



# Appendix

- **Interview process and high-level insights**
- Business Model Canvas
- Ecosystem Map
- Competitive Analysis & Market Size
- 5-year roadmap
- Income statement
- Unit Economics and Break Even Analysis
- Next steps
- Other



# Initial Interview Insights

50 Interviews conducted



Healthcare professions use hand sanitizers more than sinks and soap

Retail firms would struggle with adopting hygiene-promoting initiatives after COVID-19

Our focus should be on office spaces

Office buildings seem to have no issue with \$100-120 price range

Knowing that hygiene practices would be tracked, privacy issues should be addressed



# Initial Interview Insights

50 Interviews conducted

- Brainstormed likely target markets with team to begin interviews
- Healthcare professions use alcohol-based hand sanitizers more than abrasive washing
- Retail companies would struggle both with internal as well as customer pressure to actively adopt hygiene promoting initiatives after COVID-19.
- Decided to focus on the office spaces, based feedback from professionals in healthcare, retail, and other areas
- Consider how they can enable social distancing through this device
- Office buildings seem to have no issue with 100-120 price range
- Knowing that hygiene practices would be actively encouraged, tracked and managed, addressing privacy issues may help ease customers' minds and reduce anxiety.

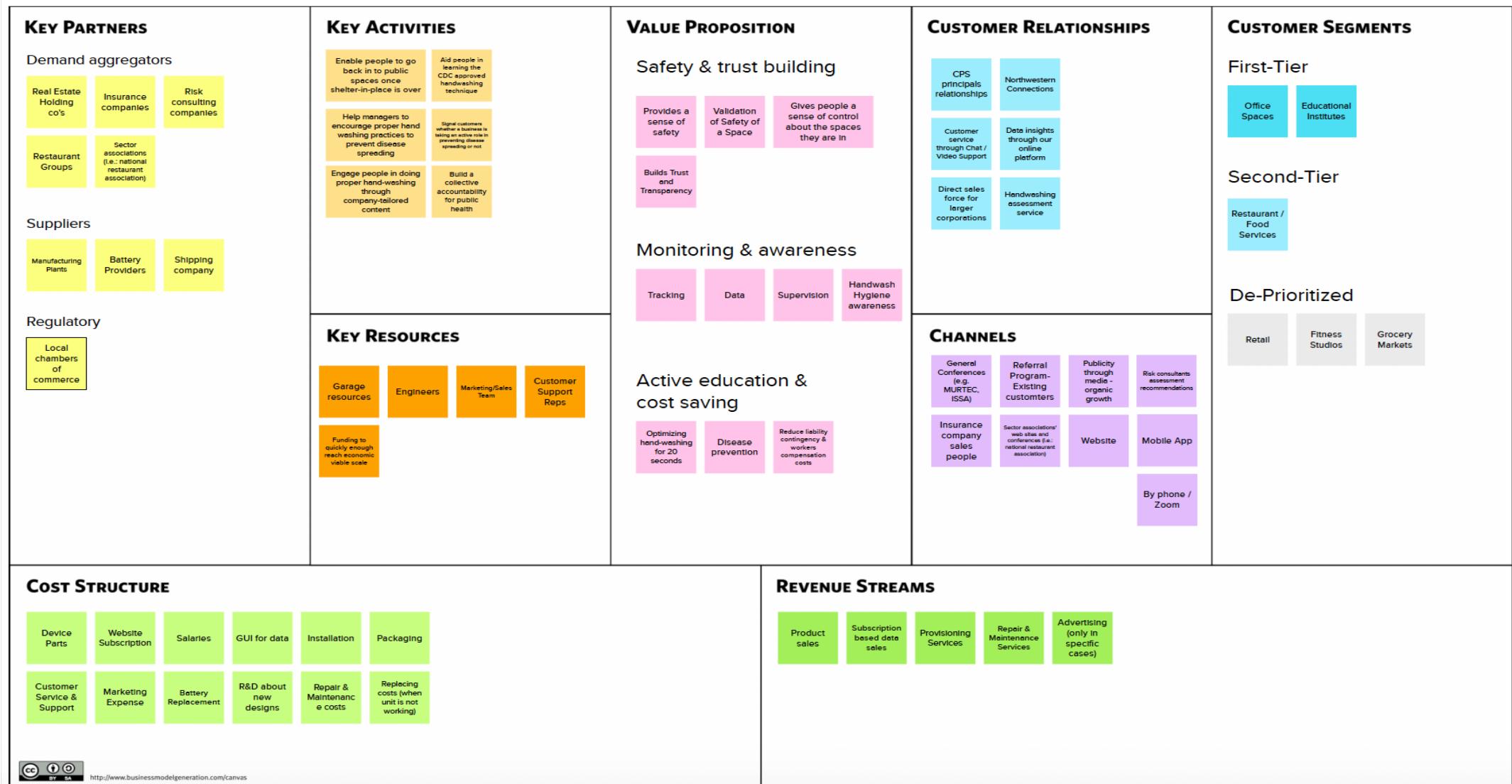


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# Final BMC





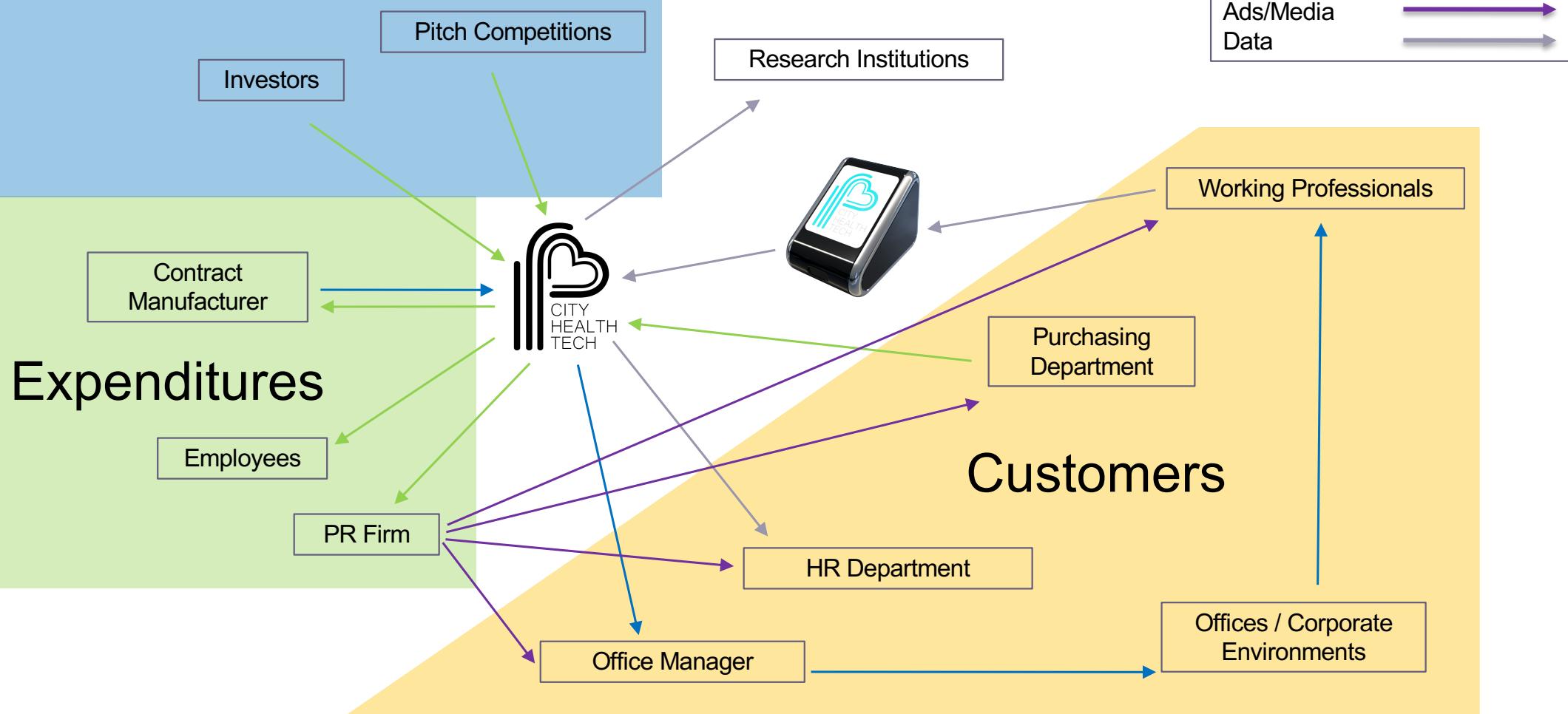
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# Funding

# Ecosystem Map

Product  
Money  
Regulation  
Ads/Media  
Data





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# Competitive Landscape

Competitor			Cost	Superior Design	Simple Setup	Education	Interaction	Flexible Target Market	Reinforces Behavior	Capture Data	Data Analysis
	City Health Tech	Smart device with teaching and tracking function	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IntelligenM	Smart Bands targetting hospital	✓	✗	✓	✗	✓	✗	✓	✓	✗
	Biovigil	Device providing reminder on a user-worn badge	✓	✓	✓	✗	✓	✓	✓	✗	✗
	Gojo	Integrated hand hygiene system targetting	✓	✗	✗	✗	✓	✗	✓	✓	✓
	Soapy Care	Hygiene microstation	✓	✗	✗	✗	✓	✓	✓	✓	✓
	Onvation	Integrated restroom management	✓	✓	✗	✗	✓	✓	✓	✓	✓

A green arrow points from the word "Price" at the bottom left towards the "Cost" column of the table.

**BioVigil:** Fully managed service (rental) business model on a price-per-badge (\$12.50-20/per badge/ per month).

**IntelligenM:** iM costs about \$10 per user per month. There is a \$30,000 one-time installation cost. Note that the system does not require involvement or time of the hospital's IT team.

# Market Size Estimate

	# Buildings (in 000)	Est. Avg # Sinks	Total Sinks (in 000)
Vacant	250.00		
Other	130.00	2.00	260
Warehouse	800.00	1.00	800
Food Service	380.00	10.00	3,800
Public Asembly	360.00	20.00	7,200
Office	1,200.00	30.00	36,000
Health Care	160.00	50.00	8,000
Public Order and Safety	80.00	10.00	800
Religious Worship	410.00	2.00	820
Lodging	160.00	100.00	16,000
Education	390.00	40.00	15,600
Service	620.00	2.00	1,240
Mercantile	600.00	20.00	12,000
Food Sales	180.00	5.00	900

Grand Total

103,420



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# Three pillars to build our sustainable competitive advantage:

## Nimble and modular approach to product design & development

- Generate first-of-its-kind modular design of our products aiming at increasing habits teaching, multi-ecosystem integration, and ease of installation capabilities
- Continuous research and directly iteration of new solutions with key clients

## IP management based on transference from function to brand

- Continuously nurture our portfolio of integrative solutions to prevent similar products on the market
- Sustaining these generated values from design patents to brand (through trademarks) over time to secure long-lasting position on our customer base

## Close & long-term relationships with key stakeholders

- Actively seek for the best partners at every stage on our value chain (i.e.: suppliers, demand integrators, regulators, etc.) and nurture long lasting, win-win relationships
- Generate fluid communication channels and integrative planning to boost everybody's business

Activities

Capabilities

# Our 5-year plan would be focused on conquering major US cities, while building core capabilities

	Y1	Y2	Y3	Y4	Y5
Growth	Schools and Offices in: <ul style="list-style-type: none"><li>Chicago</li></ul>	Schools and Offices in: <ul style="list-style-type: none"><li>New York</li><li>San Francisco</li></ul>	<ul style="list-style-type: none"><li>Wide-spread deployment in the US across schools and offices</li></ul>	<ul style="list-style-type: none"><li>Expanding across sectors such as Restaurants / Malls.</li></ul>	<ul style="list-style-type: none"><li>Expanding across sectors such as Restaurants / Malls / Supermarkets</li></ul>
Product design & development	<ul style="list-style-type: none"><li>Generate first-of-its-kind modular design of our products</li></ul>	<ul style="list-style-type: none"><li>Roll out of marketing strategy based on Y1</li><li>Dedicated to explore new needs of customers</li></ul>	<ul style="list-style-type: none"><li>Improve function of habits teaching, multi-ecosystem integration, and ease of installation</li></ul>	<ul style="list-style-type: none"><li>Engage in developing customized products</li><li>Expand product design to address other occupational health needs</li></ul>	<ul style="list-style-type: none"><li>Continuous research and directly iteration of new solutions with key clients</li></ul>
IP strategy	<ul style="list-style-type: none"><li>Generate IP management policy</li><li>Apply to our first design patents on our current product</li></ul>	<ul style="list-style-type: none"><li>Roll out of our strategy given Y1 results</li><li>Recurrent meetings between legal, mktg. &amp; development teams</li></ul>	<ul style="list-style-type: none"><li>Analyze current portfolio strengths and value to our customers and translate it into small mktg. campaigns</li></ul>	<ul style="list-style-type: none"><li>Roll-out of marketing campaigns based on results of Y3</li></ul>	<ul style="list-style-type: none"><li>Revisit portfolio values and customer trends to generate solid branding strategy</li></ul>
Stakeholders relationships	<ul style="list-style-type: none"><li>Seek partners who can boost our business on value chain</li><li>Generate master plan of integrative work</li></ul>	<ul style="list-style-type: none"><li>Implement bi-annual meetings to commit to continuous improvement with key stakeholders</li></ul>	<ul style="list-style-type: none"><li>Design stakeholder segmented management strategy according to relevance to the business</li></ul>	<ul style="list-style-type: none"><li>Explore JV opportunities with key stakeholders to address new markets with new solutions</li></ul>	<ul style="list-style-type: none"><li>Review previous year's results and value generated, and design a new 5-year strategic plan</li></ul>



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# Income & Cash flow Statement

**City Health Tech**  
Pro Forma Financial Model

**1**

	Year One	Year Two	Year Three	Year Four	Year Five
	1	2	3	4	5
<b>INCOME STATEMENT</b>					
Net Revenue	\$246,274	\$1,057,306	\$7,103,375	\$36,691,337	\$147,309,414
Growth Rate		32%	57%	41%	30%
Cost of Goods Sold	\$151,709	\$639,747	\$4,373,207	\$22,809,394	\$90,603,731
Gross Profit	\$94,565	\$417,559	\$2,730,168	\$13,881,944	\$56,705,684
Gross Margin	38%	39%	38%	38%	38%
Operating Expenses					
Employee Salaries & Benefits	\$144,834	\$149,454	\$446,673	\$515,742	\$541,424
Technology	\$127,420	\$127,420	\$127,420	\$127,420	\$127,420
Marketing	\$115,008	\$172,512	\$259,092	\$340,524	\$413,588
Sales	\$13,880	\$13,880	\$22,680	\$22,680	\$22,680
G & A	\$25,060	\$43,000	\$54,940	\$55,360	\$55,360
Total Operating Expenses	\$426,002	\$506,066	\$910,805	\$1,061,726	\$1,160,470
EBITDA	(\$331,437)	(\$88,507)	\$1,819,383	\$12,820,218	\$55,545,214
EBITDA Margin	-13%	-8%	26%	35%	38%
Expenses					
Interest Expenses	10%	\$0	\$0	\$0	\$0
Depreciation & Amortization		\$15,012	\$15,012	\$15,284	\$15,476
Taxable Income		(\$346,449)	(\$103,519)	\$1,804,280	\$12,804,934
Taxes Paid	35%	\$0	\$0	\$831,491	\$4,481,727
Total ITDA Expenses		\$15,012	\$15,012	\$646,594	\$4,497,011
Net Profit	(\$346,449)	(\$103,519)	\$1,172,769	\$8,323,207	\$36,094,330
Net Profit Margin	-141%	-10%	17%	23%	25%
<b>CASH FLOW STATEMENT</b>					
	1	2	3	4	5
Beginning Cash	\$0	(\$426,739)	(\$656,966)	(\$41,931)	\$5,787,813
EBITDA		(\$331,437)	(\$88,507)	\$1,819,383	\$12,820,218
Interest (-)		\$0	\$0	\$0	\$0
Taxes (-)		\$0	\$0	(\$831,491)	(\$4,481,727)
Operating Cash Flow		(\$331,437)	(\$88,507)	\$1,187,872	\$8,338,491
Increase in Accounts Payable (+)		\$12,469	\$40,113	\$306,880	\$1,515,303
Increase in Accounts Receivable (-)		(\$20,242)	(\$86,680)	(\$496,937)	(\$2,431,887)
Increase in Inventory (-)		(\$12,469)	(\$40,113)	(\$306,880)	(\$1,515,303)
Net Change in Working Capital		(\$20,242)	(\$86,680)	(\$496,937)	(\$2,431,887)
Total Cash from Operations		(\$351,879)	(\$155,167)	\$890,935	\$5,906,004
New Fixed Assets		(\$75,080)	(\$75,080)	(\$76,880)	(\$77,820)
New Intangible Assets		\$0	\$0	\$0	\$0
Cash Used for Investing Activities		(\$75,080)	(\$75,080)	(\$76,880)	(\$77,820)
Increase in Long-Term Liabilities (+)		\$0	\$0	\$0	\$0
New Equity (+)		\$0	\$0	\$0	\$0
Net Cash from Financing Activity		\$0	\$0	\$0	\$0
Net Cash Flow		(\$426,739)	(\$230,227)	\$815,095	\$5,829,744
Ending Cash		(\$426,739)	(\$656,966)	(\$41,931)	\$32,727,902

# Ask for Phase 1- \$450k out of \$800k

The money for **Phase I (\$450k)**, will be allocated as follows:

- Device Manufacturing costs: \$75,855 (6 months of inventory)
- Salaries for Employees: \$36,209 (3 months of salary)
- Technological expenses: \$127,420 (full first year technological expenses)
- Marketing expenses: \$115,008 (full first year marketing expenses)
- CAPEX: \$75,060 (upfront payment to the manufacturer to set up the product line)
- Contingencies: \$41,966 (6% of total investment needs)

Phase II for \$350,000 would cover half the cash flows needed for the second year. Phase II investment would be subordinated to meeting the first 9 months financial objectives, and it is included in this ask so it would buy the team enough time to prepare for the second round of investments that would take place at the end of 2021.



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# Unit Economics

	Year 1	Year 2	Year 3	Year 4	Year 5
BREAK-EVEN ANALYSIS					
Unit Revenue					
Product 1	\$125	\$125	\$125	\$125	\$125
Product 2	\$3	\$4	\$4	\$4	\$4
Unit COGS					
Product 1	\$85	\$85	\$85	\$85	\$85
Product 2	\$0	\$0	\$0	\$1	\$0
Unit Profit					
Product 1	\$40	\$40	\$40	\$40	\$40
Product 2	\$3	\$4	\$4	\$4	\$4
Unit Profit Contribution Margin					
Product 1	9.20%	10.78%	9.19%	9.89%	9.28%
Product 2	90.80%	89.22%	90.81%	90.11%	90.72%
Weighted Average Contributions					
Product 1	\$3.72	\$4.36	\$3.71	\$4.00	\$3.75
Product 2	\$2.68	\$3.68	\$3.74	\$3.31	\$3.74
Weighted Total	\$6.40	\$8.03	\$7.45	\$7.30	\$7.49
Fixed Costs	\$426,002	\$932,068	\$1,842,873	\$2,904,599	\$4,065,069
Break-Even Point	66,615	116,052	247,235	397,714	542,994
Product Sales-Mix Ratio					
Product 1	6,127	12,509	22,714	39,331	50,371
Product 2	60,489	103,544	224,523	358,384	492,625
Product Sales-Mix Revenue					
Product 1	\$765,875	\$1,563,625	\$2,839,250	\$4,916,375	\$6,296,375
Product 2	\$181,467	\$431,778	\$936,261	\$1,494,461	\$2,054,246
Total Revenue	\$947,342	\$1,995,403	\$3,775,511	\$6,410,836	\$8,350,621

# Break Even Point

Sales	1	2	3	4	5
Jan	\$12,725	\$277,634	\$1,492,870	\$9,728,109	\$50,639,051
Feb	\$26,635	\$315,046	\$1,720,586	\$11,251,687	\$56,999,382
Mar	\$41,649	\$359,016	\$1,993,493	\$13,002,465	\$64,269,871
Apr	\$57,900	\$410,663	\$2,319,451	\$15,008,533	\$72,552,452
May	\$75,521	\$471,126	\$2,707,862	\$17,301,623	\$81,961,564
Jun	\$94,519	\$541,817	\$3,169,824	\$19,917,810	\$92,625,721
Jul	\$115,030	\$624,300	\$3,718,285	\$22,897,825	\$104,689,255
Aug	\$137,190	\$720,420	\$4,368,716	\$26,287,769	\$118,314,069
Sep	\$161,010	\$832,436	\$5,139,280	\$30,139,828	\$133,681,939
Oct	\$186,628	\$962,772	\$6,051,516	\$34,513,005	\$150,996,585
Nov	\$214,184	\$1,114,404	\$7,130,782	\$39,473,989	\$170,486,417
Dec	\$246,274	\$1,303,580	\$8,406,954	\$45,098,292	\$192,407,706



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# We have received traction from schools and offices

1871 likely to be the first paying co-working space customer

30+ sinks ➤ \$5K revenue

Pilot going on 5 Schools / 4200 students (Pre-COVID)

▼20% ➤ \$262K  
Reduction in sickness

Estimated Incremental Revenue  
for public schools



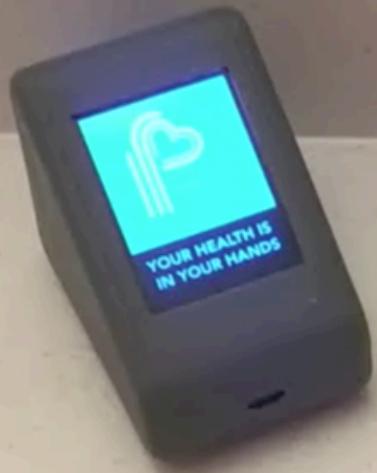
# Next Steps

- Our next round of interviews will focus on office space workers and decision makers
  - Focus on interest in data collection / usability as well as individual privacy rights
- Specialize product design for deployment in office environment
- Discover best customer acquisition plan
- Use interview insights to make decisions at CHT



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## Leadership



**Ibraheem Alinur**

CEO

NU '20 Industrial Engineering  
Gates Millennium Scholar  
Project Consultant CPAA



**Irewole Akande**

CTO

Illinois Tech '17  
Electronics Engineer  
SMU COX '22 MBA  
IoT Electronics Engineer



**Zikora Agbapu**

Lead Design Engineer  
Kennesaw State '19



**Lea Guckenberger**

Senior Director of Marketing  
Columbus College '15



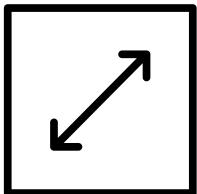
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