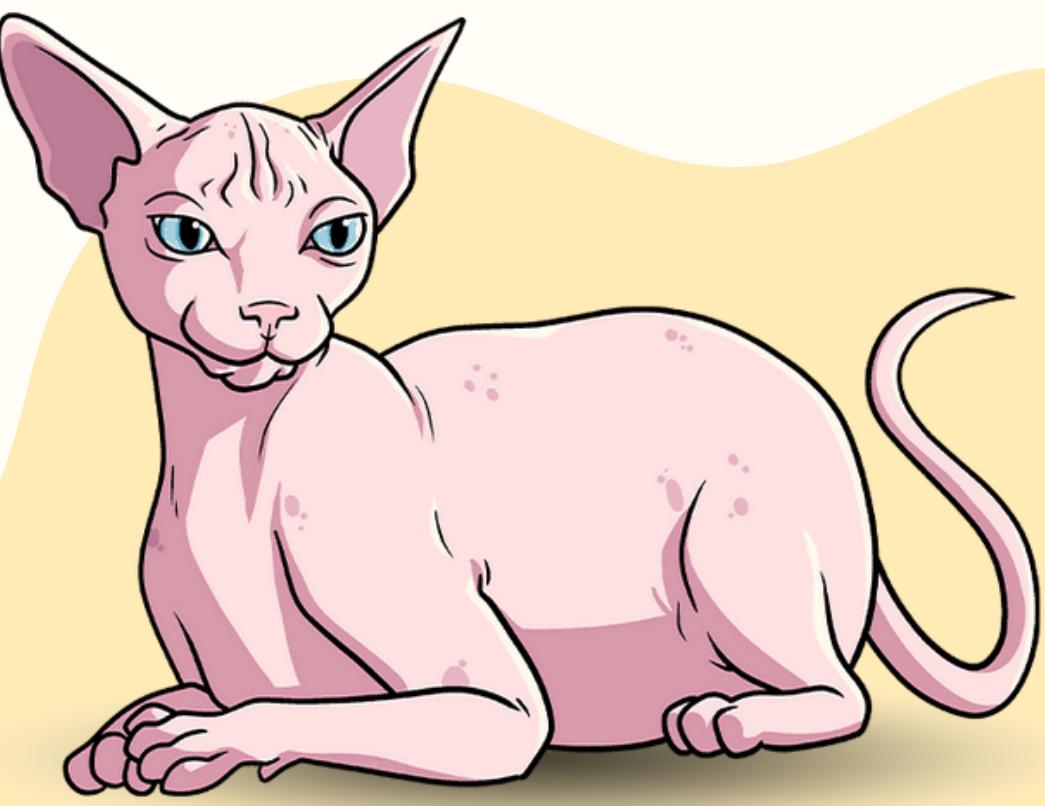




SPHYNXSENSE

A SMART STRESS DETECTION SOLUTION FOR SPHYNX CATS

Prepared by:
CatCode



INTRODUCTION



What is sphynx cat?

- Is a hairless breed with a playful personality

What is the main focus?

- Stress is a crucial element in pet health diagnosis
- Sphynx cat's lack of fur has a unique way of regulating body temperature
- Change in temperature indicates physiological changes
- Artificial Intelligence (AI) opens up new possibilities in pet health monitoring



LITERATURE REVIEW

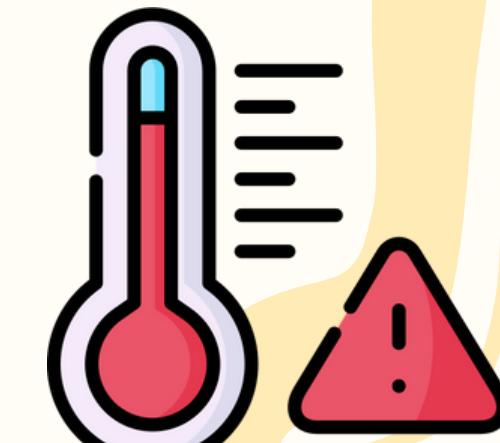


Why sphynx cats?

- Lack of fur creates bigger temperature changes (RoyalVelvets, 2025)
- No existing solutions for hairless breed

Why temperature based?

- Stress can induce temperature changes in cats (Wojtas, 2023) (Periard, 2021)
- Temperature gives an objective value to be analysed (Herbon, et al., 2018)



LITERATURE REVIEW

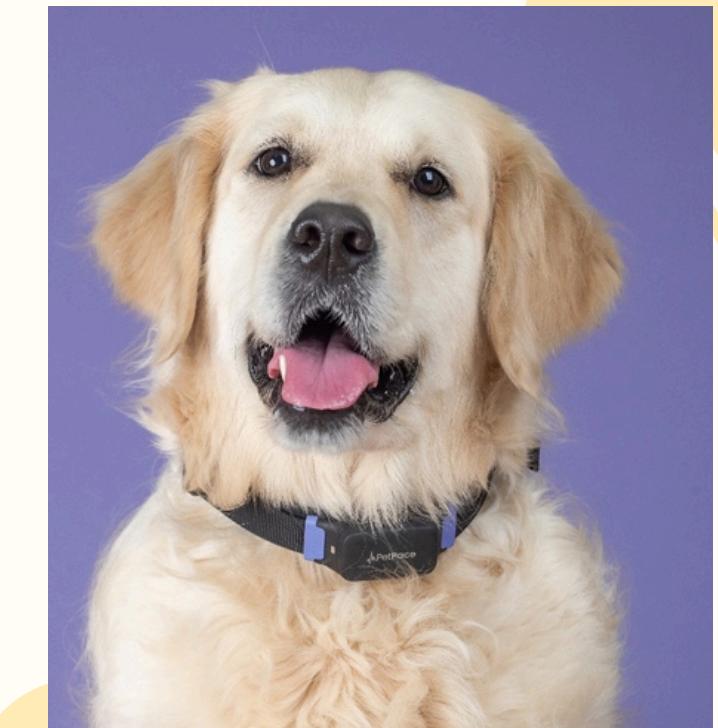


Existing solutions

- FitBark, PetPace
- Devices made to monitor health of dogs or another animals (Mingyung & Seongwon, 2021) (Koelman, 2021)
- Not made for hairless cats

Stress Indicators in Cats

- Behavioural changes (Excessive grooming, appetite loss) (CatsMe!, 2024) (Protection, 2025)
- Changes in body temperature



RESEARCH PROBLEM

- Lack of specific solutions for sphynx cats
- Stress levels cannot be detected easily through ordinary means
- No stress tracker on the market for sphynx cat breed
- No objective stress detecting methods in current market



OBJECTIVES

- To develop SphynxSense, an AI-driven app that detects Sphynx cat stress levels using an intelligent collar device.
- To design an intuitive and user-friendly UI for SphynxSense, ensuring ease of interpretation.
- To integrate AI algorithms into the collar sensor system, enabling real-time stress detection.
- To evaluate the effectiveness of the AI-based system using a quantitative data approach.





MARKET ANALYSIS

Porter Five Forces

Threat of New Entrants: MODERATE

- Tech barriers and niche focus offer some protection.
- But easier entry for brands already in pet wearables.



Bargaining Power of Suppliers: MODERATE

- If using specialized sensors or imported components, suppliers could hold more power.
- Can be balanced by sourcing from multiple vendors.



MARKET ANALYSIS

Porter Five Forces

Bargaining Power of Buyers: HIGH

- Sphynx cat owners are limited in number and can compare products online.
- Need strong value proposition and brand trust to maintain customer loyalty.

Threat of Substitutes: HIGH

- General pet health wearables or manual stress tracking methods exist.
- Product must prove unique value to stand out.



MARKET ANALYSIS

Porter Five Forces

Competitive Rivalry: MODERATE to HIGH

- Growing number of pet tech startups.
- General detection, a potential advantage if first to market.



MARKET ANALYSIS

PESTLE

Political

- Stable pet regulations in many countries support pet tech innovation.
- Import/export duties or tariffs may affect manufacturing costs.



Economic

- Growing pet care industry, expected to reach billions globally.
- Sphynx cat owners are more likely to invest in specialized tech (Niche).
- Inflation may affect pricing and consumer willingness to spend.



MARKET ANALYSIS

PESTLE

Social

- Increased awareness about animal welfare and pet mental health.
- Leading to higher demand for pet wellness products.
- Smaller target market due to the exclusivity of Sphynx cat ownership.



Technological

- Growth of wearable pet tech and AI integration in health monitoring.
- Mobile app integration provides real-time updates and user convenience.
- Data privacy and cybersecurity concerns for IoT devices.



MARKET ANALYSIS

PESTLE

Legal

- Need to comply with animal welfare laws and electronic product safety standards.
- Data protection regulations for user information stored in the app.



Environmental

- Eco-conscious consumers may prefer sustainable, recyclable materials.
- Low-energy components and biodegradable packaging can improve brand image.

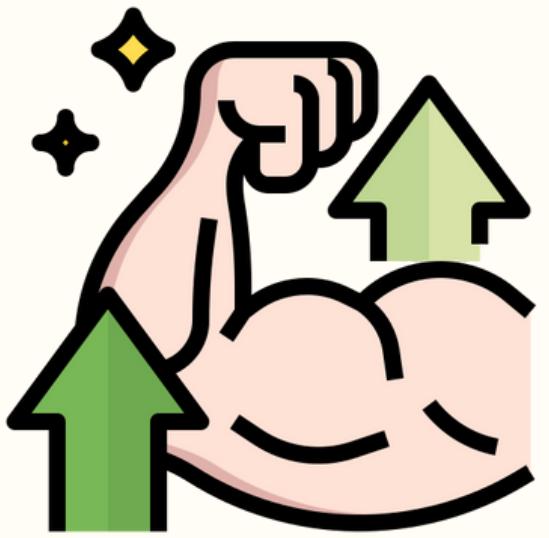


MARKET ANALYSIS

SWOT

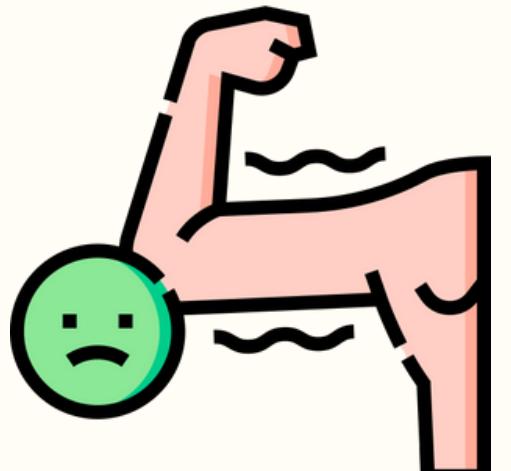
Strengths

- Affordable pricing without compromising essential quality.
- Combines wearable tech with AI-driven insights.
- App enhances user engagement and experience.



Weaknesses

- Small niche market, limited to Sphynx cat owners.
- High initial production cost.
- Requires consistent tech support and software updates.

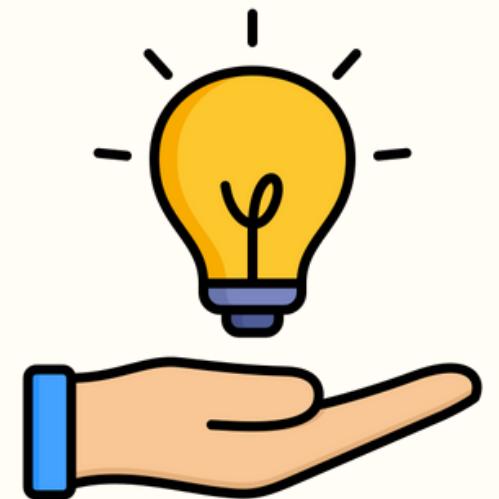


MARKET ANALYSIS

SWOT

Opportunities

- Potential to expand to other cat breeds or pets.
- Partnership with vets, pet stores, or online platforms.
- Increasing pet ownership rates and tech-savvy pet parents.

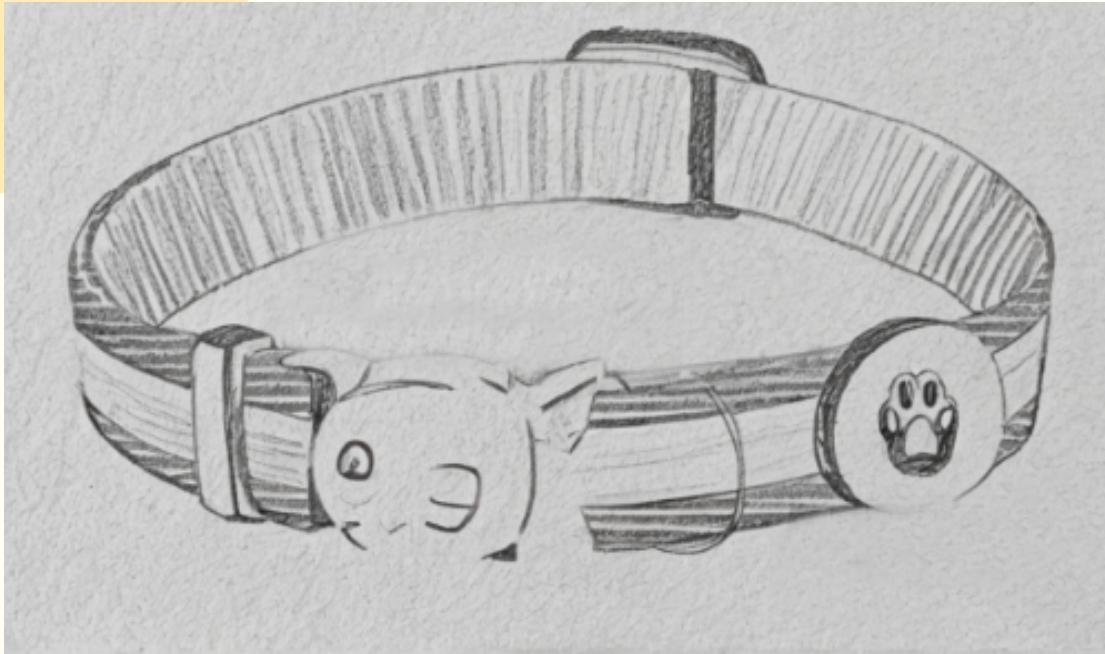


Threats

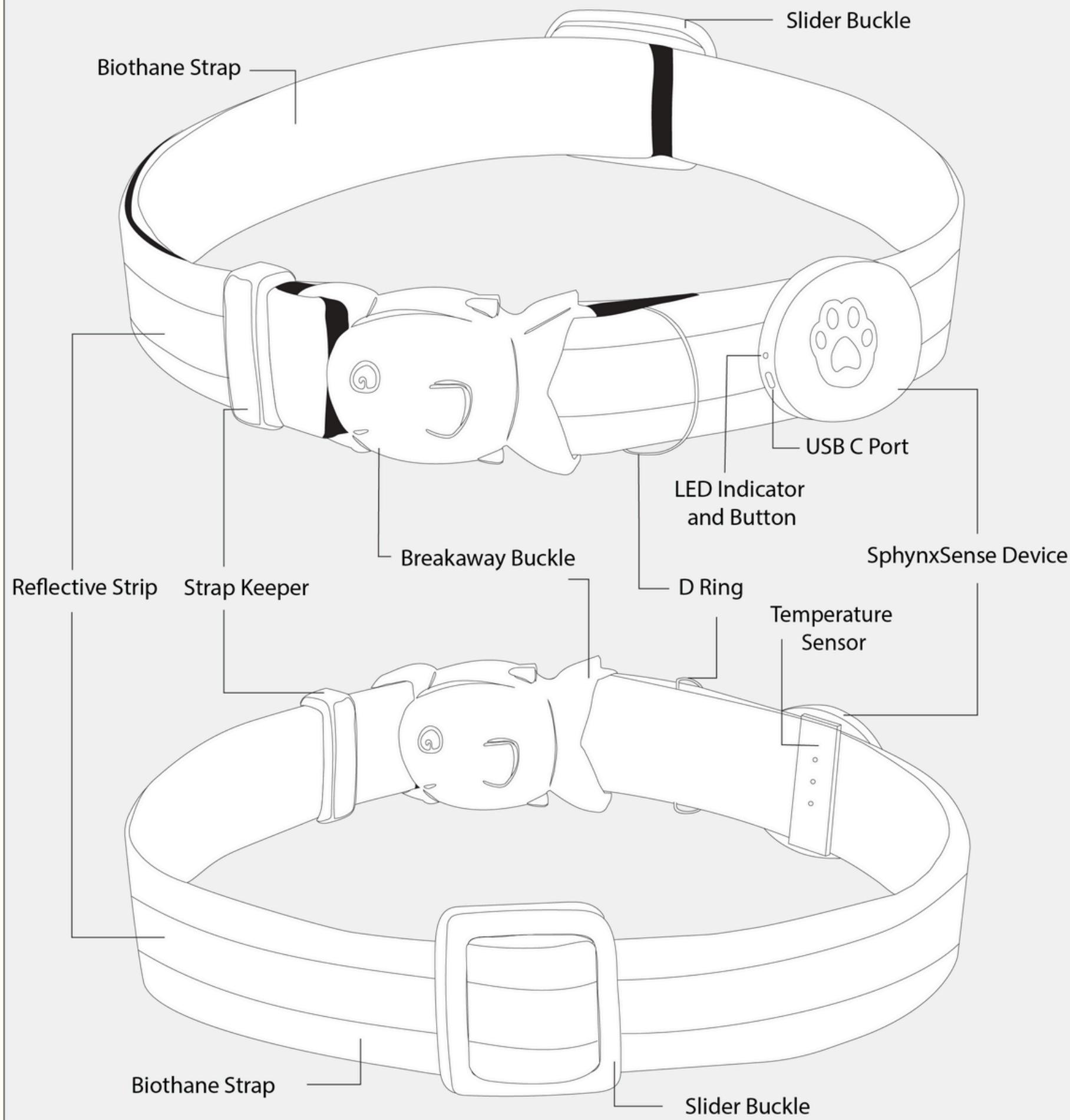
- Competition from broader pet monitoring devices.
- Technological failures or inaccuracies could damage brand trust.
- Price-sensitive market segment may prefer cheaper alternatives.



PROPOSED SOLUTION PART 1



Smart Collar



TECHNICAL OVERVIEW

Non-Invasive Monitoring



Thermistor Temperature Sensor Module



Built-in Algorithm



Low Latency



Increased Battery Lifespan

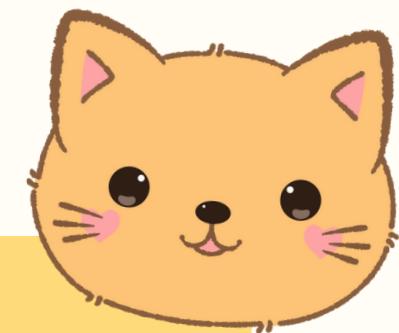
Wireless Connection



Long Range



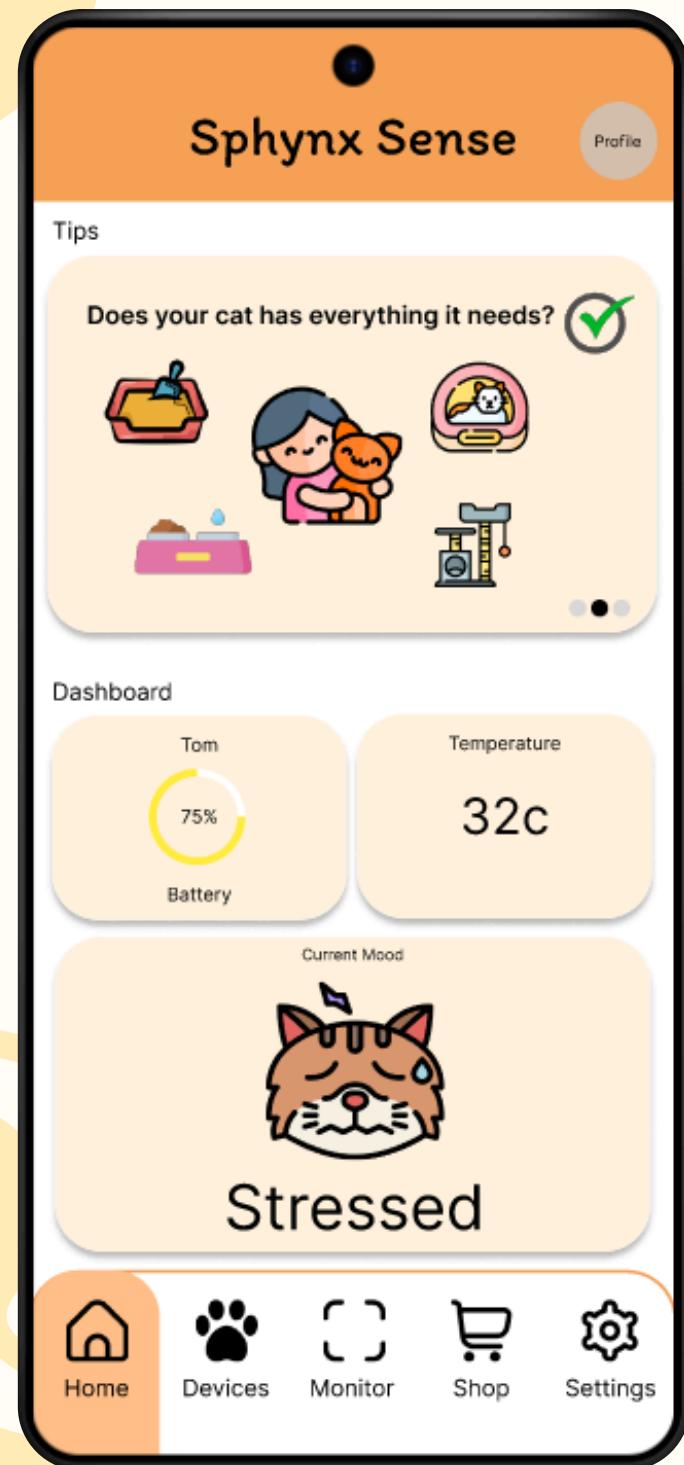
Faster Response



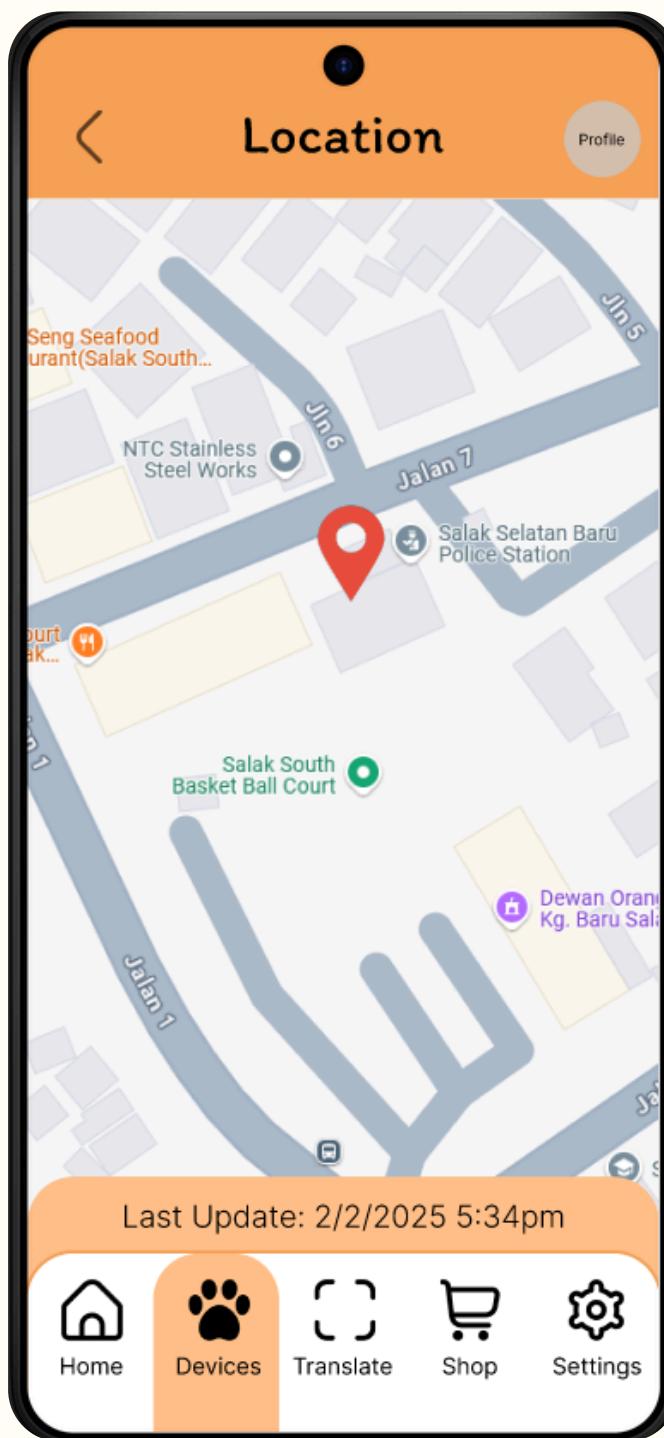
Features preview will be shown in the prototype demo

FEATURE OF SYPHYNXSENSE

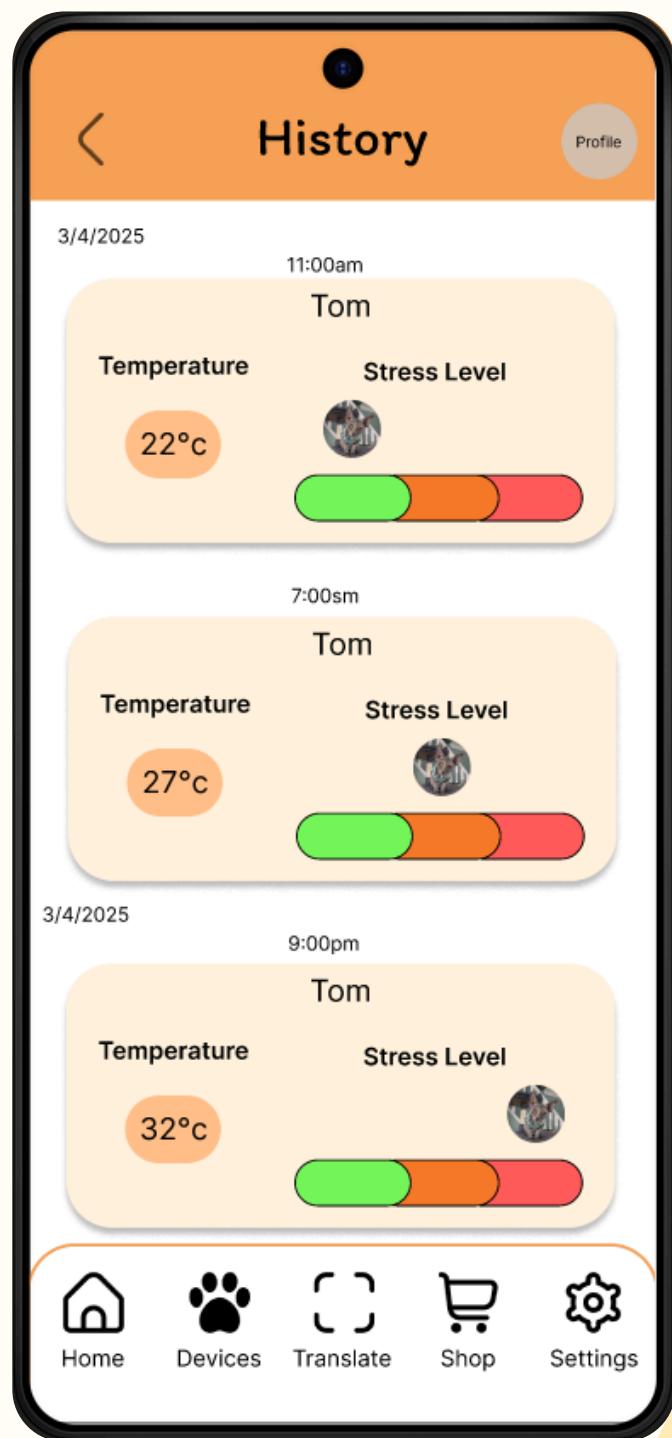
Stress Monitoring



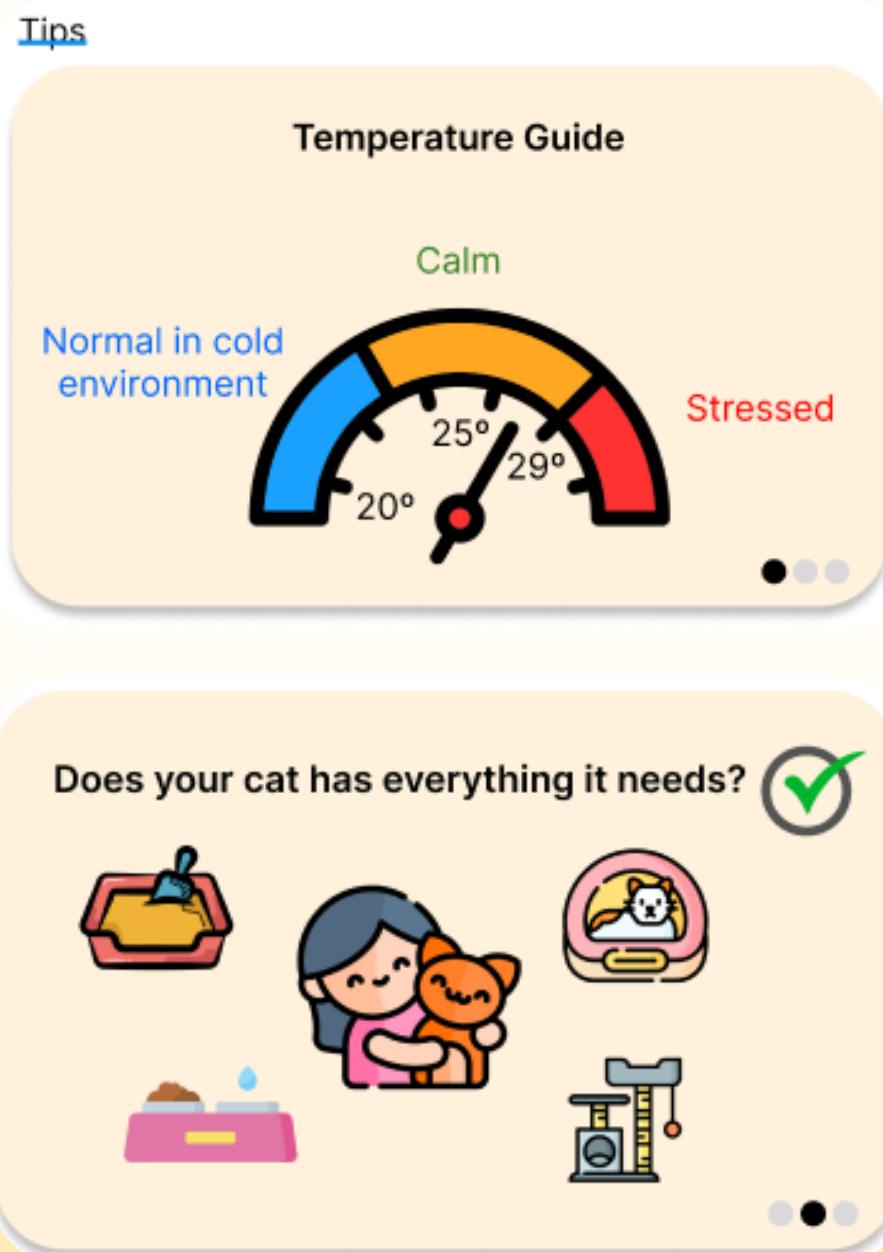
Location Tracking



Temperature History



Caring Tips





VIDEO DEMO



PROTOTYPE DEMO

The prototype of SphynxSense will
now be shown live on the screen.
Sit tight and enjoy the ride.

THANK
YOU!





Q & A

SESSION

