four-step problem-solving process used to achieve continuous improvement. It is a never-ending cycle of improvement based on learning from the results you achieve. It is also known as the Deming Cycle, Shewhart Cycle or Deming Wheel.

How do you use PDCA

As the arrows suggest, the cycle never stops (see fig. 1).

PLAN Clarify your objectives and goals, then document what you will do to achieve your goals. You need to clearly define how you will know when your goals are met and what success looks like. This should be measurable.

Ideally you should aim to test your ideas on a small scale if this is possible.

DO Execute your plan.

CHECK After you've delivered your plan, you need to check what has been achieved and compare it to what was expected. Gather as much data as possible and consider what you can improve to achieve greater results next time.

ACT If you have achieved your aims, then you need to update your work standards, so your new better way of working becomes the norm (until the next improvement that is).

If you haven't achieved your aims, then you either need to revert to your previous standard or tweak your 'plan' and go around the PDCA cycle again.

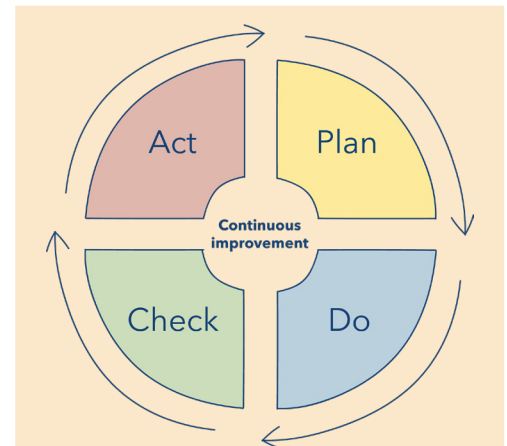


Fig. 1: PDCA model

William Edwards Deming (1900-1993) was an American statistician and business consultant. He is widely acknowledged as the leading management thinker in the field of quality.

Walter Andrew Shewhart (1891 - 1967) was an American physicist, engineer and statistician, sometimes known as the father of statistical quality control.

Deming and Shewhart created the PDCA cycle, which is the first Continuous Improvement philosophy.

The approach is based on the premise that our knowledge and skills are limited but improving over time. Especially at the start of a new process or project, key information may not be known; PDCA method provides us with ongoing feedback to strengthen our initial assumptions and increase our knowledge. Rather than enter "analysis paralysis" to get it perfect the first time, it is better to be approximately right than exactly wrong. With the improved knowledge, we may choose to refine or alter our initial approach.