

1 Executive Summary

This project demonstrates how AI and Six Sigma methodologies can be combined to optimize a business reporting process. By applying the DMAIC framework, inefficiencies were identified and AI-enabled improvements were proposed to enhance efficiency, accuracy, and decision turnaround time.

2 Define Phase

Process: Monthly Business Reporting

Stakeholders: Business Analysts, Managers, Leadership

Key Issues Identified:

- Manual data consolidation
 - Repetitive report creation
 - Delayed decision-making
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3 Measure Phase

Current State Metrics (Baseline):

- Reporting cycle time: 5 days
 - Manual effort: High
 - Error probability: Medium
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4 Analyze Phase

Root Causes Identified:

- Lack of automation in data preparation
 - Manual interpretation of insights
 - Repetitive documentation tasks
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5 Improve Phase (AI-Enabled Solutions)

Proposed Improvements:

- AI-assisted data summarization
- Generative AI for executive summaries
- AI-supported insight validation

Expected Benefits:

- Faster reporting
 - Reduced manual effort
 - Improved decision quality
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Control Phase

Sustainability Measures:

- Standardized AI prompts
 - Documentation templates
 - Human review checkpoints for AI outputs
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Success Metrics

- Reduction in reporting cycle time (%)
 - Decrease in manual effort
 - Improvement in stakeholder satisfaction
 - Consistency of insights
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Conclusion

This project highlights how AI Business Analysts can use structured process improvement frameworks alongside AI tools to deliver measurable operational improvements while maintaining control and accountability.

Tools & Frameworks

Six Sigma (DMAIC) • Generative AI • Business Analysis • Process Optimization