Business Plan

Team 16 : AN2I

Collaborators :

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1. Executive Summary

Mission Statement

Our mission is to **revolutionize medical documentation and decision-making** by significantly reducing physicians' administrative workload. Our AI-powered solution **empowers doctors with intelligent, proactive AI agents to optimize patient care through : automated transcription, reports generation, and clinical decision support**, allowing doctors to focus on **higher-quality diagnoses** and **treat more patients efficiently** .

Objectives

- **Develop a real-time transcription and reporting tool** tailored for medical professionals.
- **Enhance consultations** with AI-driven recommendations.
- **Leverage patient history** for improved diagnosis and decision-making.
- **Provide a fully customizable platform** suitable for all medical specialties.

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2. Product Overview

We provide a **fully integrated AI-powered medical assistant set of tools based on Agentic-AI** that **goes beyond traditional transcription** to:
✅ **Reduce paperwork** and minimize medical errors.
✅ **Improve consultation efficiency** by generating structured reports.
✅ **Assist in clinical decision-making** through AI-driven recommendations.
✅ **Seamless integration with existing systems**

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3. Market Analysis

Industry Overview

The **medical AI market** is growing rapidly, with AI-driven documentation and decision support systems seeing **high adoption rates**.

Needs Assessment

- Physicians spend **40% of their time on documentation ([source](#))**, reducing time with patients.
- Real-time transcription so the doctor stays on track during discussion.
- **Missed details during consultations** can lead to **medical errors and misdiagnoses**.

- **Adding real-time suggestions** to physicians can improve the consultation's smoothness.
- **Inefficient patient history retrieval** slows down decision-making.

Target Market

📌 **Primary Audience:** Private practices and clinics.
📌 **Secondary Audience:** Hospitals,Nurses, medical assistants, and healthcare administrators. (after discussion with SFIL about potential)

Competitive Analysis

Existing solutions lack:
❌ Assistance **during** consultations (only post-processing transcription).
❌ Integration with **patient history** for contextual insights.
❌ AI-powered **suggestions and clinical recommendations**.
❌ Automated **summarization in a structured storytelling format**.

Our solution fills these critical gaps.

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4. Organization and Management

We are a **team of five engineers and researchers** with expertise in:

- **Artificial Intelligence & Data Science.**
- **Software Engineering.**
- **Sales & Marketing.**

Our **versatile skill set** enables us to develop, deploy, and scale our AI-driven medical assistant while ensuring smooth market entry.

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5. Products and Services

5.1. Key Features

1. Real-Time Transcription with Agentic-AI context-awareness

✔ **Buffered processing** ensures **accuracy** and **context awareness** instead of instant transcription.
✔ Captures **medical terminology** and **structured conversation flow**.

2. AI-Powered Recommendations & Decision Support

- Suggests **follow-up questions** based on symptoms & patient history.
- Recommends **further tests, treatments, or medication adjustments**.
- Uses **medical data sources & past consultations** to improve over time.

- Warns the doctor when the treatment doesn't fit the patient's profile.

3. Automated Report Generation & Customization

📄 AI-generated structured reports including:
✅ Symptoms
✅ Diagnosis
✅ Treatment Plan
✅ Conclusion & Keywords
✅ Customizable sections (doctors can edit before finalizing).

4. AI-Generated Summaries in Storytelling Format

- **Our Agentic AI autonomously creates patient narratives**, ensuring that each consultation builds on previous medical records.

- The AI functions as a **memory-driven agent**, allowing doctors to **review case histories in a structured format** instead of searching through unstructured notes.

5. Patient File Integration & Future Consultation Prep

📂 Before each consultation, the **Agentic AI autonomously retrieves and summarizes patient history**, offering a **personalized, pre-consultation briefing**.

📅 The AI **anticipates** potential follow-ups, **reducing redundant questioning** and improving diagnostic efficiency.

6. AI-Generated Referral Letters (Specialist Referrals)

✔ When referring a patient to a specialist, doctors **usually need to write a detailed report**, including patient history, symptoms, and recommendations. This process is **time-consuming**, requiring them to **search through multiple documents**.

✔ With our system, **referral letters are generated instantly** using AI-generated summaries that are **already updated after each consultation**.

✔ **Doctors only need to specify a few filters** (e.g., required specialty, key medical details to include, etc..), and the AI **automatically compiles a structured, relevant referral letter**.
✔ This ensures that the specialist receives **only the necessary patient details**, making the referral process **faster and more efficient**

5.2. Seamless Integration with Existing Systems

🚀 Works **without requiring replacement** of current consultation management software.

5.3. Unique Selling Proposition (USP)

✅ **Goes beyond transcription** – provides **clinical assistance**.
✅ **Reduces errors & paperwork and overlooked details**, improving efficiency in high-volume hospitals.
✅ **Customizable for all medical specialties**.

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6. Business Model

Revenue Streams

💰 **Subscription-Based Pricing:**
✔ **Individual doctors** – monthly/yearly plans.
✔ **Clinics** – tiered pricing per practitioner.
✔ **Hospitals** – enterprise licensing based on patient volume.

💰 **Additional Revenue Streams:**
✔ **Premium features** for specialized disciplines.
✔ **Custom integrations** with existing IT systems.

Cost Structure

📌 **AI development & model training**
📌 **Cloud infrastructure & maintenance**
📌 **Marketing & sales operations**
📌 **Regulatory compliance & customer support**

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7. Marketing and Sales Strategy

Market Entry Strategy

📌 **Pilot programs** with individual practitioners.
📌 **Free trial for early adopters** (beta program).

📌 **Partnerships with health tech platforms** (e.g., **Doctolib**).
📌 **Referral incentives** for early users.

Promotion & Advertising

📣 **Targeted digital campaigns** for healthcare professionals.
📣 **Case studies** showcasing efficiency improvements.
📣 **Participation in medical tech conferences & trade shows**.

Competitive Advantage

✅ **Intelligent Decision Support:** Unlike other solutions, we assist doctors **during** consultations.
✅ **Customizable Summaries & Reports:** Adaptable to different medical specialties.
✅ **Scalable for solo practitioners & large hospitals:** High ROI for all user levels.

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8. Cost Estimation (Worst-Case Scenario)

In the **worst-case scenario**, assuming **one patient every 15 minutes**, with **each consultation recorded for 15 minutes**, the estimated **monthly costs** are:

A doctor treats a patient every **15 minutes** and each consultation is recorded for **15 minutes**, the estimated monthly cost includes **transcription and LLM-based summarization**. The transcription process, using transcription services(e.g **Whisper API**) is estimated to require **240 hours per month**, resulting in a cost of around **$40 per month**. Additionally, for generating **AI-powered summaries and reports**, approximately **2,000 tokens per report** are needed, bringing the total estimated cost for **GPT-4-turbo processing to $20 per month**. Altogether, the **total estimated monthly cost amounts to $60.00 per doctor**.

Cost Justification

💰 With a **subscription price of $160/month**, even if our system **saves only 1 hour per day**, the doctor can **treat at least two additional patients per day**.

💵 The **revenue from these extra patients alone** would **cover the subscription cost in less than a week**.

Cost Optimization Strategies

✔ **Self-hosting models on cloud GPUs/local servers** to eliminate inference API costs.
✔ **Alternative transcription providers (Deepgram, AssemblyAI)** to lower per-minute costs.
✔ **Smaller/fine-tuned LLMs** to optimize token usage.

9. Risk Assessment and Compliance

Challenges & Risks

⚠ **Physician adoption resistance** to AI-based tools.
⚠ **Ensuring high transcription accuracy** across different medical specialties.
⚠ **Regulatory approval** for AI healthcare solutions.

Mitigation Strategies

✅ Continuous **AI model training** on **medical data**.
✅ Regular **user feedback** to refine and improve system performance.
✅ **Collaborating with health institutions** to ensure compliance with regulations.

10. Conclusion

Our AI-powered medical assistant is a **game-changer in healthcare**, addressing the **critical pain points** faced by physicians—excessive documentation, missed details, inefficient decision-making, and time-consuming patient referrals. By **seamlessly integrating AI into medical workflows**, we enable doctors to **spend more time on patient care** while ensuring **higher accuracy and efficiency** in clinical decision-making.

With **semi-real-time transcription, intelligent recommendations, automated report generation, storytelling-based summaries, and AI-powered referral letters**, our solution goes beyond traditional transcription tools. We provide **real value** by reducing administrative burden, minimizing errors, and optimizing consultation efficiency.

From a **business perspective**, our **scalable subscription model** ensures affordability for individual practitioners, clinics, and hospitals while delivering a **strong return on investment**. With a **pilot-first market entry strategy**, strategic **partnerships with health tech platforms**, and a **focus on AI-driven automation**, we are positioned for **rapid adoption and growth** in the medical AI space.

By leveraging **self-hosted models, cost-efficient transcription solutions, and optimized LLM usage**, we maintain **competitive pricing** while ensuring the system is **cost-effective and scalable**.

Ultimately, our solution does not just **save time—it transforms healthcare efficiency**, enabling **faster patient diagnoses, better treatment outcomes, and streamlined workflows**. With **a strong team of AI engineers, software developers, and industry

experts, we are ready to **scale, deploy, and disrupt** the medical documentation and decision-support landscape.