Pilot Architecture Components

Core Prompt Library

- **Initial Set:** 20-30 curated prompt templates
- **Categories:** Data analysis, customer service, content generation
- **Format:** Markdown files with metadata headers
- **Storage:** Git repository with structured folders
- **Documentation:** Usage examples and parameter guides

Version Control System

- **Platform:** GitHub/GitLab with branch protection
- **Workflow:** Feature branches, pull request reviews
- **Change Tracking:** Detailed commit messages with tags
- **Rollback:** Version pinning for production prompts
- **Collaboration:** Multi-user access with role permissions

Testing Framework

- **Unit Tests:** Automated validation of prompt outputs
- **Test Cases:** 10+ scenarios per prompt template
- **Quality Metrics:** Accuracy, relevance, consistency scores
- **CI Integration:** Automated testing on every commit
- **Regression Suite:** Prevent degradation from changes

Monitoring Dashboard

- **Metrics:** Usage frequency, latency, token consumption
- **Quality:** User satisfaction ratings and feedback
- **Performance:** Response time and error rate tracking
- **Cost Analysis:** API usage and resource allocation
- **Alerts:** Threshold-based notifications for anomalies