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Pitch Deck

# PRODNOISIS 5.0

Team: Straw Hats

BITS Pilani , Pilani campus

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# About Aqua Intel

**Smart Hydration. Smarter Health.**

Aqua Intel is an AI-powered smart water bottle designed to monitor water quality, track hydration, and promote healthier drinking habits. With cutting-edge sensor technology and app integration, Aqua Intel ensures that every sip is safe, pure, and tailored to your hydration needs.

# UNDERSTANDING THE PROBLEM STATEMENT

## Problem Statement

Millions of consumers face dual challenges: uncertain water quality and ineffective hydration tracking, putting their health at risk. Existing solutions only address one aspect, leaving a critical gap in ensuring both safe and sufficient water intake.

## Why solve it now?

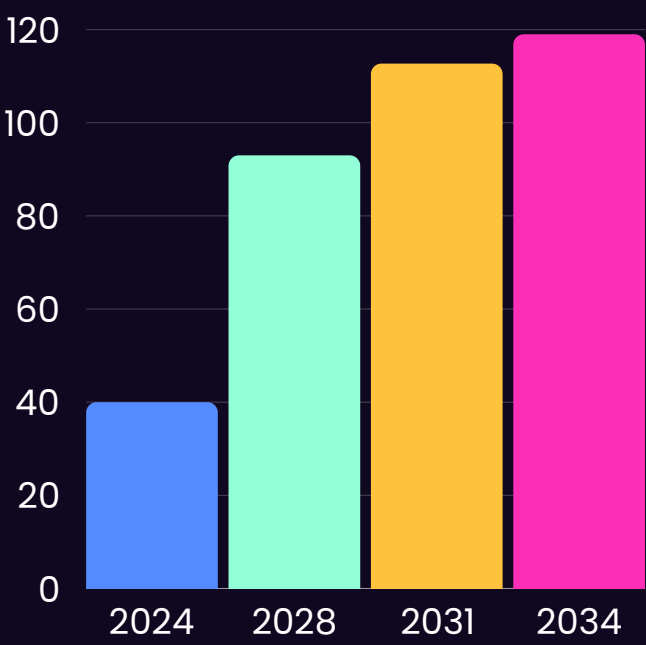
- Consumers are increasingly prioritizing wellness and proactive health management. This trend fuels the demand for smarter, integrated hydration solutions.
- IoT and sensor technologies now enable **real-time, accurate water quality and consumption monitoring**. These innovations create opportunities for comprehensive, dual-function products.
- Regulatory and environmental pressures push for sustainable, safe water practices. With a robust **market growth rate** (~11.5% CAGR), the time is ideal for integrated smart water solutions.

## Competitors



## Market Size & Forecast

Smart Water Bottle Market Size was valued at USD 40.03 Billion in 2024. The Smart Water Bottle Market industry is projected to grow from USD 44.63 Billion in 2025 to USD 118.91 Billion by 2034, exhibiting a compound annual growth rate (CAGR) of 11.5 during the forecast period (2025-2034).



## Benefits for Users?

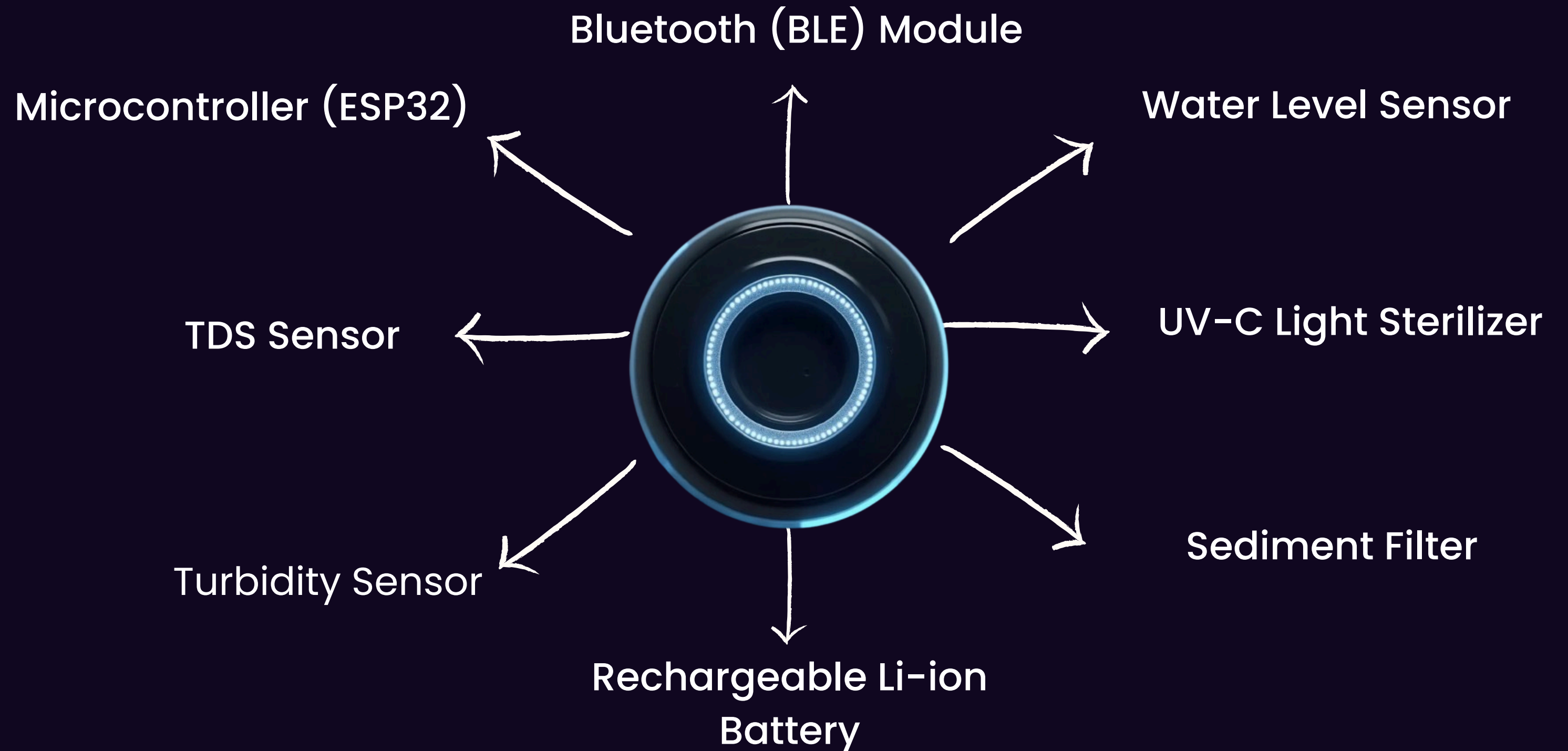
- **Accurate Hydration Tracking:** Receive real-time data on water intake with personalized reminders, ensuring you meet daily hydration goals effortlessly.
- **Reliable Water Quality Monitoring:** Instantly verify water safety and get alerts for potential contaminants, empowering you to make informed drinking decisions.
- **Integrated Health Insights:** Seamless integration with mobile apps and wearables delivers actionable insights to improve overall wellness and fitness performance.
- **Eco-Friendly & Sustainable:** Designed with BPA-free, sustainable materials, reducing reliance on single-use plastics and supporting environmentally conscious lifestyles.
- **Enhanced Convenience:** Features such as rechargeable battery ensures the bottle is reliable and ready for use in any setting.

# USER PERSONAS



|                |  |  |  |
|----------------|--|--|--|
| NAME           | Sarah – The Fitness Enthusiast   | Kendra – The Outdoor Adventurer  | Lana – The Globetrotting Parent  |
| AGE            | 27   | 35   | 49   |
| OCCUPATON      | Marketing Manager  | Adventure Guide  | Travel Blogger   |
| PROFILE        | Relies on technology to track workouts and hydration; values data-driven insights to maintain optimal performance. | Needs robust, portable hydration solutions for extended outdoor activities.      | Balances travel and family needs; highly values safety and sustainability.   |
| WHY AQUA INTEL | Advanced hydration tracking and water quality checks integrated with her wearable devices.                         | Durable design with reliable sensors that provide real-time water safety alerts. | Provides personalized hydration insights and quality alerts, ensuring her family has access to safe drinking water wherever they go. |








# Comprehensive Product Blueprint



# Aqua Intel Smart Bottle

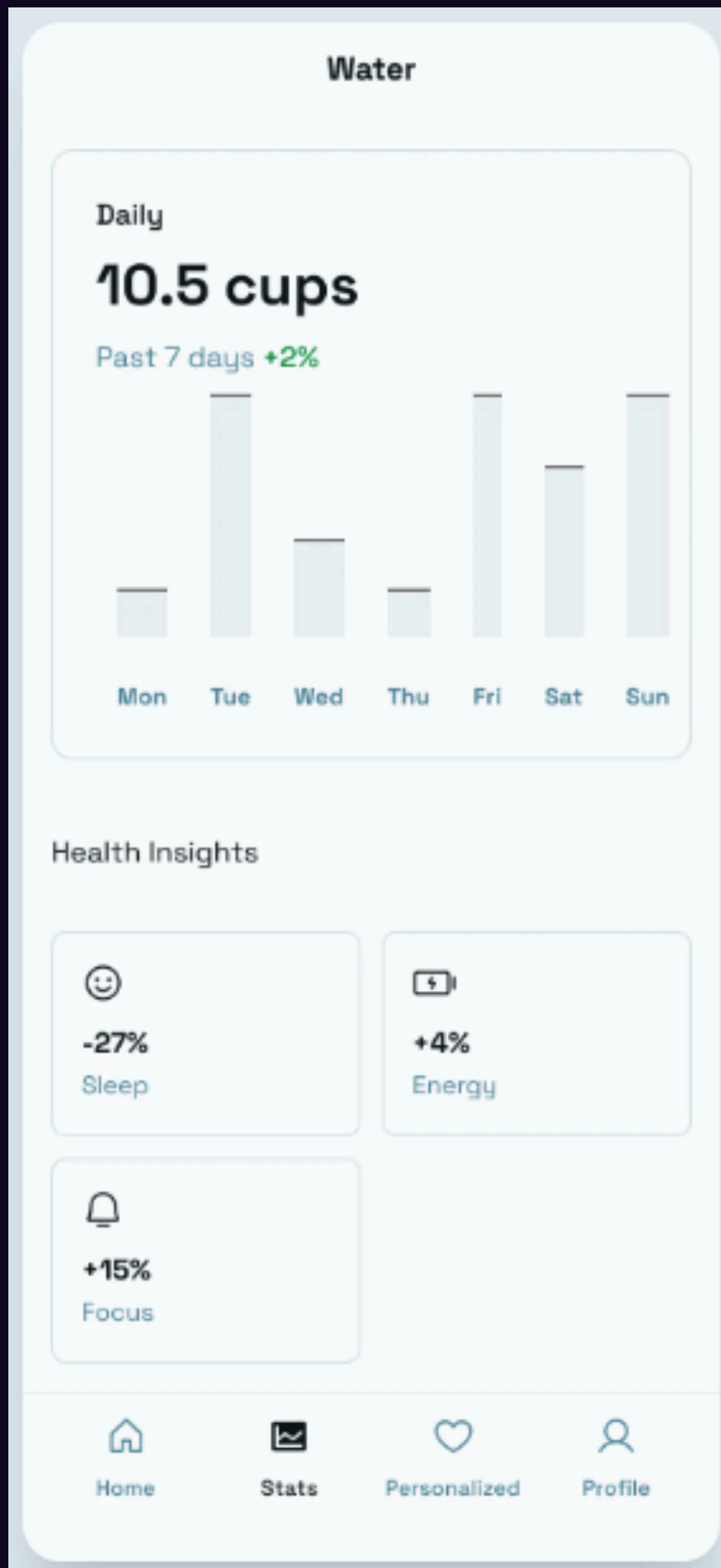
- Real-time Water Quality Monitoring
- Hydration Tracking
- Smart Hydration Alerts
- Long Battery Life
- Premium, Eco-friendly Materials
- Easy-to-Use Display
- Seamless Device Syncing
- Sleek, Portable Design



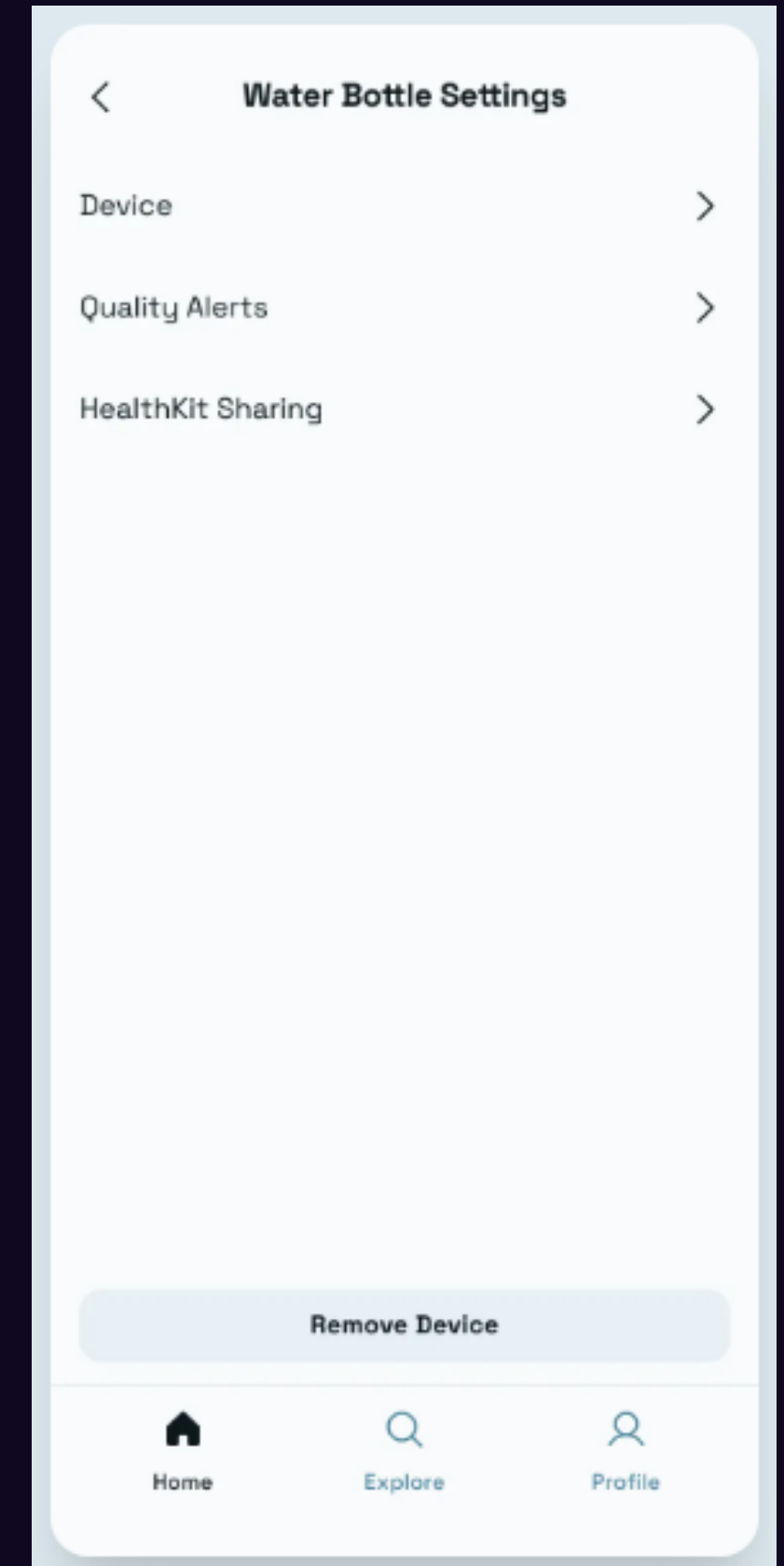
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# App User Interface



- **Real-time Water Quality Monitoring** – Color-coded water safety and hydration progress.
- **Personalized Hydration Insights** – AI-driven hydration suggestions based on activity and weather.
- **Easy Navigation & Customization** – Simple tabs and settings for a seamless user experience.
- **Wearable Sync & Data Integration** – Sync with health platforms like Fitbit and Google Fit.



# Technical Framework

## IoT Communication Protocols

Bluetooth Low Energy (BLE): Use BLE for communication between the smart bottle and the app.

## Integrating IOS/Android devices

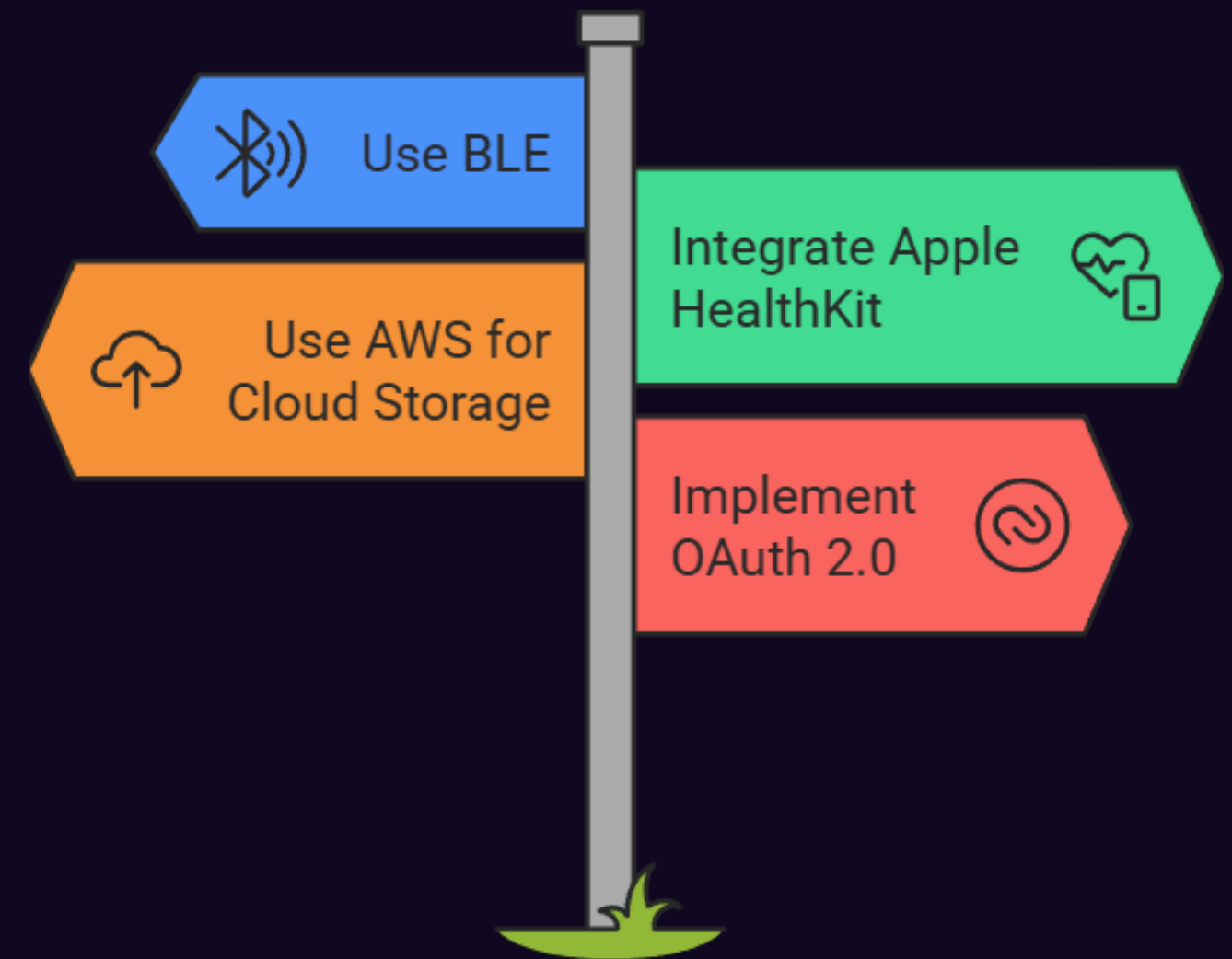
Apple HealthKit (iOS) , Google Fit API (Android) , Fitbit API

## Data Integration & Management

Cloud Storage (Backend Infrastructure) - Amazon Web Services (AWS)  
Real-time Data Sync - Firebase Realtime Database or Firestore

## Security Protocols

Authentication & Authorization - OAuth 2.0  
Data Encryption - End-to-End Encryption (E2EE)  
Secure APIs - RESTful API Security





# Technical Framework

Our approach integrates machine learning algorithms with the smart water bottle to enhance water quality monitoring and user experience. By leveraging classification and anomaly detection algorithms, the bottle's sensors analyze turbidity, TDS, and pH levels to assess water quality in real-time. These algorithms process sensor data, classify water as safe or unsafe, and provide instant feedback via the connected app.

Our app can track water intake and suggest personalized hydration goals using AI based on factors like age, weight, activity level, and climate.



Link of the model: [https://colab.research.google.com/drive/1yOE-vydsit-00Cvfc1Nd33EPyt00x\\_rE?usp=sharing](https://colab.research.google.com/drive/1yOE-vydsit-00Cvfc1Nd33EPyt00x_rE?usp=sharing)

# Target Market & Customer Segments

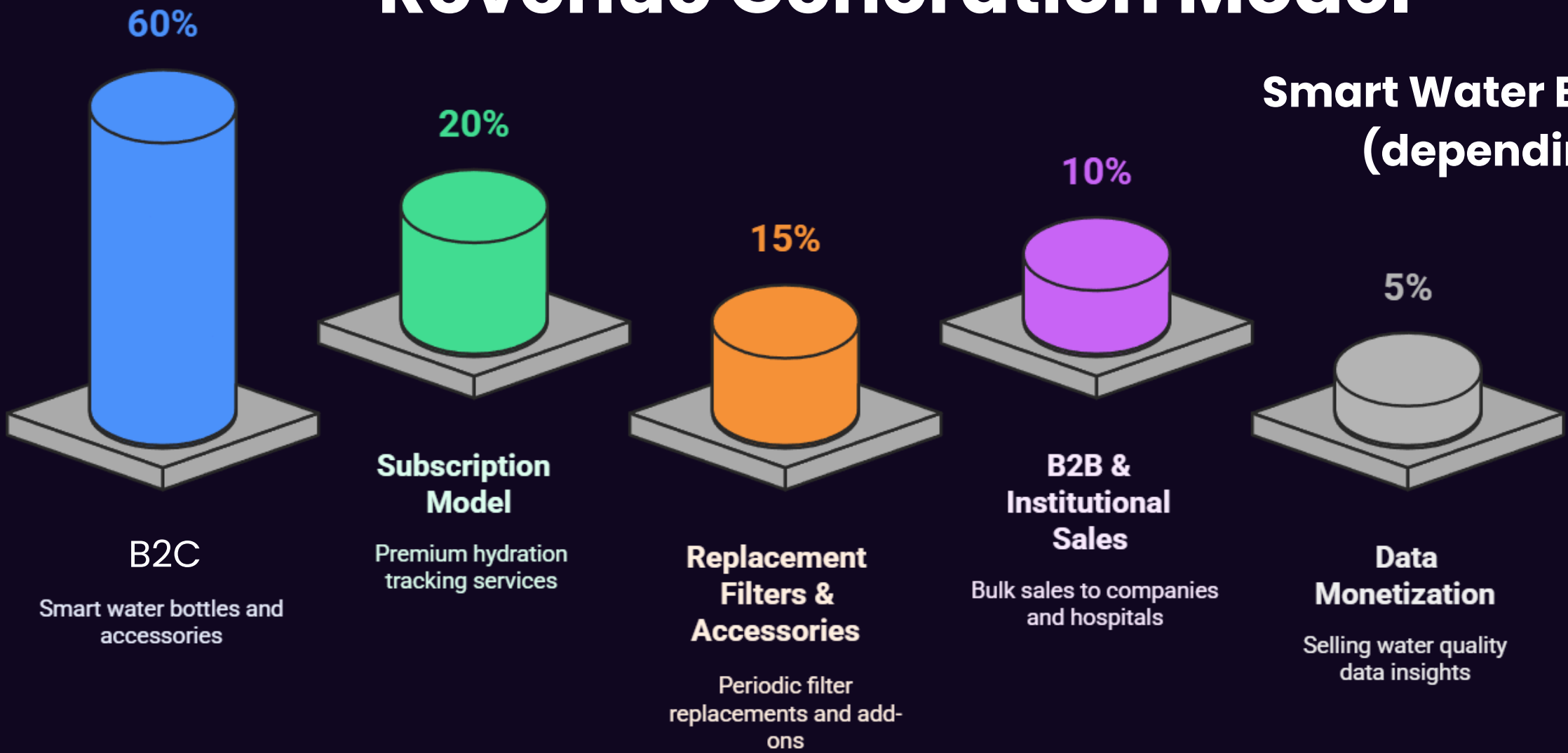
- Health-conscious individuals & fitness enthusiasts.
- Travelers & outdoor adventurers.
- Parents concerned about water quality for kids.
- Corporate wellness programs
- Eco-friendly consumers interested in sustainability and water conservation.

# Sustainability & Environmental Impact

Components of Sustainability & Environmental Impact



# Revenue Generation Model

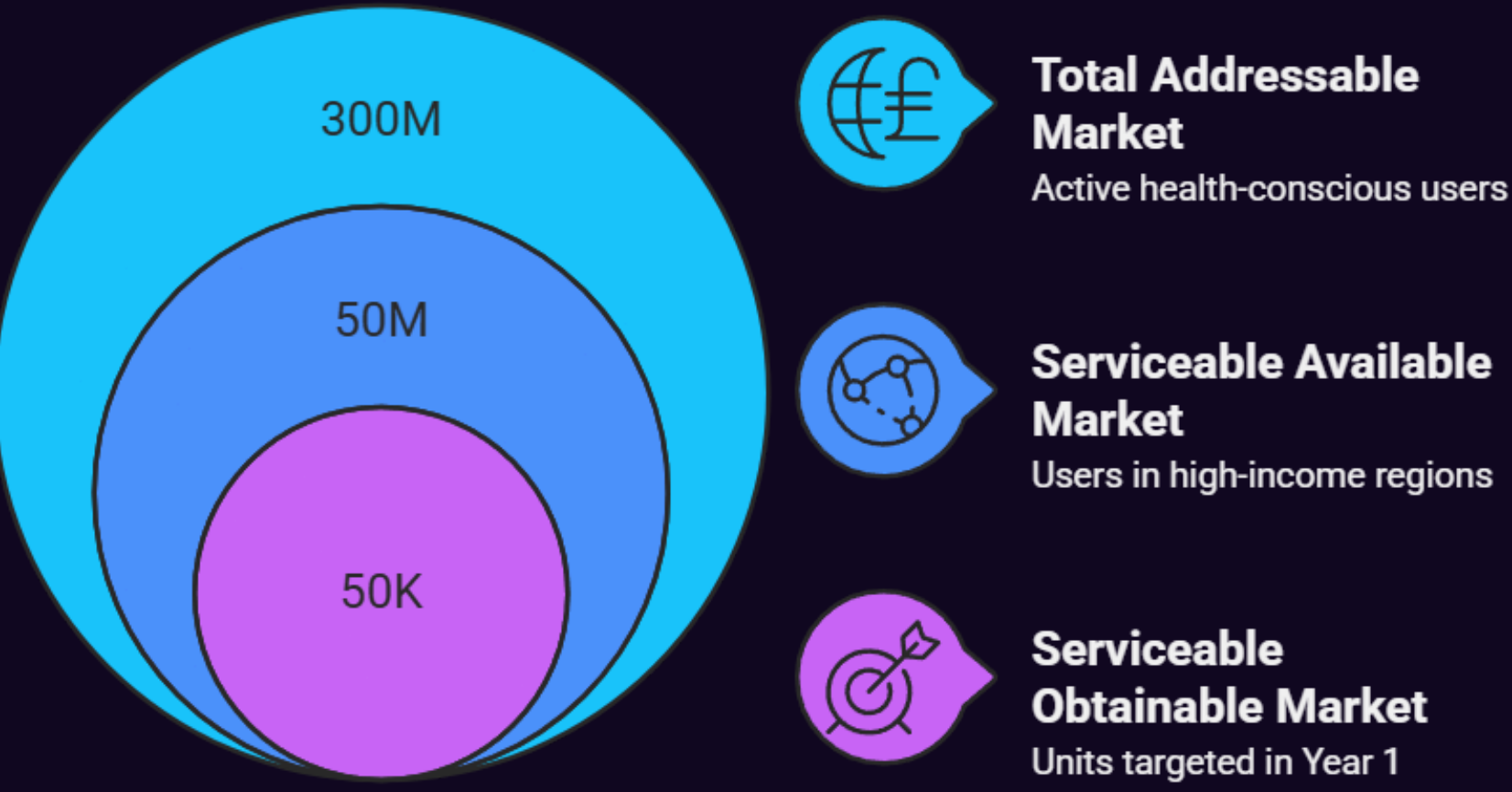


**Smart Water Bottle Price: \$60–\$70 per unit  
(depending on model & features).**

| B2C   | Subscription Model   | Replacement Filters & Accessories   | B2B & Institutional Sales             | Data Monetization |
|---|--|---|---------------------------------------|-------------------|
| Target Market                               | Target Conversion Rate:  | Filter Price: \$10 per unit, Replaced every 3 months. Customers: 30% of Consumers | Target Bulk Sales:                    | Projected Revenue |
| Penetration:<br>Year 1: 50,000 units → \$3M | 10% of buyers subscribe →<br>Year 1: 5,000 subscribers → \$250K. | Year 1: 15,000 users → \$60K.   | Year 1: 10,000 units (bulk) → \$800K. | Year 1: \$250K.   |
| Year 2: 150,000 units → \$9M.               | Year 2: 30,000 subscribers → \$1.5M.                             | Year 2: 50,000 users → \$2M.  | Year 2: 50,000 units (bulk) → \$4M.   | Year 2: \$1M.     |
| Year 3: 500,000 units → \$30M.              | Year 3: 100,000 subscribers → \$5M.                              | Year 3: 200,000 users → \$8M.   | Year 3: 100,000 units (bulk) → \$8M.  | Year 3: \$3M.     |
|   |  | Your paragraph text   |                                       |                   |

# Market Potential for Smart Water Bottles      Sales Channel Breakdown & Feasibility

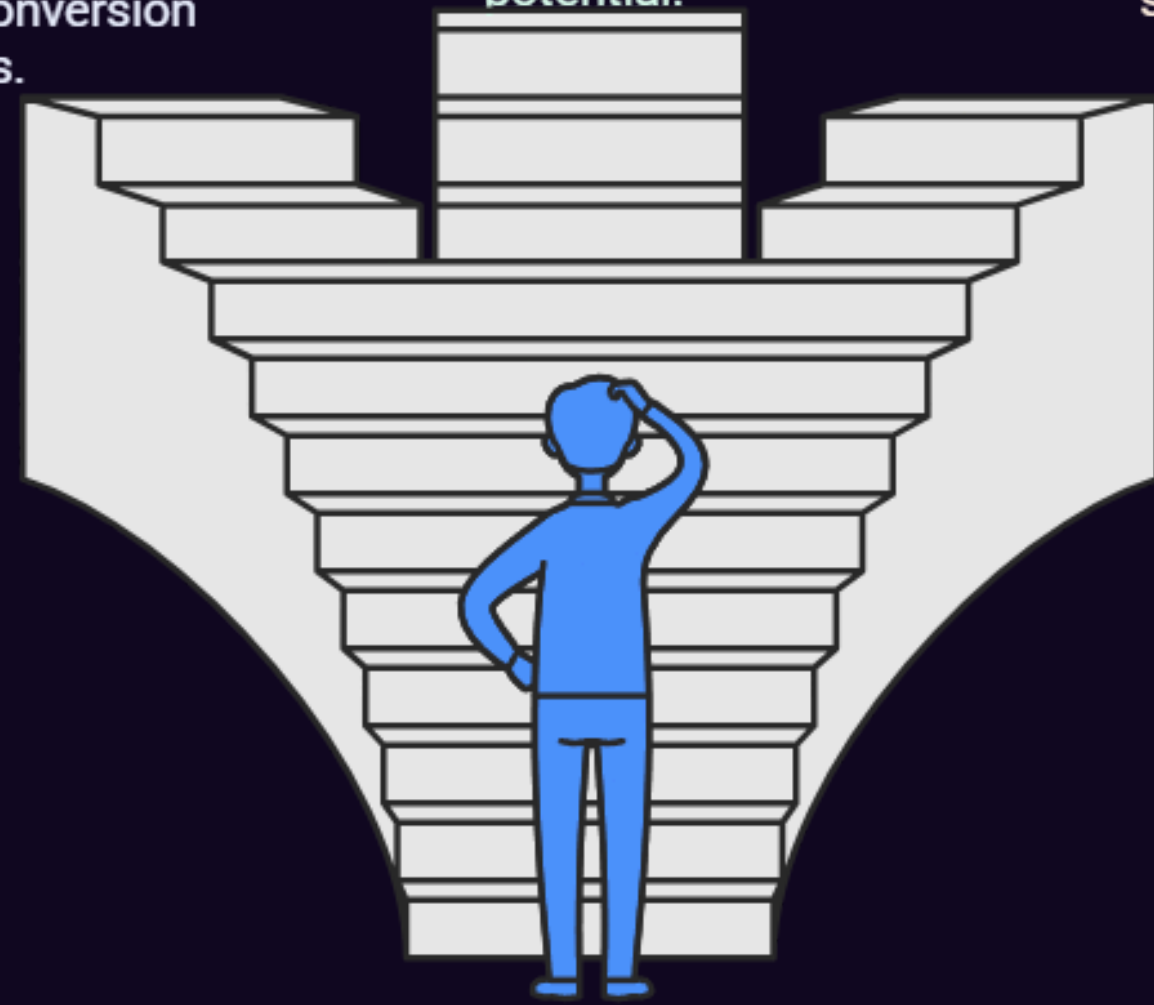
How to achieve the target of 50,000 units sold in Year 1?



**Direct-to-Consumer**  
Leverage website and platforms like Amazon and Shopify for high traffic and conversion rates.

**Retail Partnerships**  
Collaborate with major retailers to benefit from their extensive reach and quarterly sales potential.

**B2B & Bulk Sales**  
Target corporate wellness programs and institutions for bulk sales.



# Implementation Roadmap for Product Development

## Phase 1: Research & Prototyping

Market Research (\$10K)

Product Design (\$50K)

Prototype Testing (\$40K)

## Phase 4: Scaling & Expansion

Retail Expansion (\$1M)

Product Expansion (\$1M)

B2B Sales Growth (\$1M)

## Implementation Roadmap



## Phase 2: MVP Development

MVP Development (\$40K)

Pre-Launch Marketing (\$40K)

IoT Integration (\$20K)



## Phase 3: Launch & Initial Sales

Mass Production (\$300K)

Launch (\$100K)

Customer Support (\$100K)



# Thank You

Straw Hats  
Team



Siddharth Purswani



Vinimesh Yadav



Onkar Deshmukh



Ayush Goyat