

## 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.

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## 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
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**Expected Benefits:**

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

### Sustainability Measures:

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

- Reduction in reporting cycle time (%)
  - Decrease in manual effort
  - Improvement in stakeholder satisfaction
  - Consistency of insights
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## 8 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.

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## 📌 Tools & Frameworks

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