# Final Report Guidelines and Deliverables Template

Dear Belt Candidate

Reports are important management tools for influencing future actions **and documenting learning and accomplishments**. Through reports, information can be shared and consequently lessons learned. However, good report writing is not easy and it is very time consuming. In addition, if a report is not easy to read, it probably will not be read at all. There are a number of aspects to a good final report. These include report structure and flow, the quality of the data analysis, conclusions reached, ability to manage change, and writing style.

The guidelines listed below address these issues:

1. The report must provide clear evidence that the **DMAIC** process was followed and tool use was appropriate and accurate. Build a storyline!
2. Address each deliverable requirement as outlined in the “**Final Report Deliverables Checklist**” (Refer to Section 4 for details).
3. Know the **purpose** and the **audience** of your report well and write it accordingly.
4. Make sure your report has a **structure** and follows with headings and sub-headings, or sections as outlined in the Final Report Template. This will help you and the reader navigate your way through the report.
5. Use **discipline** in preparing your report. THINK before you write! If you are writing about the work you have just completed, think carefully what it is that is important to report and what is not. Learn to think and write critically.
6. Be **concise** and state your point. Avoid detailed and descriptive narrative that burdens the reader with more than s/he needs to know.
7. Be **objective** in your reporting. Present the facts; do not make unsupported claims. Do not generalize about a situation or a problem but say what it pertains to. It is better to say you don't know than to (a) present an incomplete picture which you know will only raise questions for the reader, or (b) fill the gaps with speculation, extrapolation, or opinion.
8. Be as **analytical** as you can rather than descriptive. Aggregate, summarize, mention trends or patterns, point to exceptions, and prioritize issues according to their magnitude and need for attention.
9. Be **consistent** in reporting information. Treat the same type of event, situation, problem, activity, or whatever it might be, the same from one instance to the next.
10. Use **logic** to prepare your report in a coherent fashion – from one paragraph or section to the next.
11. Select the most effective way to **present the improvements made**. Use tables to show quantitative information or to report events or activities for which there in some pattern.
12. Include any long, bulky data sets in the appendix rather than in the body of the report.
13. All **tables, figures, and graphs** should be labeled and referred to in the text.



*(Replace with your company’s logo)*

**Project Title:**

**Belt Status:**

**Candidate Name:**

**Company:**

**Email Address:**

**Phone Number:**

**Lean Methods Instructor:**

**Training Start Date:** MM-DD-YYYY

**Training End Date:** MM-DD-YYYY

**Project Start Date:** MM-DD-YYYY

**Project End Date:** MM-DD-YYYY

## Executive Summary

The Executive Summary presents the major information the report contains. Its readers are typically managers who need a broad understanding of the project and how it fits into a coherent whole. These readers do not usually need or want a detailed understanding of the various projects undertaken in their organizations. Therefore, the Executive Summary allows readers to learn a gist of the report without reading the entire document, to determine whether the report is relevant to their needs or to get an overview before focusing on the details

The Executive Summary should include:

1. Problem statement and scope of the project
2. Critical tools/ methods used
3. Major results / findings (including key supporting information)
4. Conclusions & Recommendations

The Executive Summary is not used as an introduction to the report, but is an independent, entirely condensed version – the report in miniature. It generally has the following characteristics:

* Length: Maximum 1 page
* The Executive Summary should include no terms, abbreviations, or symbols unfamiliar to the reader. Again, readers should understand the content of the Executive Summary without reading the rest of the report.

## 1. Belt Project Overview

### 1.1. Business Case

* What are the compelling business reasons for embarking on this project?
* Is the project linked to key business goals and objectives?
* What key business process output measure(s) will the project leverage and how?

### 1.2. Voice of the Customer (VOC)

Even the smallest LSS project must take the time to ensure it is customer focused.

* Has the customer been identified?
* Has the customer improvement team collected the VOC?
* What customer feedback methods were used to solicit their input?
* Have the customer needs been translated into specific, measurable requirements? How?

### 1.3. Problem Statement

Include:

* What?
* Where?
* When?
* How much?
* How do you know it’s bad?

### 1.4. Goal/Objective Statement

Using S.M.A.R.T.: Specific, Measurable, Aggressive Yet Achievable, Relevant, Time Bound, i.e. Improve {metric} from {baseline level} to {goal level} by {date}.

### 1.5. Scope

* What are the boundaries of the scope? What is in bounds and what is not?
* What is the start point? What is the stop point?
* How does the project manager ensure against scope creep?
* What constraints exist that might impact the team?

### 1.6. Financial Benefits

Savings, i.e. Measure of the $$$ impact when the primary metric is improved to Goal.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Original****Forecast** | **Validated?** | **Revised****Forecast** | **Validated?** | **Actual Savings****To Date** |
| **Date** |  |  |  |  |  |
| **Savings** |  |  |  |  |  |

### 1.7. Non-financial Benefits (Primary and Secondary Metrics)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Primary/Secondary Metric** | **Baseline** | **Actual** | **Goal** | **% ImprovementToward Goal** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

(INSERT: Primary Metric Time Series Plot – an SPC chart is recommended.)

### 1.8. Other Organizational Benefits (Not Measured or Not Measurable)

List other positive results from your project: consequential metrics that may actually have improved, side benefits to other products or processes, potential savings, increases in capacity, process understanding, morale, customer good will, etc.

### 1.9. Summary of Changes Made to Affect Improvement

List the changes made to the processes that have been verified to have caused the improvements in the project metrics and/or that provided the savings. Make sure that you address each of these changes in the phase summaries.

### 1.10. Timeline

Provide the Planned & Actual completion dates of the project’s major milestones.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Start** | **Define** | **Measure** | **Analyze** | **Improve** | **Control** |
| **Planned:** |  |  |  |  |  |  |
| **Actual:** |  |  |  |  |  |  |

### 1.11. Team Members

|  |  |  |
| --- | --- | --- |
| **Name** | **Functional Area** | **Expertise** |
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## 2. Phase Summaries & Deliverables

The phase summaries are where you tell the story of your project. In these summaries, discuss the tools you used in each phase, conclusions drawn and actions taken based on your data driven analysis. You should include any significant statistical and graphical output with discussion and interpretation pertaining to the major deliverables by phase.

### 2.1. Define

Discuss the problem you examined. Explain how you identified your specific Six Sigma or Lean Six Sigma project. You might possibly integrate visuals and data summaries with text using tools such as a Pareto chart or a summary report of current process performance.

The following DELIVERABLES must be clearly demonstrated:

* Executive Summary
* Define the Business Case
* Collect & Translate the VOC
* Define the Process
* Manage the Project
* Approved Project Charter
* Provide Sufficient Phase Narrative: Tell the STORY of how your team applied the tools/methodology to guide your performance improvement work.

### 2.2. Measure

Analyze current performance levels and identify goals you hope to achieve. Integrate visuals presenting flow charts, cause-and-effect tools, process control charts, sample data sets, summary statistics, etc. You also might include visuals presenting results from process capability studies, measurement system analyses and process audits. Note: Do not present long, bulky data sets in the main report; place them in appendices.

The following DELIVERABLES must be clearly demonstrated:

* Demonstrate Team Engagement
* Verify Data Quality
* Collect Process Data
* Understand Process Flow
* Lean Techniques/Quick Hits/Expose Simplification Opportunities
* Understand Process Behavior
* Baseline Process Capability
* Provide Sufficient Phase Narrative: Tell the STORY of how your team applied the tools/methodology to guide your performance improvement work.

### 2.3. Analyze

Analyze gaps between current performance and target performance levels, explaining possible sources of variation – focusing on potential Critical X's.

The following DELIVERABLES must be clearly demonstrated:

* Root Cause – Potential Critical X's
* FMEA (Risk Analysis & Mitigation)
* Analyze Process Data/Investigate the Significance of X's
* Provide Sufficient Phase Narrative: Tell the STORY of how your team applied the tools/methodology to guide your performance improvement work.

### 2.4. Improve

Identify innovative ways to improve performance. Evaluate how well these improvements address your previously defined target performance goals. Specify criterion for choosing best solution(s) and implement a course of action.

The following DELIVERABLES must be clearly demonstrated:

* Generate Potential Solutions
* Evaluate Potential Solutions
* Select Best Solutions – Apply statistical rigor
	+ When data are not available and statistical analysis cannot be performed, an FMEA must be used as a minimum. However, the team is expected to make a significant effort to apply data driven solutions.
* Implement Solutions w/Action Plan
* Statement of Y=f(x)
	+ A statement in the form of an equation (mathematical or logical) showing the relationship between the primary metric (Y) and the final set of critical X's is required.
	+ Y is the output measure, such as process cycle time or customer satisfaction. f is the letter representing "function" (what the value(s) of X(s) does/do for Y (the output). X(s) is/are any process input(s) (variables) having assigned or inherent values(s) that is/are involved in producing the output.
	+ For example, if you call your major department store to ask a question, the ability to have your question answered (Y) is a function (f) of the wait time, the number of people answering the phones, the time it takes to talk with the representative, the representative's knowledge, etc.
* Provide Sufficient Phase Narrative: Tell the STORY of how your team applied the tools/methodology to guide your performance improvement work.

### 2.5. Control

Identify the methods of control such as Mistake Proofing, Process Control Charts, Process Control Plans, Project Closure Plan and Project Transition Action Plan. Demonstrate how your solution achieved the desired results and explain any further action to be taken, including the responsible team members and timeline. Discuss financial validation and provide evidence of project approval by the Champion or equivalent. Summarize project conclusions, lessons learned and potential future areas of improvement. Although not required as a deliverable, don't forget to give credit to team members and key project contributors.

The following DELIVERABLES must be clearly demonstrated:

* Provide Clear Indication of Improved Primary Metric(s)
* Provide Formal Control Plan – Control Methods Applied
* Project Approval by Champion or equivalent
* Discuss Financial Validation (even if it is $0)
* Provide Project Closure Documents
* Provide Sufficient Phase Narrative & Project Conclusions: Tell the STORY of how your team applied the tools/methodology to guide your performance improvement work.

## 3. Appendix

Use appendices to present information that is too bulky to be presented in the body of the report or that will interest only a few readers. For example, large diagrams or charts, computations, graphical and statistical output, test data and texts of supporting documents should appear in appendices.

### 3.1. DOE Reports (Detailed, if appropriate)

### 3.2. FMEAs (Detailed)

### 3.3. Gage or Attribute R&R Studies (Detailed)

### 3.4. Any Other Supporting Data

## 4. Final Report Deliverables Checklist

Below is the Final Report Deliverables checklist that the MBB will be using when reviewing the report. The "Final Report Deliverables Checklist" outlines and describes the deliverables for each phase of the DMAIC roadmap. If further clarification is needed, the red triangles (upper right corner of the deliverable cell) provide a more detailed description of tools that are commonly applied for that deliverable. Finally, the list of tools and techniques next to the deliverables provide examples of commonly applied tools and techniques, depending on training level of the Belt (GB/BB).

