

AeroStem



**Know what's happening to your
plant, anywhere, anytime.**

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2

AeroStem



Made By:

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Table of Contents

I. Overview

Company Model and Product
(Slide 4)

II. Problem

What does the plant market need?
(Slides 5 – 7)

III. Customer Segment

Who will AeroStem target?
(Slides 8 & 9)

IV. Unique Value Proposition

What makes AeroStem better than the rest?
(Slides 10 & 11)

V. Solution

How does AeroStem solve these problems that the market has?
(Slides 12 – 14)

VI. Conclusion

Feasibility of the business and our ask to investors
(Slides 15 – 18)

VII. Bibliography

(Slide 19)

VIII. Appendix

(Slide 20)

I. Overview

AeroStem – a smart pen equipped with sensors that tells the user, through a companion app, vital information about their plant and helps them take care of it.

From manufacturing to the consumer:

1.

Product produced in China. Cheaper labor costs and technology is readily available for production.

2.

AeroStem can be found in home improvement and general retail stores.

3.

Companion App can be downloaded and synced to AeroStem via Bluetooth.

- **Private Distributor Model**
- Partner with a few retailers
- Partner with one manufacturer

II. Problems with houseplants/potted plants for consumers

54%

of plants are underwatered

34%

of plants receive incorrect
levels of sunlight

50%

of plants die within 5 days

Consumers lack necessary knowledge to take care of their plant. **Online advice** can be **overly generic** and **isn't tailored to their exact situation.**

Problems (Existing Solutions)

What's Missing?

1. **Real collected data**
2. **Tailored Advice**

App Competitors

Planta	 Blossom
*Care Reminders	Care Reminders
*Plant Identification	Water Calculator (Requires pot size measurement)
*Plant Care Info	Plant Care Info
AI Advice	AI Identifier/Advice
Personal Plant Gallery	Personal Plant Gallery
Subscription (\$35.99/yearly)	Subscription (\$35.99/yearly) or (\$7.99/monthly)

Locked behind subscription

Problems (Existing Solutions)

What's Missing?

1. Cheaper costs
2. Light Measurement (Only Soil is ever shown!)
3. A product that adjusts to the plant species

Products

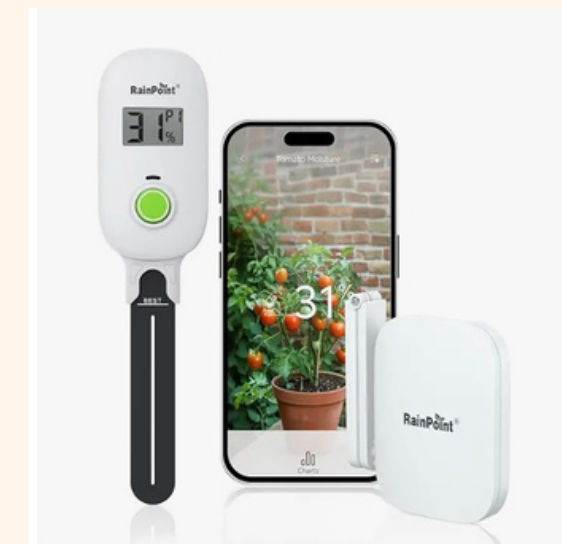
Water Systems



Spider Farmer 4-Pack Gravity-Fed Silent Self-Waterin...

\$101.99

RainPoint[®]
More Than Water Saving



Sponsored ⓘ

RAINPOINT

Smart Digital Wireless Plant Moisture Meter Houseplants Indoor WiFi Hub Kit with Low/High Moisture Alert, Real-time Monitor...

3.9 ★★★★★ (138)

100+ bought in past month

\$39⁹⁹

III. Customer Segment

	Millenials	Gen Z
Behavior	Tend to care more	Low-Maintenance
Locations	Urban/Suburb	Urban Areas

“People aged 18–34 are the largest demographic of new gardeners”
–Gitnux.org

“7 in 10 millennials call themselves a plant parent”
–Arma and Elma

Our customer segment will focus on **Gen Z and Millennials** in the **Urban/Suburban Area**. The distribution will target **Philadelphia and the Greater Philadelphia area**.

Customer Segment

“66% of Americans own a houseplant”

-Amra and Elma

640,000 Gen Z in Philadelphia/Greater Philadelphia

-HAPCO

528,000 Millenials in Philadelphia/Greater Philadelphia

-Economy League

Millennials Are Dominant in Philadelphia

The number of millennials in Philadelphia has increased steadily since 2005 as the baby boomer and Gen X populations declined.

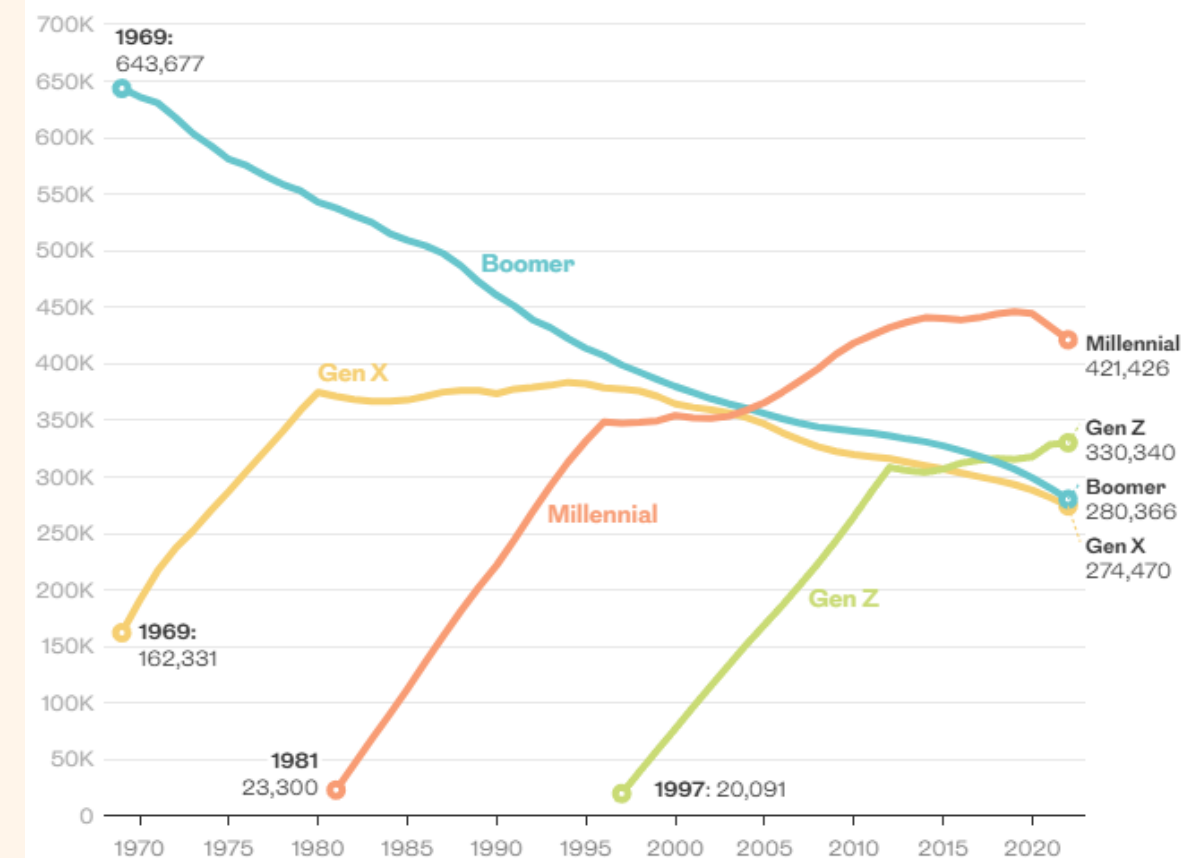


Chart: Lizzie Mulvey • Source: National Institutes of Health (NIH)

780,000+ are viable customers for AeroStem. We plan to utilize the **growing plant aesthetic trends** on social media to **promote both AeroStem and urban houseplants.**

IV. Unique Value Proposition

(Current Market Needs)

“The **houseplant markets** presents **numerous opportunities** for **growth** particularly in... **plant care education**”

“There is a **growing need** for **plant care products**, such as specialized fertilizers, pots, and watering systems. For example, companies can capitalize on this by **developing innovative solutions** that **address common plant care challenges**.”

Unique Value Proposition

 AeroStem offers everything, but with **Real Results**:

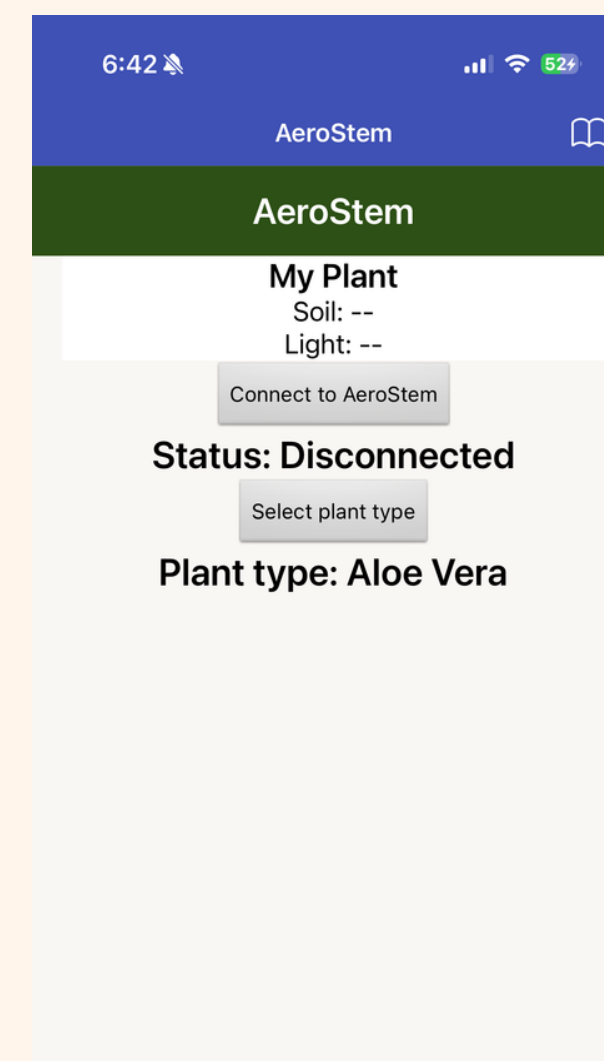
1. Care Reminders
2. Plant Care Info
3. **Real collected data**
4. **Tailored Advice**
5. **One Time Purchase(\$30)**

Cheaper and **provides more data** than other plant products!

AeroStem(\$30)



App(Free!)



V. Solution

(AeroStem)



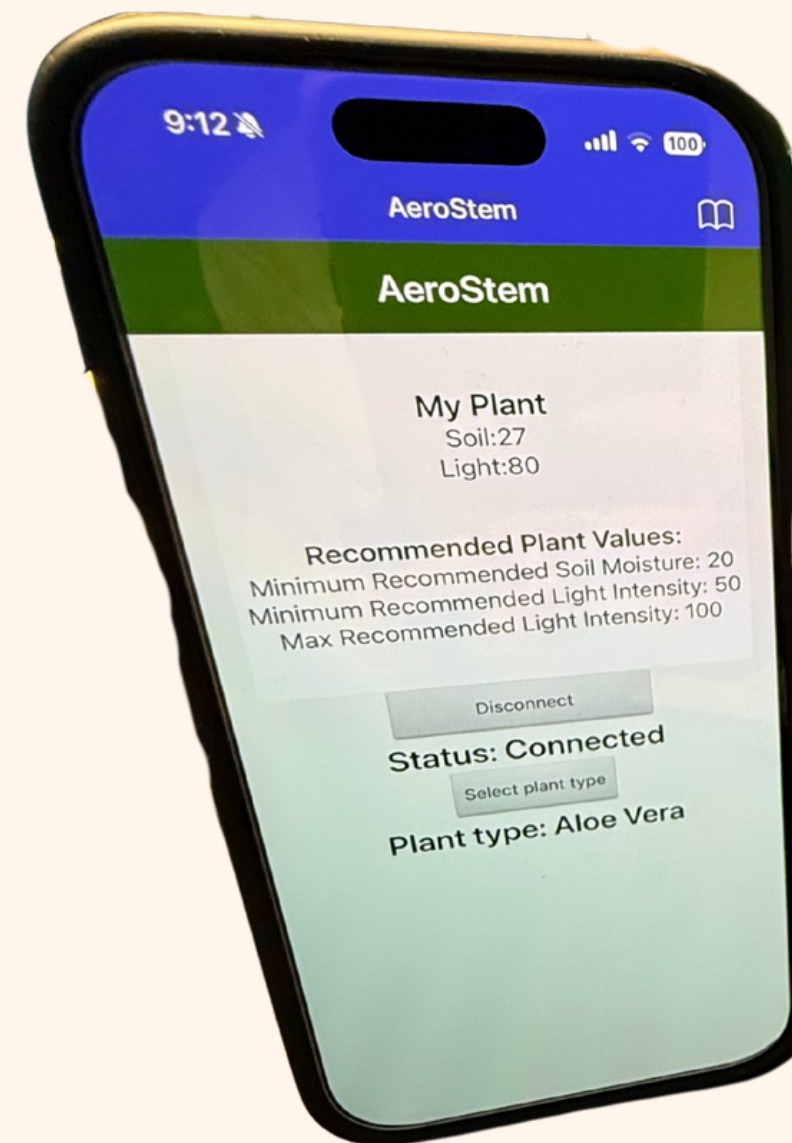
AeroStem monitors soil moisture and light intensity, displayed on the AeroStem companion app. The app factors in data and selected plant specie, which sends notifications based on those factors. AeroStem gives the user specific information on what their plant needs, not generic advice.

Solution(Setup)

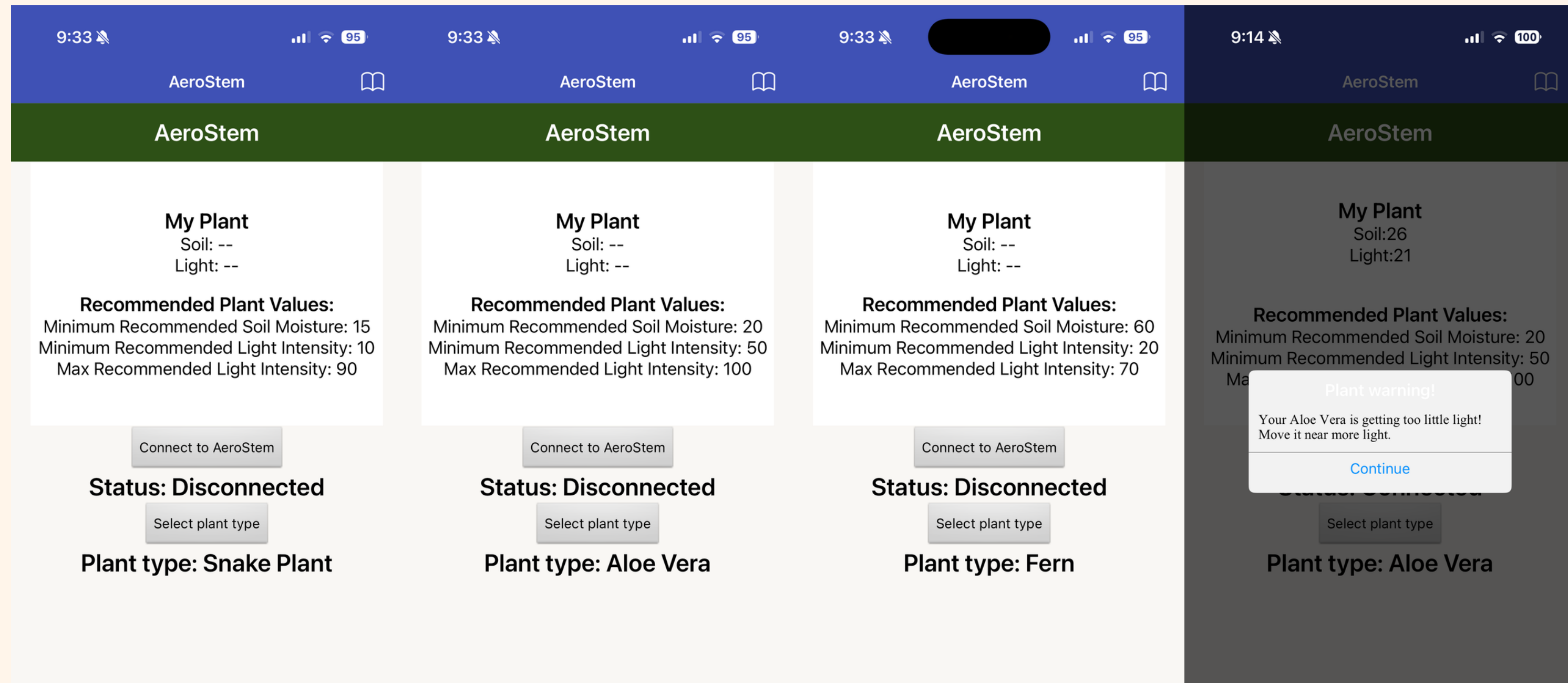
1. Insert AeroStem
2. Select Plant Type
3. Link to Companion App

Done!

Contact us for a video on how
AeroStem works!



Solution(App)



Here's AeroStem **adjusting to different plant species**, and displaying a **notification that the plant needs help!**

VI. Conclusion(Business Valuation)

“66% of Americans own a houseplant”

-Amra and Elma

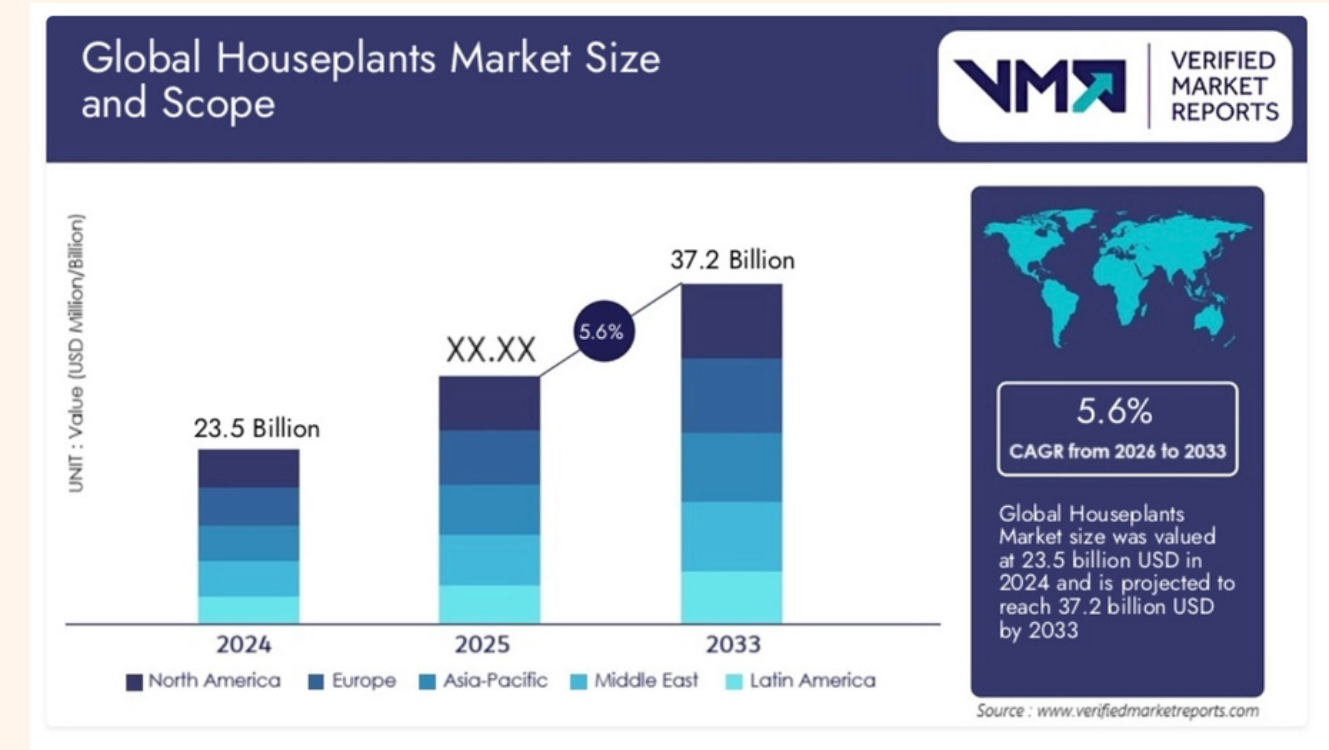
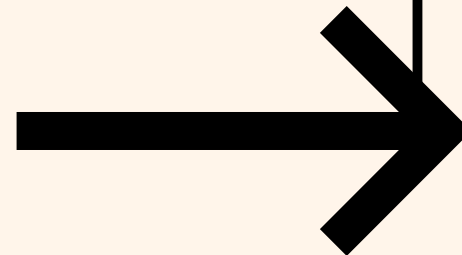
640,000 Gen Z in Philadelphia/Greater Philadelphia

-HAPCO

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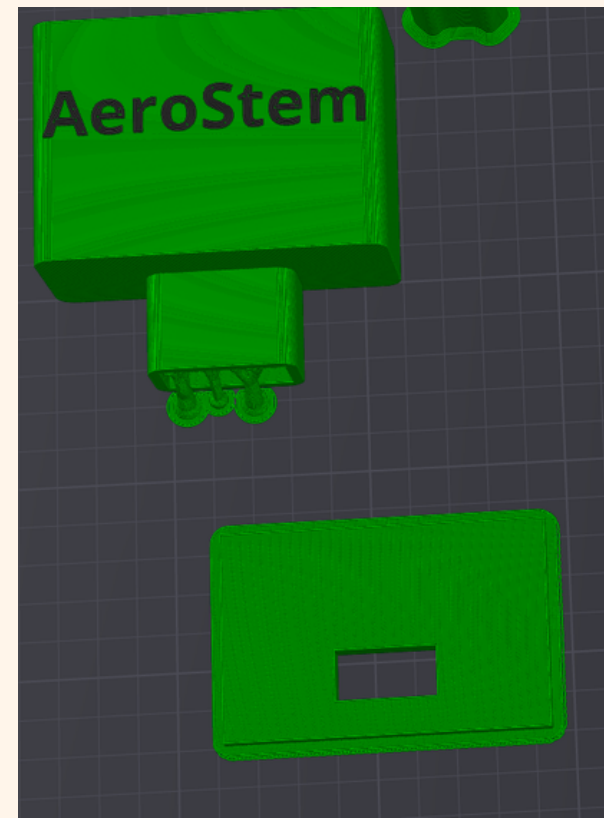
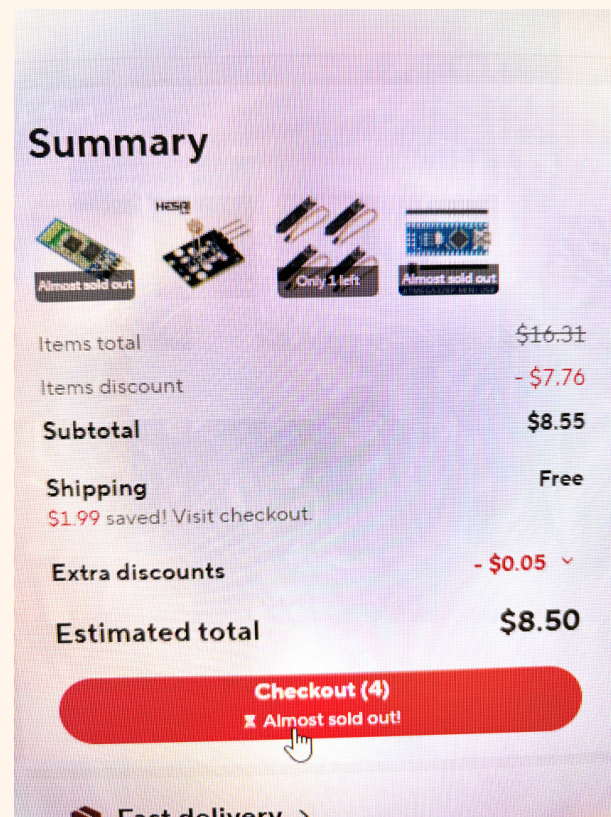
$$(640000+528000)*0.66*0.05*30 =$$



\$1.15M+

With the **rising plant market**, AeroStem could be valued at **\$1.15M+** in the **Philadelphia/Greater Philadelphia area alone** with **only 5% of consumers** buying the product.

Conclusion (Manufacturing and Price)



With a production cost of **\$10.5** and a retail price of **\$30**, that's a profit margin of **65%**

Electrical Components

Costs only **\$8.5** after being ordered on Ali Express straight from China, right from the source.

3D Printed Case

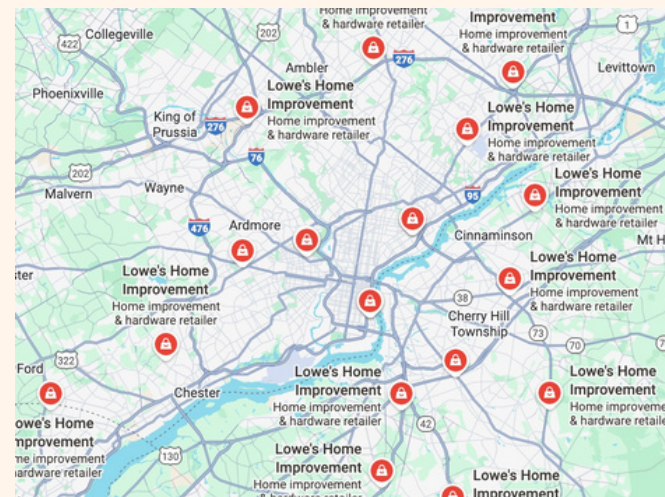
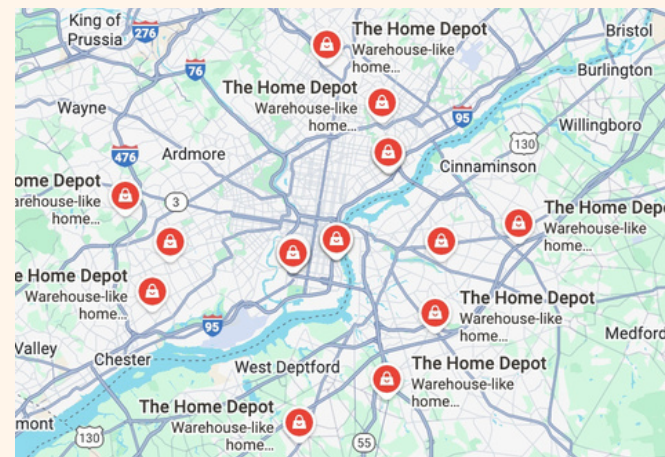
The AeroStem exterior was 3D Printed on a Bambu A1. Costs about **\$2** for filament material.

Next Steps for Manufacturing

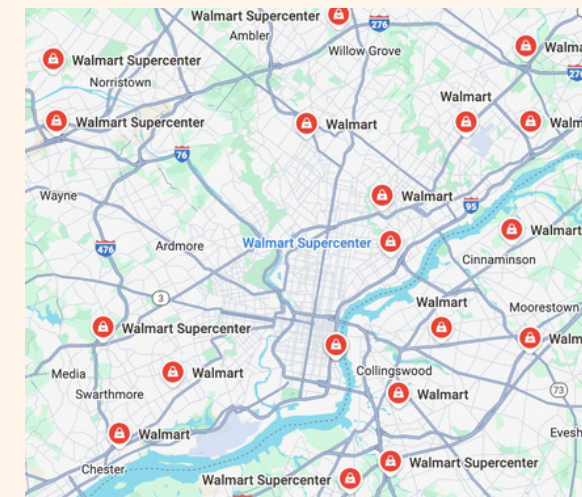
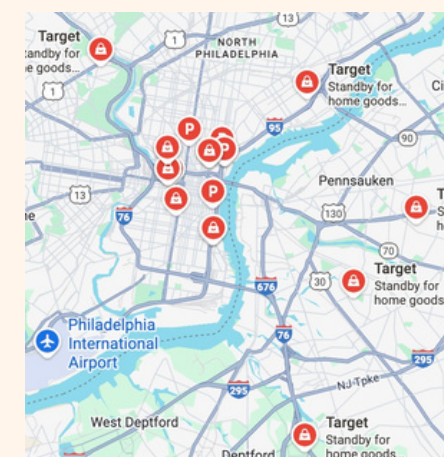
Moving away from 3D Printing and **towards plastic molding** would be ideal. 3D printers **take more time** and **cost a lot**.

Conclusion(Distribution)

Home Improvement



General Retail



AeroStem will be available in **these stores only**, as to **cover a large area while cutting down on distribution costs.**

Conclusion(Ask)

We are asking for:

\$115k for 10% equity

To **expand production** and **establish distribution channels**.

Contact Us



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New Idea

That solves the issues seen in the plant market

\$1.15M+

Business valuation from projected revenue

65% Profit

High return on investment for each unit sold!

VII. Bibliography

PLANT MARKET RESEARCH

Verified Market Reports

<https://www.verifiedmarketreports.com/product/houseplants-market/>

Houseplant Statistics

<https://gitnux.org/houseplant-statistics/>

Arma and Elma

<https://www.amraandelma.com/plant-marketing-statistics/>

HAPCO Philadelphia

<https://hapcophiladelphia.com/free-content/philly-has-more-millennials-gen-z-ers-living-at-home-than-national-average/>

Economy League

<https://www.economyleague.org/resources/philadelphias-millennial-population>

PLANT RESEARCH

Live to Plant

<https://livetoplant.com/how-to-properly-fix-unwatering-issues-in-potted-plants/>

The Spruce

<https://www.thespruce.com/whats-wrong-with-my-plant-8416048>

Gardening Etc.

<https://www.gardeningetc.com/news/beginner-gardener-plant-death-rate>

Gardening Mentor

<https://gardeningmentor.com/why-arent-my-potted-plants-growing/>

Greg-Plant identifier and App

<https://greg.app/post/1dazj8/the-study-also-revealed-that-over-50-of-houseplant-owners-have-killed-an-average-of-5>