**Nocta Business Plan**

**1. Executive Summary**

* **Product**: Nocta is an intelligent ambient environment controller designed to optimize sleep by monitoring room parameters (light, sound, temperature, humidity) and controlling devices like AC, heating, dehumidifier, and blinds.
* **Goal**: Enhance sleep quality by adapting the environment to each phase of the sleep cycle.
* **Target Market**: Sleep-conscious individuals, tech-savvy homeowners, wellness enthusiasts.
* **Business Model**: Hardware sales with an optional subscription for sleep analytics and room data analysis.

**2. Problem Statement**

Many individuals struggle with poor sleep quality due to:

* Inconsistent room temperature, lighting, or humidity
* Noise disturbances
* Inability to align their environment with sleep phases
* Night shift

Existing smart home devices often operate in isolation and are not tailored to the sleep cycle.

**3. Solution**

Nocta provides a solution by:

* Monitoring light, sound, humidity, and temperature in real-time.
* Integrating with AC, heating, dehumidifier, and blinds to dynamically adjust conditions based on:
  + Sleep phase (via connected wearable or approximation)
  + User preferences
  + Room data and historical patterns

**4. Market Analysis**

**Target Audience**:

* Age: 20–55
* Location: Urban, tech-savvy areas
* Interests: Health, sleep optimization, smart homes

**Market Size**:

* The sleep tech market is projected to exceed $40B by 2027. // toate cele 4
* The home automation market is also expanding rapidly.

**Competitor Landscape**:

* **Smart thermostats** (e.g., Nest, Ecobee)
* **Sleep tracking devices** (e.g., Oura, Fitbit)
* **Smart home platforms** (e.g., Alexa, HomeKit)
* **Gap**: None combine real-time control with personalized sleep cycles.

**5. Product Overview**

**Hardware**:

* **Microcontroller**: ESP32
* **Sensors**: DHT11 (temp/humidity), BH1750 (light sensor), KY-015 (sound sensor)
* **Actuator control**: API integration for smart devices (AC, heat, blinds, humidifier) or smart relays for non-smart appliances

**Software**:

* **Nocta App**: Sleep phase detection (via wearable or approximation), manual setup, analytics
* **Cloud backend** for data storage and processing (optional)
* **AI model** to learn optimal conditions for each user

**Design**:

* Sleek, cozy aesthetic to match bedroom decor
* Portable or wall-mounted design

**6. Revenue Model**

* **Tier 1**: Hardware only (one-time purchase)
* **Tier 2**: Hardware + Premium App Subscription (advanced analytics, scheduling, integrations)
* **Tier 3**: B2B Licensing (smart hotels, clinics, employer wellness initiatives, private hospitals)

**Examples of Employer Wellness Programs**:

* **UiPath**: Wellness programs, flexible hours, mental health resources
* **ING Bank Romania**: Wellness days, psychological counseling, mindfulness workshops
* **Banca Transilvania**: Mental health support, webinars, work-life balance initiatives

**7. Go-To-Market Strategy**

* **Launch**: Direct-to-consumer via website & Kickstarter
* **Community building**: Collaborate with sleep and wellness influencers on platforms like Reddit, X, TikTok, Facebook, Instagram
* **Partnerships**: Integrate with wearables (Oura, Apple Watch), smart home platforms
* **Retail**: Expand to Emag, sleep tech stores, wellness clinics

**8. Team & Structure**

* **Tech Development**: Embedded systems, App Development, AI/ML
* **Design**: UI/UX, Industrial Design
* **Marketing & PR**: Community building, campaigns, social media
* **Business & Ops**: Sales, strategy, legal, finance

**9. Financial Plan**

* **Initial Funding Needs**: Hardware prototyping, app development, marketing
* **Revenue Projections (Yr 1–3)**: Unit sales, subscriptions
* **Break-even Point**: ~ 556 units
* **Scalability**: Low cost per unit with cloud-based updates

**Estimated Costs**:

* **Component Costs**:
  + ESP32: 20 RON
  + DHT22: 10 RON
  + BH1750: 5 RON
  + Sound Sensor: 5 RON
  + Motor + Blinds: 40 RON
  + PCB, Casing, Assembly: 30 RON
  + Packaging: 10 RON
  + API Licensing: 10 RON
  + **Total Hardware Cost**: 130 RON (~26€)
  + **Total Estimated Unit Cost**: ~160 RON (~32€)
* **Fixed Costs**:
  + Prototyping & R&D: 10,000 RON
  + App Development: 20,000 RON
  + Marketing Campaign: 15,000 RON
  + Business Admin/Legal/Branding: 5,000 RON
  + **Total Fixed Costs**: ~50,000 RON (~10,000€)

**Pricing Strategy**:

* **Base Unit**: 250 RON (50€)
* **Annual Subscription**: 60 RON/year (~5 RON/month)

**10. Milestones**

| **Quarter** | **Goal** |
| --- | --- |
| Q1 | Finalize MVP hardware + app |
| Q2 | Launch crowdfunding campaign |
| Q3 | First production batch + beta testing |
| Q4 | Full release, app v2, data insights feature |
| Year 2 | Integrations with smart home platforms |

**11. Market Study Insights**

* **Interest in the Product**: 90% of respondents expressed interest.
* **Investment Justification**: 88% believe it’s a justified investment.
* **Preferred Payment Model**: 75% prefer a one-time payment, while 25% favor a subscription model.
* **Willingness to Pay for Subscription**: Split evenly, indicating optional value-added services could be an appealing offer.

**Maximum Price Willing to Pay**:

* **Average**: 214 RON
* **Median**: 150 RON
* **Most Common Range**: 50–300 RON