

# Introduction

Companies need assistance in improving the quality in their products and processes. The Project Quality Management Application helps manage the Quality Improvement and Control Process.

## Rationale

The costs of poor quality<sup>1</sup> can be up to 25% of the costs of goods sold. If it costs \$100 to fix a product in the field it might cost only \$1 to fix at the source. This ratio occurs in all kinds of domains; for instance, it might cost \$100 to fix a defect in a production computer system might cost a dollar to make sure the defect never got into the system.

Six Sigma is a methodology and set of tools to improve business processes by reducing defects and errors and increasing quality<sup>2</sup>. Six Sigma uses a structured approach called DMAIC to manage the quality improvement process<sup>3</sup>.

## Overview

The Project Quality Management application will:

- be an web application that
- will manage all of the phases in the DMAIC process
- will capture the information for each of the documents produced
- will produce outputs from the documents (Word, excel , PDF, other)
- will manage approval workflows and will have project reporting

The current state of the project is:

- The database design is complete
- Prototype of the initial set of screens is done (about 160 or so)
- The overall architecture is done

## Next steps

- Competitive analysis – is someone else doing this (do we need a SWOT analysis?)
- Sanity check- do my screens make sense? What's a reasonable set of validations for each screen etc.
- Do the roles make sense? Workflows, security etc?
- Discuss Future state etc.

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1 <https://www.techamsolutions.com/post/do-you-know-your-total-cost-of-quality>

2 <https://www.simplilearn.com/what-is-six-sigma-a-complete-overview-article>

3 <https://www.simplilearn.com/dmaic-process-article>