*Generated for: Project Brief: SmartAssist - Internal LLM Solution (rasha.gh22@gmail.com)*

# Project Brief: SmartAssist - Internal LLM Solution

## 1. Project Overview

* **Project Name**: SmartAssist
* **Client**: Internal (TechNova Startup)
* **Project Sponsor**: Sarah Chen, CEO
* **Project Lead**: Alex Rivera, CTO
* **Date Created**: May 6, 2025
* **Version**: 1.0

## 2. Project Background

TechNova is a growing startup focused on developing customized software solutions for small to medium businesses. As we scale from 15 to an anticipated 30+ employees this year, we've identified increasing inefficiencies in our internal knowledge management, customer support, and code documentation processes. Our team spends approximately 30% of their time searching for information across various documentation systems, answering repetitive client questions, and documenting code. We believe implementing an internal LLM solution can significantly reduce this overhead and improve productivity.

## 3. Business Case

### Business Problem

* Knowledge silos are forming as the team grows
* Significant time lost searching for information across Notion, GitHub, Slack, and Google Drive
* Inconsistent documentation quality leading to longer onboarding times for new hires
* Engineering team spending 10+ hours weekly answering repetitive technical questions
* Limited ability to leverage past client solutions for new business opportunities

### Business Objectives

* Reduce time spent searching for information by 50%
* Decrease onboarding time for new employees from 4 weeks to 2 weeks.
* Enable self-service for 70% of common internal questions.
* Improve code documentation quality and consistency.
* Create a foundation for a potential future client-facing AI assistant.s

### Expected Business Value

* 15% increase in engineering capacity for billable work
* Improved employee satisfaction and reduced frustration
* Faster response times to client inquiries
* Better knowledge retention as the company scales

## 4. Project Goals & Success Criteria

### Primary Goal

Create a customized LLM solution that centralizes our company knowledge, automates repetitive tasks, and provides intelligent assistance to team members.

### Specific Objectives

* Build a secure, private LLM application that can access our internal systems.
* Train the model on our company documentation, codebase, and past communications.
* Implement natural language interfaces across our primary work platforms.
* Develop specific capabilities for code documentation and technical Q&A.
* Establish usage analytics to measure impact and ROI.

### Success Metrics

* 50% reduction in time spent searching for information.
* 80% accuracy in answering internal questions.
* 90% employee adoption within 2 months.
* 40% reduction in repeated questions to senior team members.
* Positive satisfaction scores (>4.2/5) from user feedback.

## 5. Target Audience/Users

* **Primary Users**: Technical team (developers, designers, project managers)
* **Secondary Users**: Non-technical staff (sales, operations, HR)
* **Key User Needs**:
  - Quick access to organizational knowledge
  - Assistance with code documentation and technical problems
  - Help finding relevant past projects and solutions
  - Easy access through existing tools (Slack, browser extension)
  - Confidence in data privacy and security

## 6. High-Level Scope

### In Scope

* Selection/configuration of base LLM model.
* Integration with our key systems (GitHub, Notion, Slack, Google Drive).
* Development of custom retrieval-augmented generation (RAG) system.
* User-friendly interface accessible via Slack and web browser.
* Basic analytics dashboard to track usage and impact.
* Initial training on our documentation and codebases.
* Security and access controls.

### Out of Scope

* Client-facing AI assistant (future phase).
* Automated code generation capabilities.
* Integration with external CRM or financial systems.
* Voice interface.
* Mobile application.
* Advanced analytics and recommendation engine.

## 7. High-Level Requirements

### Functional Requirements

* Natural language query interface.
* Document and code search across all repositories.
* Context-aware responses based on company data.
* Code documentation assistance.
* Self-learning capability from user interactions.
* User feedback mechanism.
* Question routing for complex queries.

### Technical Requirements

* Integration with the existing authentication system.
* API connections to all internal data sources.
* Vector database for efficient retrieval.
* Regular data synchronization mechanisms.
* Data privacy and security measures.
* Horizontal scalability as the company grows.
* Response latency under 3 seconds.

### Constraints

* $25K maximum budget for implementation
* 3-month timeline to initial release.
* Must work with existing infrastructure
* Limited dedicated resources (part-time team allocation).
* Data must remain within our security perimeter

## 8. Preliminary Timeline

* **Estimated Start Date**: May 15, 2025
* **Estimated Completion Date**: August 15, 2025
* **Key Milestones**:
  - Architecture & Model Selection: May 30, 2025
  - Data Integration Complete: June 20, 2025
  - Alpha Version for Internal Testing: July 10, 2025
  - Beta Launch with Core Team: July 25, 2025
  - Full Deployment & Training: August 15, 2025

## 9. Preliminary Budget

* **Estimated Budget Range**: $20,000 - $25,000
* **Budget Breakdown**:
  - LLM API/Hosting Costs: $7,500
  - Development Resources: $12,000
  - Training & Documentation: $2,500
  - Contingency: $3,000
* **Ongoing Costs**: ~$650/month for API usage and maintenance

## 10. Key Stakeholders

* Sarah Chen, CEO (Executive Sponsor)
* Alex Rivera, CTO (Technical Lead)
* Maya Patel, Head of Engineering (Subject Matter Expert)
* Jamal Williams, Operations Manager (Process Owner)
* Dev Team Representatives (2)
* Non-Technical Representatives (2)

## 11. Initial Resources

### Team Resources

* 1 Lead Developer (50% allocation)
* 2 Backend Engineers (25% allocation each)
* 1 Frontend Developer (25% allocation)
* 1 DevOps Engineer (10% allocation)
* Subject Matter Experts (5% allocation each)

## 12. Next Steps

* Finalize the detailed requirements document.
* Complete model and technology selection process
* Create a detailed implementation plan
* Schedule a kickoff meeting with all stakeholders
* Begin the data inventory and cleaning process