Software Proposal

ClinicTrends AI Project

Group: 1

Students:

Luis Guilherme de Barros Andrade Faria - **A00187785**

Jing Feng Chin - **A00178098**

Luong Hai Chau - **A00117495**

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1. Proposed Project

ClinicTrendsAI – Proactive NPS Feedback Analysis Dashboard

2. Problem Description

In competitive service industries such as aesthetic clinics, customer retention heavily relies on satisfaction metrics like the Net Promoter Score (NPS). However, these insights are often

reactive—reported through static summaries and post-event analyses—limiting a clinic's ability to act before issues escalate.

Currently, many small and medium-sized businesses lack tools to analyze satisfaction trends, forecast risks, or identify key satisfaction drivers. Stakeholders often rely on spreadsheets and manual review of comments, making it difficult to prioritize improvements, understand performance across locations, or make data-informed decisions.

Furthermore, existing enterprise-level satisfaction platforms (e.g., Medallia, Qualtrics) are cost-prohibitive for smaller businesses, while basic survey tools (e.g., SurveyMonkey) do not offer predictive features or actionable insights.

3. Proposed Solution

ClinicTrendsAI is a lightweight, Python-based web dashboard built using Streamlit that enables proactive customer satisfaction management. The system will allow users to upload survey CSV files and receive real-time analysis through interactive visualizations and machine learning forecasts.

Core Features:

- **Historical NPS Trends** – Visualized by clinic location or timeframe
- **ML Forecasting** – Predict future NPS scores based on patterns
- **Threshold Alerts** – Automatic notifications when satisfaction drops
- **Feature Impact Analysis** – Show key drivers of customer sentiment

Target Users:

- **Managers** – Access clear dashboards to act before issues escalate
- **Regional Directors** – Compare store performance
- **Analysts** – Understand feature importance using interpretable ML outputs

This solution bridges the gap between affordability and functionality—introducing predictive analytics, alerting mechanisms, and interpretability in a user-friendly MVP format. It also supports stakeholder agility by integrating real-world business logic into its design.

4. Project Plan

Development Methodology: The project will follow a **Scrum-based Agile approach** with six sprints over 12 weeks. This allows for flexibility, incremental delivery, and fast integration of feedback.

Timeline:

- **Sprint 1**: Requirements gathering, stakeholder interviews, risk assessment

- **Sprint 2**: Data cleaning, initial NPS metric generation
- **Sprint 3**: Model selection, UI mockups
- **Sprint 4**: ML integration + visualization modules
- **Sprint 5**: Testing, UX improvement, feedback application
- **Sprint 6**: Final polish, documentation, and stakeholder demo

Justification for Agile:

Agile provides flexibility for this project's real-world data use case and evolving stakeholder needs. Frequent iteration and feedback are crucial to refine UI, metrics, and model performance, ensuring high usability and relevance.