



Six Sigma DMAIC Project Management & Methodology Checklist

Define Phase: Project Scope & Objectives

Identify the problem statement, define project goals, map the high-level process, and establish the project charter and stakeholders.

Project Name

Write something...

Project Description

Write something...

Project Objectives

Write something...

Project Deliverables

- ☐ Software Development
- ☐ Hardware Procurement
- ☐ Process Documentation
- ☐ User Training

Target Completion Date

Enter date...

Estimated Budget Cap

Enter a number...

Project Charter Reference

 Upload File

Project Sponsor Approval

Measure Phase: Data Collection & Baseline Performance

Establish baseline process metrics, validate the measurement system (Gage R&R), and gather critical-to-quality (CTQ) data.

Data Collection Start Date

Enter date...

Process Name

Write something...

Baseline Defect Rate (%)

Enter a number...

Average Cycle Time (Minutes)

Enter a number...

Measurement Method

- ☐ Manual Counting
- ☐ Automated Sensor Data
- ☐ Time Study
- ☐ Sampling

Observations and Anomalies

Write something...

Raw Data Spreadsheet

 Upload File

Data Verifier Signature

Analyze Phase: Root Cause Identification

Perform data analysis to identify variations, utilize tools like Fishbone Diagrams or 5 Whys, and isolate the fundamental causes of defects.

Primary Root Cause Category

- ☐ Human Error
- ☐ Equipment Failure
- ☐ Process Flaw
- ☐ External Factor
- ☐ Software Bug

Detailed Analysis Description

Write something...

Incident Discovery Date

Enter date...

Contributing Factors Identified

- ☐ Lack of Training
- ☐ Inadequate Maintenance
- ☐ Environmental Conditions
- ☐ System Latency

Supporting Evidence (Logs/Photos)

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Estimated Impact Magnitude (1-10)

Enter a number...

Lead Investigator Approval

Improve Phase: Solution Development & Implementation

Brainstorm potential solutions, conduct pilot testing, implement process changes, and verify that the solutions address the identified root causes.

Solution Name

Write something...

Implementation Roadmap Description

Write something...

Implementation Priority

- ☐ Low
- ☐ Medium
- ☐ High
- ☐ Critical

Target Deployment Date

Enter date...

Development Tools Used

- ☐ Cloud Infrastructure
- ☐ CI/CD Pipeline
- ☐ Automated Testing
- ☐ Containerization

Technical Documentation

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Estimated Budget (USD)

Enter a number...

Project Lead Approval

Control Phase: Process Standardization & Sustainability

Implement control plans, establish monitoring systems (SPC), update standard operating procedures (SOPs), and ensure long-term stability.

Standard Operating Procedure (SOP) ID

Write something...

Process Description & Standardized Workflow

Write something...

Control Mechanisms Implemented

- ☐ Automated Alerts
- ☐ Visual Management/Dashboards
- ☐ Checklists
- ☐ Periodic Audits
- ☐ Poka-Yoke (Error Proofing)

Target Performance Metric (KPI Value)

Enter a number...

Next Scheduled Audit Date

Enter date...

Updated Process Documentation

 Upload File

Process Owner Approval

Project Documentation & Handover

Finalize the project report, document lessons learned, archive data, and formalize the transfer of ownership back to the process owner.

Handover Date

Enter date...

Project Name

Write something...

Handover Summary

Write something...

Documentation Status

- ☐ Complete
- ☐ In Progress
- ☐ Pending Review

Technical Manuals & Assets

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Client Acceptance Signature