Continuous Improvement Toolkit

Project Charter
The Continuous Improvement Map

Managing
- Risk
- FMEA
- RAID Log*
- Risk Analysis*
- Fault Tree Analysis
- Traffic Light Assessment
- Lean Measures
- OEE
- Process Yield
- Capability Indices
- Gap Analysis*
- Bottleneck Analysis
- Reliability
- MSA

Risk
- PDPC
- Payoff Matrix
- Delphi Method
- TPN Analysis
- Decision Tree
- Pick Chart
- Voting
- Four Field Matrix
- Critical-to X
- Force Field Analysis
- Portfolio Matrix
- Kano
- Decision Balance Sheet
- Paired Comparison
- Cost of Quality*
- Pugh Matrix
- Prioritization Matrix
- A3 Thinking

Performance
- Project KPIs
- KPIs
- Descriptive Statistics
- Chi-Square
- Nonparametric
- Probability Distributions
- Normal Distribution
- Multivariate
- Scatter Plots
- Correlation
- Regression
- Data Mining
- SIPOC*
- Run Charts
- Five Whys
- Root Cause Analysis
- Data
- How-How Diagram***
- Tree Diagram*
- Waste Analysis**
- Value Stream Mapping**

Understanding
- Gap Analysis*
- Benchmarking***
- Data collection planner*
- Sampling
- Check Sheets**
- Focus Groups
- Questions
- Interviews
- Mind Mapping*
- Affinity Diagrams
- SCAMPER***
- Attribute Analysis
- Value Analysis**
- Process Mapping
- Control Charts
- Fishbone Diagrams
- Relations Mapping
- SIPOC*
- Control Planning
- Standard Work
- Document control

Selecting & Decision Making
- Break-even Analysis
- Importance Urgency Matrix
- Quality Function Deployment
- Cost Benefit Analysis
- Payoff Matrix
- Delphi Method
- TPN Analysis
- Decision Tree
- Pick Chart
- Voting
- Four Field Matrix
- Critical-to X
- Force Field Analysis
- Portfolio Matrix
- Pugh Matrix
- Prioritization Matrix
- A3 Thinking

Planning & Project Management*
- Daily Planning
- PERT/CPM
- MOST
- RACI Matrix
- Activity Networks
- SWOT Analysis
- Stakeholder Analysis
- Improvement Roadmaps
- PDCA
- Policy Deployment
- Gantt Charts
- DMAIC
- Kaizen Events
- Control Planning
- Best Practices
- Implementing Solutions***
- TPM
- Automation
- Mistake Proofing
- Health & Safety
- Simulation
- Just in Time
- 5S
- Quick Changeover
- Visual Management
- Product Family Matrix
- Flow
- Pull
- Spaghetti**
- Process Redesign

Understanding Cause & Effect
- DOE
- ANOVA
- Multi-var Studies
- Regression
- Quick Changeover
- Visual Management
- Product Family Matrix
- Flow
- Pull
- Spaghetti**
- Process Redesign

Designing & Analyzing Processes
- Process Redesign
- Kaizen Events
- Control Planning
- Standard Work
- Document control
- Best Practices
- Implementing Solutions***
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Understanding
- Data Collection
- Understanding Performance**
- Benchmarking***
- Data collection planner*
- Sampling
- Check Sheets**
- Focus Groups
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- Mind Mapping*
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Group Creativity
- Five Ws
- Group Creativity
- Process Redesign
- Kaizen Events
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- Document control
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Data Collection
- Suggestion Systems
- Data Collection
- Understanding Performance**
- Benchmarking***
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- Check Sheets**
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- Interviews
- Mind Mapping*
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Continuous Improvement Toolkit . www.citoolkit.com
Project Charter

One page document that summarizes the fundamental information of a project before it begins.
Project Charter

- Clarifies the project objectives and scope.
- Addresses the needs of the stakeholders.
- Defines the roles and responsibilities.
The information in the project charter is critical for obtaining leadership support and commitment to provide the necessary funding and resources.
Once signed, it authorizes the project leader to formally start on the project and use the necessary resources and funding to complete the project successfully.
Project Charter

Benefits:
- Establishes a shared understanding of the project scope and objectives.
- Enables all stakeholders to review the project and commit it.
Benefits:

- Acts as a contract between the project sponsor, key stakeholders and the project team.
Project Charter

Benefits:

- Communicates the objectives to those outside the project team.
- Serves as a reference for future projects.
Benefits:

- **It ensures that the project:**
  - Is business focused.
  - Is well scoped.
  - Is executed in a timely manner.
  - Have the necessary resources.
  - Have the necessary support.
Project Charter

Although project charters are short and brief, they often refer to more detailed documents.
The components will vary depending on the methodology used, but often include:

- The business case.
- Objectives.
- Scope and boundaries.
- Business impact.
- Project team.
- Time frame for executing the project.
They should, however, provide answers to:

- What must be done?
- Why doing it?
- What are the benefits of implementing the project?
- When must it be done?
- Who does what?
Key Elements – Problem Statement:

A problem exists when there is a difference between where we are and where we want to be.
Key Elements – Problem Statement:

- **Problem statement**: The problem in one statement
- **Business case**: Why the problem needs to be solved
Project Charter

Key Elements – Problem Statement:

- The business case **should**: 
  - Describe what is the impact on the customer when it occurs.
- The business case **may**: 
  - Describe when and how often the problem occurs.
  - State the symptoms and their effects.
Project Charter

Key Elements – Problem Statement:

- There is no right or wrong way of writing a problem statement.
- It should be brief and specific.
- It is sometimes written in the following format:

  - The problem of...
  - Is affecting...
  - The impact of which is...
Project Charter

Key Elements – Problem Statement:

- The problem statement **should not** include background information.
- It **should not** discuss the causes or solutions.
Project Charter

Key Elements – Problem Statement:

Example of a problem statement

The manual oil refilling process using drums in the forming machines in line #4 make it difficult to control oil losses which may reach more than 4% per drum.
Project Charter

Key Elements – Problem Statement:

- What is the Problem of this Problem Statement: “The business is not making enough profit”.
  - Not supported with data.
  - Too general.
  - You can’t solve all the problem at once.
Project Charter

Key Elements – Problem Statement:

No problem

Means ...

No improvement
Project Charter

Key Elements – Goal Statement:

- Responds to the problem statement.
- Defines the target for the project.
- There is always room for improvement.
Project Charter

Key Elements – Goal Statement:

- It should clearly define the purpose of the project.
- It should be brief and specific.
- It should start with a verb, e.g. increase, reduce, eliminate, etc.
- It should have a measurable target.
Project Charter

Key Elements – Goal Statement:

- It is often written in the following format:

  Improve *(primary metric)* from *(baseline performance)* to *(desired future performance)* by *(desired date of completion)*.
Project Charter

Key Elements – Goal Statement:

Avoid using technical language when writing a goal statement

Avoid suggesting or assuming a solution

There is always room for improvement
Reduce oil losses of the manual refilling process of the forming machines in line #4 to less than 1% per drum by the 30th of October.
Project Charter

Key Elements – Project Team:

Composed of a dedicated **project leader** and **team members** from cross functions.
Project Charter

Key Elements – Project Team:

- **The project leader:**
  - Provides the purpose.
  - Establishes a shared ownership.
  - Communicates and facilitates.
  - Monitors and tracks.
Key Elements – Project Team:

The team members are responsible for executing the project activities to produce the desired deliverables.
Project Charter

Key Elements – Project Team:

- It is also common to have a **project sponsor**.
- He should have the authority to afford the necessary resources and provide support as needed.
Project Charter

Key Elements – Project Scope:

- Defines what is involved in the project and what is not.
- It is important to identify:

  - Products
  - Services
  - Processes
  - Departments
  - Locations
  - Lines
  - Customer
Project Charter

Key Elements – Project Scope:

- **Avoid the temptation of expanding the scope of the project:**
  - You will not be able to complete the project within the allocated time.
  - More resources will be required.
  - The action and control plans will be too detailed.
Project Charter

Key Elements – Project Scope:

Use **SIPOC mapping** to identify key **Suppliers, Inputs, Process boundaries, Outputs and Customers**.
Project Charter

Key Elements – VOC:

- Customers are the elements that identify the need for executing the project.
- It is important to take the **Voice of the Customer** into account during the project definition phase.
A customer representative may be needed to evaluate the outcomes of the project definition process and provide feedback as necessary.
Project Charter

Key Elements – Project Metrics:

- Bring attention to the future progress and results.
- Keep the team focused to achieve the project goals and expectations.
The success of any project is measured by each or both of:

- Primary metric
- Financial metric

Tracking these metrics is important not only during the project period but also several years after the project completion.
Project Charter

Key Elements – Time Frame:

- The time required to complete the project.
- Often represented by the start and expected completion dates.

- It is possible to assign approximate completion date, you need, however, to revise it as the project progresses.
Project Charter

Key Elements – Signatures:

- Signing on the project charter:
  - Serves as a formal approval of the project.
  - Empowers the project leader to proceed with the project.
A Project Charter may Contain:

- The key **stakeholders** affected by the project, and their expectations and concerns.
- We need to get their support in order for the project to be successful.
Project Charter

A Project Charter may Contain:

- The implementation **Methodology**.
  - Six Sigma.
  - Lean.
  - Traditional Project Management (PM).
  - Etc.
A Project Charter may Contain:

- Project cost and benefit analysis.
- **Cost of Poor Quality** → helps determine the potential savings.
- The required **Resources** including the source of funding.
A Project Charter may Contain:

- **Risk** assessment of the planned activities.
- The **barriers** and obstacles that could hinder the team.
- Assumptions, constraints and dependencies.
Project Charter

A Project Charter may Contain:

- Project **deliverables** at every stage.
- If a deliverable is significant, it may be a milestone.
A Project Charter may Contain:

- The **milestones** of the project.
  - Highlight important dates.
  - Help you stay on schedule.
  - Provide regular opportunities to review progress.
  - Could be as simple as the completion of each project phase.
A Project Charter may Contain:

- A **communication** plan.
- A **go/no go** decision to decide whether to move forward with the project as defined or to stop.
How to Prepare an Effective Project Charter?

- A project charter should be developed as a collaborative effort.
- It should be clear and concise (preferably one page).
- It should be customer focused and addresses their specific needs and expectations.
- It should contain realistic and achievable objectives (use the SMART checklist).
- It should be dealt with as a live document during the project lifetime.
- It should be updated as the project progresses.
# Project Charter

## Project Charter Template:

### PROJECT CHARTER

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Goal Statement:</th>
<th>VOC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Statement:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Team:</td>
<td>Project Information:</td>
<td>Key Metrics:</td>
</tr>
<tr>
<td>Leader:</td>
<td>Project start: Project end:</td>
<td></td>
</tr>
<tr>
<td>Team member1:</td>
<td>Project approach:</td>
<td></td>
</tr>
<tr>
<td>Team member2:</td>
<td>Project scope:</td>
<td></td>
</tr>
<tr>
<td>Team member3:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Milestones:

Signatures: __________  __________  __________  __________  __________
Further Information:

- Project charters can be made by the project team, the sponsor, or by an expert external to the project team.
- It may be created for each phase for multiple-phased large projects.
Project Charter

Further Information:

- **Sometimes, the project should be stopped at the beginning:**
  - The potential benefits might not be sufficient.
  - The availability of resources might be an issue.
  - What else?
Project Charter

Further Information:

- Are you pursuing the right goal?
- The SMART stands for:
  - **S**: Specific.
  - **M**: Measurable.
  - **A**: Achievable.
  - **R**: Realistic.
  - **T**: Time bound.
  - **P**: Positively stated
  - **U**: Understood
  - **R**: Relevant
  - **E**: Ethical
  - **C**: Challenging
  - **L**: Legal
  - **E**: Environmentally sound
  - **A**: Agreed
  - **R**: Recorded

Always check whether your goals correlates with the 14 requirements
Further Information:

- A good problem statement concisely communicates the problem in terms of who, what, when, where, and how many.
  - **Who** is affected by the problem?
  - **What** does the problem appear to be?
  - **When** does the problem occur?
  - **Where** does the problem occur?
  - **How many** times has the problem occurred over the defined period?
Project Charter

Further Information:

- A good goal statement summarizes describes:
  - What do we want to do?
  - What is the level of performance we want to reach?
  - By when?
Further Information:

- The project charter has to be filled in and agreed by the Champion before the kick-off.
- The completed project charter is a requirement for a project kick-off.
- Adjustments to the project charter are possible with the approval of the Champion.
- A completed project is a requirement for Black Belt certification.