

Assignment 1: The Entrepreneurial Journey of MedTech Company

Company: NutriTrack AI



1. The Journey

NutriTrack AI was founded in 2026 by Kittitat and Papawee. The company emerged when physicians from multiple medical specialties recognized a critical nutritional bottleneck in patient recovery. Caregivers and patients often struggle to manage complex enteral feeding schedules at home due to limited gastrointestinal tolerance and the wide variability in nutritional formulas and caloric compositions among medical foods [1]. To address this challenge, the founders collaborated with AI and software developers to create an AI-powered enteral feeding calculator and management application. By inputting the prescribed medical food brand and the patient's current tolerance level, the system generates a safe, individualized daily feeding plan that supports clinical decision-making and facilitates personalized nutrition management [2]. The long-term vision of NutriTrack AI is to become the global gold standard in

personalized medical nutrition, leveraging data-driven approaches to optimize nutritional care for patients requiring enteral feeding [3].

2. **Entrepreneurial Characteristics**

The key trait of the founding team is their problem-solving and interdisciplinary collaboration. By merging the diverse clinical medical expertise of doctors from multiple specialties with advanced AI software development, they created a highly specific, tailor-made digital health solution.

3. **Challenges**

A major challenge for NutriTrack AI is building a comprehensive database of medical food profiles and finalizing the AI titration algorithm to ensure utmost clinical safety. They are overcoming this by seeking \$200,000 in seed funding to conduct rigorous clinical validation and pilot studies with caregivers and dietitians to prove the app's efficacy.

4. **Ecosystem**

NutriTrack AI leverages a strong healthcare ecosystem. They partner with clinical dietitians and gastroenterologists (Key Opinion Leaders) to recommend the app at hospital discharge, and collaborate with medical food distributors and healthcare systems to provide the app as a B2B value-added service.

Assignment 2: Opportunity Identification and Feasibility Analysis

Company: NutriTrack AI

1. Opportunity Identification

NutriTrack AI identified a clear gap in the market by observing the challenges caregivers face when adjusting tube feeding volumes at home. According to the ESPEN guidelines on home enteral nutrition, managing enteral feeding outside the hospital requires careful monitoring and adjustment of feeding regimens, which can be difficult for non-professional caregivers [4]. Because caregivers often lack clinical confidence to safely modify feeding volumes, many wait until the next physician appointment before making changes, potentially delaying adequate nutritional support. NutriTrack AI addresses this gap by developing an application that guides daily feeding titration and supports more efficient nutritional management for patients receiving enteral feeding.

2. Feasibility Analysis:

Part 1: Product/Service Feasibility

The app acts as a smart companion, generating safe, tailor-made daily feeding plans based on food brand, tolerance, and meal schedules. This eliminates the pain of manual calculations, making the product highly desirable for overwhelmed caregivers.

Part 2: Industry/Target Market Feasibility

The Total Addressable Market (TAM) for NutriTrack AI is the **Thailand enteral nutrition care market**, including tube-feeding patients across Thai hospitals, long-term care facilities, and home-care services. This market is driven by the growing need for safe nutritional management after hospital discharge, especially among patients who require ongoing tube feeding at home.

The Serviceable Addressable Market (SAM) is **Bangkok hospitals and home-care networks**, where tertiary hospitals, clinical dietitians, discharge planning teams, and home-care providers are concentrated. These settings provide a strong entry point because caregivers often receive feeding instructions during discharge and need practical tools to continue care safely at home.

The Serviceable Obtainable Market (SOM) is the **King Chulalongkorn Memorial Hospital pilot**, focusing on discharged tube-feeding patients and their caregivers. Starting with this pilot allows NutriTrack AI to validate its clinical workflow, collect user feedback, and demonstrate its value before expanding to other hospitals and home-care networks in Bangkok and across Thailand.

Recent market reports estimate the global enteral nutrition market to be valued at approximately USD 7–8 billion [5] with steady growth expected in the coming years (Grand View Research, 2023). NutriTrack AI targets patients requiring home-based tube feeding and caregivers managing daily nutrition, with an initial rollout focused on Thai hospitals and home-care services.

Part 3: Organizational Feasibility

The team possesses a strong combination of clinical knowledge (founded by medical doctors across various specialties) and technical capability (medical-grade AI app developers).

Part 4: Financial Feasibility

The business requires approximately THB 3.5 million in seed funding for MVP development, medical food database construction, AI titration algorithm refinement, and pilot clinical validation. The financial model is feasible through a combination of B2C subscription for long-term caregivers, pay-per-use plans for short-term users, and B2B hospital licensing. With hospital-led customer acquisition and low marginal cost after product development, NutriTrack AI targets a break-even point within 24 months.

Overall Assessment: NutriTrack AI shows strong product desirability, clear target market segmentation, and a highly scalable subscription/licensing financial model. The opportunity is highly attractive and feasible to pursue.

Reference

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Assignment 3: Customer Discovery and User Research

Company: NutriTrack AI

- 1. Target User & Target market** The primary users are caregivers and patients relying on home-based tube feeding.

TAM: Thailand enteral nutrition care market

SAM: Bangkok hospitals and home-care networks

SOM: King Chulalongkorn Memorial Hospital pilot

2. User Persona

Personal info

Caregiver or family member (adult child or spouse) of a patient requiring long-term tube feeding, non-medical background, currently overwhelmed by the complexity of home care.

Professional info

Full-time caregiver or balancing a job with home care duties, responsible for preparing 3–4 daily enteral meals and monitoring gastrointestinal symptoms.

Behavior & Personality

Highly anxious about patient safety, diligent but lacks clinical confidence, relies heavily on doctor's written instructions, and frequently seeks reassurance through phone calls or hospital visits.

Needs

Step-by-step guidance on how to adjust feed volumes safely, confidence to manage titration without immediate medical supervision, and clear daily schedules customized to the patient's current tolerance.





Challenges

Confusion caused by different medical food brands, fear of causing GI distress (diarrhea/bloating) by overfeeding, and the stress of waiting weeks for the next doctor's appointment to make minor plan changes.

Opportunities

Access to a "smart companion app" that titration day-by-day, reduction in travel time and costs for minor hospital visits, and the empowerment of seeing the patient reach nutritional goals safely and faster.

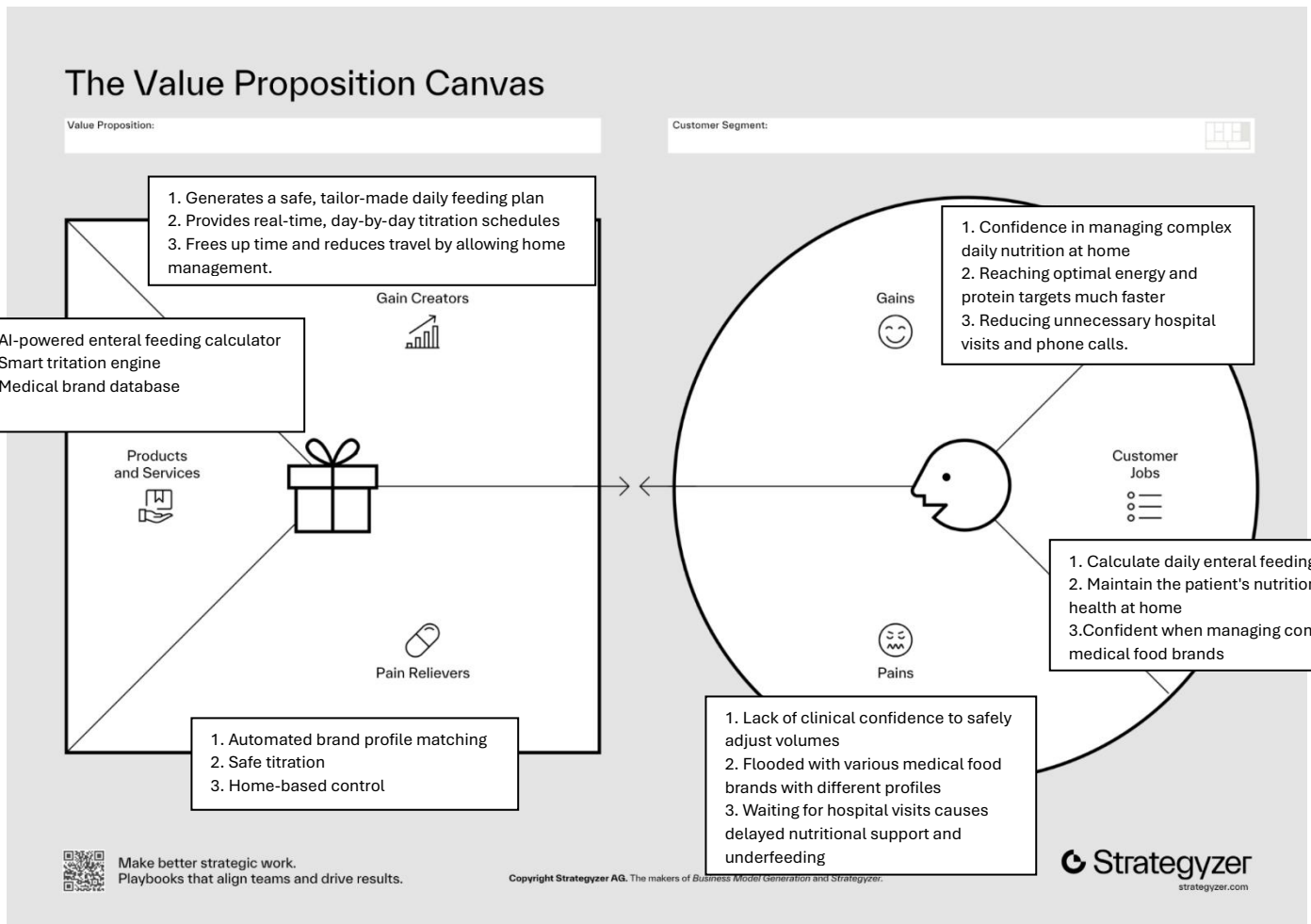
3. User Journey

	Awareness	Consideration	Decision	Retention
Action (User Behavior)	Patient discharged with tube feeding. Caregiver realizes the complexity of medical food profiles.	Caregiver searches for tools or logs; doctor or clinical dietitian recommends NutriTrack AI at discharge.	Caregiver downloads app, inputs food brand, tolerance level, and meal schedule.	Caregiver follows daily smart titration plan, patient heals faster, user renews subscription.
Touchpoints (Interaction)	Hospital discharge, medical food packaging.	Dietitian/Gastroenterologist consultation, online patient support groups.	App interface, subscription	Daily app notifications, real-time volume
Experience & Emotions	How do I calculate this without making a mistake?" 	"Finally, an app made specifically for this." 	"Inputting data was easy and it gave me a safe plan" 	"I feel confident managing nutrition at home. The patient is recovering." 

4. Stakeholder Analysis

- **Internal:**
 - Founders (Medical Doctors across various specialties)
 - AI/Software Developers.
 - NutriTrack AI Sales & Service Teams
 - **External:**
 - Caregivers (Users)
 - Patients
 - Clinical Dietitians & Doctors (KOLs/Influencers)
 - Hospital Administrators
 - Medical Food Distributors
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Assignment 4: Value Proposition and Jobs to be Done



Jobs to be done

1. Functional – Calculate precise daily enteral feeding volumes and gradually titrate concentration based on patient gastrointestinal tolerance.
2. Social – Maintain the patient's nutritional health at home to demonstrate competent caregiving and professional management for clinical follow-ups.
3. Emotional – Feel confident and less overwhelmed when managing complex medical food brands and feeding schedules.

Gains

1. Clinical Confidence – Empowered caregivers who have the confidence to safely manage complex daily nutrition at home.
2. Target Achievement – Reaching optimal energy and protein targets much faster to accelerate the patient's healing process.

3. Resource Efficiency – Reducing unnecessary hospital visits and phone calls for minor feeding adjustments, saving time and costs.

Pains

1. Clinical Uncertainty – Caregivers lack the confidence to safely adjust feeding volumes, leading to anxiety and potential underfeeding.
2. Formula Complexity – The market is flooded with various medical food brands, each with different caloric and protein profiles that are difficult to calculate manually.
3. Care Bottlenecks – Waiting for hospital appointments to make minor titration adjustments causes delayed nutritional support and slows patient recovery

Products & Services

1. AI-Powered Enteral Calculator – A mobile application designed for precise tracking and calculation of enteral feeding.
2. Smart Titration Engine – An algorithm that generates individualized, day-by-day titration schedules based on patient tolerance.
3. Medical Brand Database – A comprehensive digital library of medical food profiles for automated nutrient matching.

Gain Creators

1. Tailor-Made Feeding Plans – Generates safe, individualized daily feeding schedules based on specific prescribed food brands.
2. Real-Time Titration – Provides day-by-day guidance on adjusting volume and concentration without waiting for hospital visits.
3. Resource Optimization – Frees up time for caregivers and reduces travel costs by allowing safe nutritional management at home.

Pain Relievers

1. Automated Brand Matching – Instantly matches nutrient profiles across all medical food brands to ensure accuracy.
2. Safe Titration Guidance – Provides structured, safe volume adjustments to ensure patient gastrointestinal tolerance.
3. Home-Based Control – Eliminates the need for minor hospital visits by empowering home-based clinical adjustments.

Problem–Solution Fit

The NutriTrack AI solution directly addresses the clinical gap between hospital discharge and home recovery. It solves the primary pain of caregiver uncertainty and formula complexity through automated brand matching and a safe titration engine. By enabling real-time, day-by-day adjustments at home, it eliminates the bottleneck of hospital wait times. This

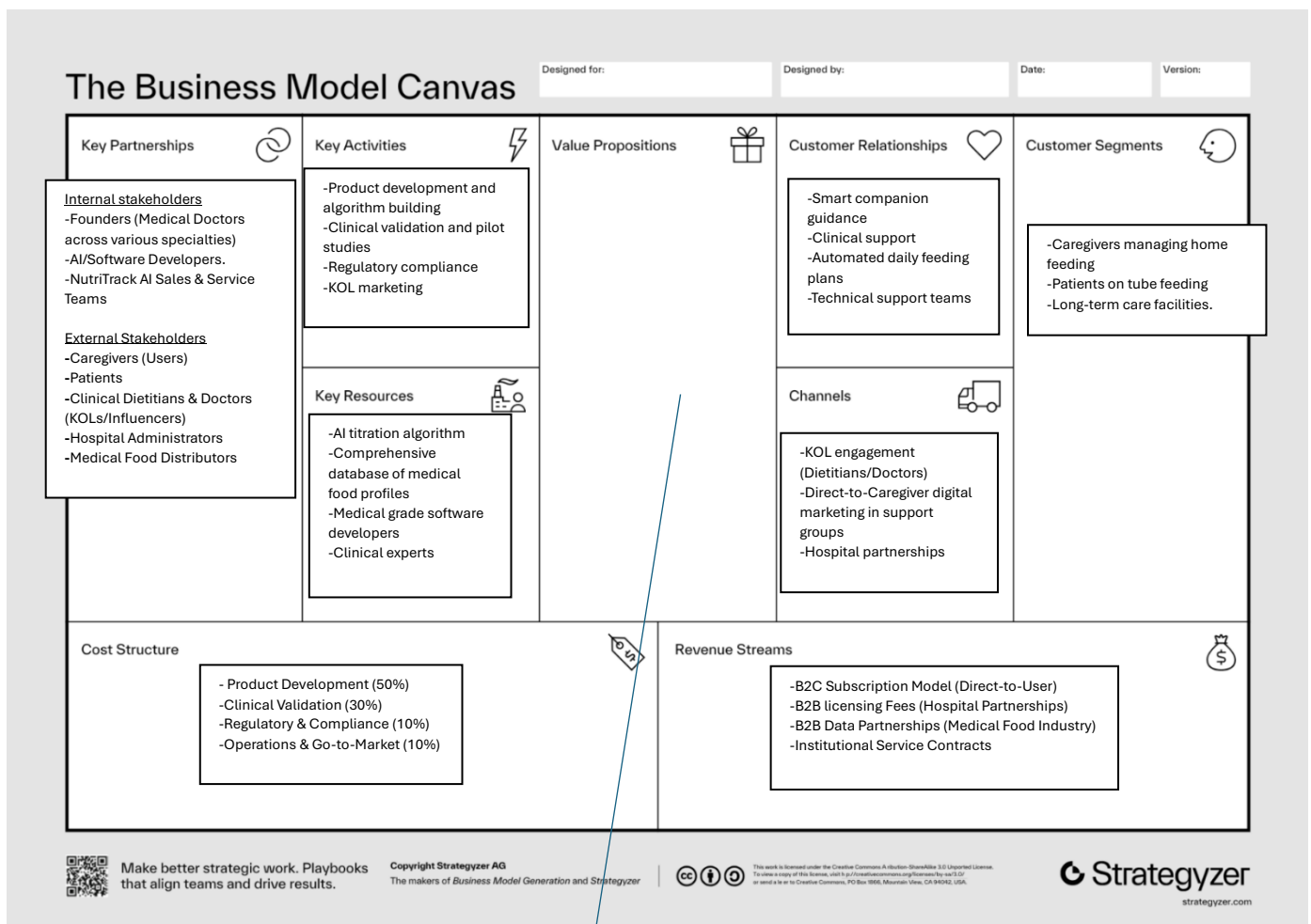
ensures patients reach their energy and protein targets faster, accelerating healing while allowing healthcare professionals to focus on critical care.

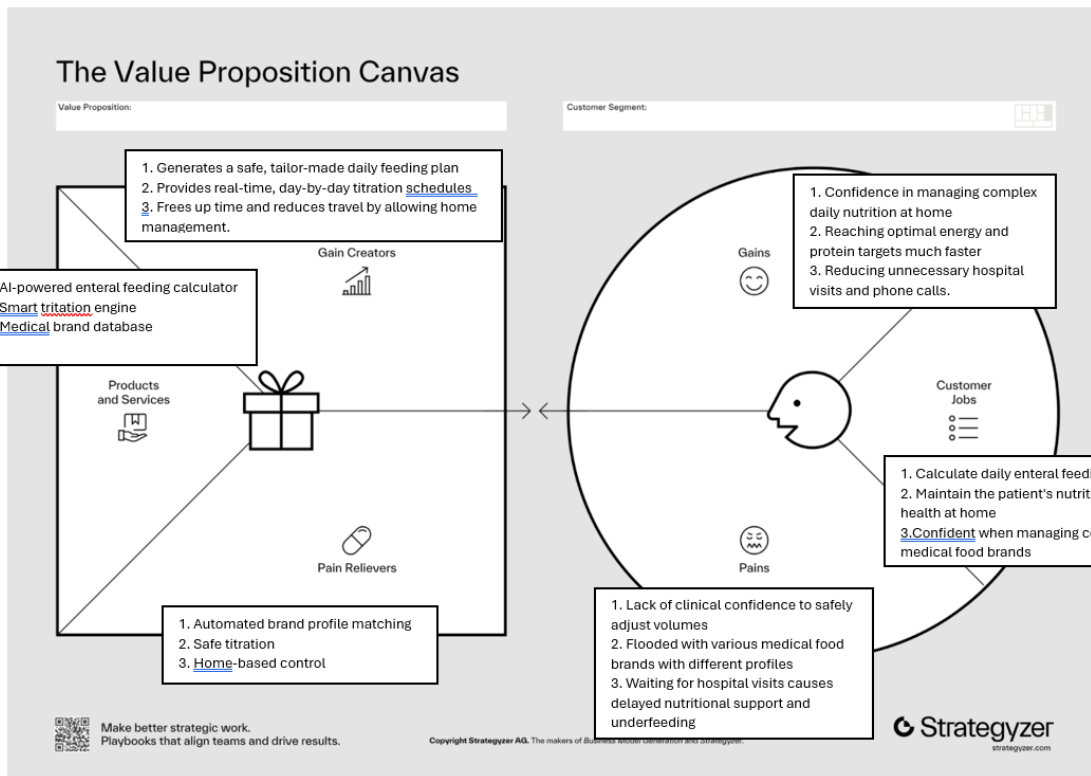
Assignment 5: Develop an Effective Business Model

1. Identify and explain which strategy they use: a Tech Push Strategy or Demand Pull.

NutriTrack AI utilizes a Demand Pull (Market Pull) strategy. The company started with a manifest clinical problem recognized by doctors and caregivers lacking the confidence to adjust tube feeding volumes, leading to underfeeding. The AI application was specifically designed as a solution to answer this urgent market need.

2. Business Model Canvas





2. Identify and explain which type of business model pattern they follow

NutriTrack AI uses a flexible pricing model: a 14-day free trial after discharge, followed by 99–199 THB/month subscription, 49 THB/7-day pay-per-use plan, and B2B hospital licensing per active patient/month. Brand-neutral sponsorship with medical food distributors may support the medical food database.

The go-to-market strategy starts with a King Chulalongkorn Memorial Hospital pilot, where nurses or dietitians onboard caregivers before discharge. The service will then expand to Bangkok hospitals, home-care networks, LINE OA, caregiver groups, Thai tutorials, and medical food distributor channels.

3. Describe how the Business Model has contributed to the company's competitive advantage

NutriTrack AI's business model supports both recurring revenue and strong clinical adoption through subscriptions, pay-per-use plans, and hospital partnerships. Its competitive advantage comes from moving beyond simple tracking to AI-powered clinical nutrition planning. Unlike general tube-feeding apps such as Tubie, NutriTrack AI provides formula-specific calorie/protein calculation, day-by-day titration based on tolerance, nutrition target comparison, caregiver preparation guidance, hospital follow-up integration, and Thai-localized workflow. This makes the app more accurate, practical, and clinically relevant for Thai caregivers and hospitals.