



# PDCA Cycle

## FREE Template and Implementation Checklist

*Plan • Do • Check • Act — Practical worksheet for improving quality, reducing defects, and sustaining continuous improvement*

| Field              | Details |
|--------------------|---------|
| Project / Problem  |         |
| Process / Area     |         |
| Owner              |         |
| Start Date         |         |
| Target Close Date  |         |
| Revision / Version |         |

### How to use this template

Use this document as a project worksheet. Keep the problem statement measurable, test the improvement on a small scale first, compare results against baseline data, and only standardize the change after evidence shows improvement.

## 1. PDCA Cycle Snapshot

| PDCA Stage   | Purpose                                                                                                                                             |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PLAN</b>  | Define the problem, goal, scope, baseline data, root causes, and action plan before changing the process.                                           |
| <b>DO</b>    | Run a controlled pilot or small-scale implementation. Record what was changed, where, when, and by whom.                                            |
| <b>CHECK</b> | Compare actual results with the expected results using data, observations, trends, and stakeholder feedback.                                        |
| <b>ACT</b>   | Standardize successful changes, update procedures, train users, and define follow-up controls. If the pilot fails, restart the cycle with learning. |

## 2. Problem Definition and Goal

| Item                              | Write your response here                                                                         |
|-----------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Problem statement</b>          | What is happening? Where is it happening? How often? What is the impact?                         |
| <b>Business / customer impact</b> | Quality, cost, delivery, safety, compliance, productivity, or customer satisfaction impact.      |
| <b>SMART goal</b>                 | Example: Reduce defect rate from ___% to ___% by ___ date without increasing cycle time.         |
| <b>Scope</b>                      | Included processes / products / lines / teams.                                                   |
| <b>Out of scope</b>               | Areas not covered in this PDCA cycle.                                                            |
| <b>Baseline data</b>              | Current defect rate, cycle time, complaints, rework, scrap, downtime, or other relevant metrics. |

## 3. PLAN — Understand the Problem Before Acting

| Planning Question                            | Details |
|----------------------------------------------|---------|
| <b>Process step affected</b>                 |         |
| <b>Likely root cause</b>                     |         |
| <b>Evidence / data supporting root cause</b> |         |
| <b>Proposed countermeasure</b>               |         |
| <b>Expected result</b>                       |         |
| <b>Risk if countermeasure fails</b>          |         |
| <b>Resources needed</b>                      |         |

### PLAN Checklist

- ☐ Problem is clearly defined using facts, not opinion.
- ☐ Baseline performance is documented before implementation.
- ☐ Root cause has been validated using data or direct observation.
- ☐ Goal is measurable and time-bound.
- ☐ Stakeholders and process owners are aligned.
- ☐ Potential risks and unintended consequences are reviewed.

## 4. DO — Pilot the Improvement

| Execution Detail              | Record here |
|-------------------------------|-------------|
| Pilot location / area         |             |
| Implementation date           |             |
| Change introduced             |             |
| People trained / informed     |             |
| Data collected during pilot   |             |
| Issues observed during pilot  |             |
| Immediate containment actions |             |

### DO Checklist

- ☐ Pilot is small enough to control but realistic enough to learn from.
- ☐ Change is implemented exactly as planned or deviations are documented.
- ☐ Operators / users understand the new method.
- ☐ Before-and-after data is collected consistently.
- ☐ Problems during the pilot are recorded, not ignored.

## 5. CHECK — Verify Results with Data

| Metric                        | Baseline | Target | Actual | Result / Comment |
|-------------------------------|----------|--------|--------|------------------|
| Defect rate                   |          |        |        |                  |
| Rework / scrap                |          |        |        |                  |
| Cycle time                    |          |        |        |                  |
| Customer complaint / feedback |          |        |        |                  |
| Process compliance            |          |        |        |                  |

### CHECK Checklist

- ☐ Actual results are compared against baseline and target.
- ☐ Decision is based on evidence, not one-time opinion.
- ☐ Unexpected side effects are reviewed.
- ☐ Stakeholder feedback is captured.



- ☐ Learning is documented even if target was not achieved.

## 6. ACT — Standardize or Restart the Cycle

| Action Item                         | Decision / Details                                                                                                                                                                 |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Decision                            | <input type="checkbox"/> Standardize <input type="checkbox"/> Modify and repeat pilot <input type="checkbox"/> Stop and restart PDCA <input type="checkbox"/> Escalate for support |
| Standard work / SOP update required |                                                                                                                                                                                    |
| Training required                   |                                                                                                                                                                                    |
| Control plan / audit method         |                                                                                                                                                                                    |
| Owner for sustainment               |                                                                                                                                                                                    |
| Follow-up review date               |                                                                                                                                                                                    |

### ACT Checklist

- ☐ Successful change is built into standard work, checklist, SOP, or training material.
- ☐ Ownership is assigned for long-term control.
- ☐ Follow-up audit or review cadence is defined.
- ☐ Results and lessons learned are shared with relevant teams.
- ☐ Next improvement opportunity is identified for the next PDCA cycle.

## 7. PDCA Implementation Checklist

| # | Checklist Item                                    | Stage | Status                                                                                                  | Owner / Due Date |
|---|---------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------|------------------|
| 1 | Define the problem with measurable evidence       | Plan  | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |                  |
| 2 | Collect baseline data before changing the process | Plan  | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |                  |
| 3 | Validate likely root cause                        | Plan  | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |                  |
| 4 | Create a simple countermeasure plan               | Plan  | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |                  |

|    |                                                       |       |                                                                                                         |  |
|----|-------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------|--|
| 5  | Pilot the change on a controlled scale                | Do    | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |  |
| 6  | Record implementation issues and observations         | Do    | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |  |
| 7  | Compare results with baseline and target              | Check | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |  |
| 8  | Confirm whether improvement is sustainable            | Check | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |  |
| 9  | Update SOP, standard work, checklist, or control plan | Act   | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |  |
| 10 | Train affected users and assign sustainment owner     | Act   | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |  |
| 11 | Schedule follow-up review / audit                     | Act   | <input type="checkbox"/> Not Started <input type="checkbox"/> In Progress <input type="checkbox"/> Done |  |

## 8. Action Log

| # | Action / Countermeasure | Owner | Due Date | Status                                                        |
|---|-------------------------|-------|----------|---------------------------------------------------------------|
| 1 |                         |       |          | <input type="checkbox"/> Open <input type="checkbox"/> Closed |
| 2 |                         |       |          | <input type="checkbox"/> Open <input type="checkbox"/> Closed |
| 3 |                         |       |          | <input type="checkbox"/> Open <input type="checkbox"/> Closed |
| 4 |                         |       |          | <input type="checkbox"/> Open <input type="checkbox"/> Closed |
| 5 |                         |       |          | <input type="checkbox"/> Open <input type="checkbox"/> Closed |

## 9. Lessons Learned and Next PDCA Cycle

| Reflection Question            | Notes |
|--------------------------------|-------|
| What worked well?              |       |
| What did not work as expected? |       |
| What should be standardized?   |       |



|                                   |  |
|-----------------------------------|--|
| What should be avoided next time? |  |
| Next PDCA opportunity             |  |

### Practical tip

A strong PDCA project does not need to be complex. The most effective cycles are often short, visual, data-driven, and owned by the people closest to the process.

## 10. Final Approval

| Role                  | Name / Signature | Date Label | Date |
|-----------------------|------------------|------------|------|
| Process Owner         |                  | Date       |      |
| Quality / CI Reviewer |                  | Date       |      |
| Implementation Owner  |                  | Date       |      |