POXY

The Problem

On average humans spend 90% of their time indoors. Indoor air pollution is proven to be 5x worse than outdoor air pollution. This is caused by lack of circulation indoors along with air being trapped in a space.

Causes... Harmful VOC's

Trichloroethylene

Found in printing inks, paints, varnishes, adhesives, etc.

Benzene

Used to make plastic resins, detergents, pesticides, and can be found in tobacco smoke

Formaldehyde

Found in paper bags, facial tissues, paper towels, napkins, and plywood panelling

Ammonia

Found in window cleaners, floor waxes, smelling salts, and fertilizers

Xylene

Found in rubber, leather, paint, tobacco smoke

"Indoor Air." Volatile Organic Compounds (VOCs) in Your Home. MDH, n.d. Web. 14 Apr. 2016. <http://www.health.state.mn.us/divs/eh/indoorair/voc/>

Health Effects...

Trichloroethylene	Benzene	Formaldehyde	Ammonia	Xylene
Short term symptoms include: dizziness, headache, nausea and vomiting	Short term symptoms include: irritated eyes, drowsiness, increase in heart rate	Short term symptoms include: irritated nose, mouth, and throat	Short term symptoms include: eye irritation, coughing and sore throat	Short term symptoms include: headache, dizziness and throat irritation

Long Term Effects

-Lung cancer
-Asthma
-Respiratory Irritation
-Bronchitis
-Heart Cancer

"Indoor Air." Volatile Organic Compounds (VOCs) in Your Home. MDH, n.d. Web. 14 Apr. 2016. <http://www.health.state.mn.us/divs/eh/indoorair/voc/>

Our mission

Our mission is to use the power of nature to organically eliminate the toxins polluting the air indoors.

Introducing POXY

-When it comes to making our product(pots/soil)…
-The way it works…
-With every plant of ours sold a plant will also be donated to a classroom
-A few Materials Peat Moss, Coarse Grained Sand, Perlite, Compost, Bamboo

Initial Blueprint/ Ideas

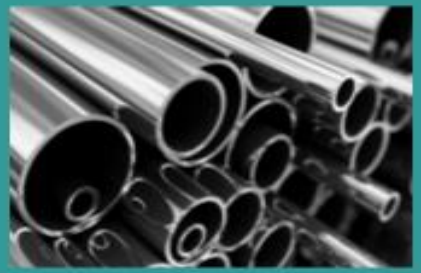
-A self sustaining plant

-Evaporation, Filter, Repeat

-Scrapped Materials for new idea

-Metal Tubes

-Plastic Tubes

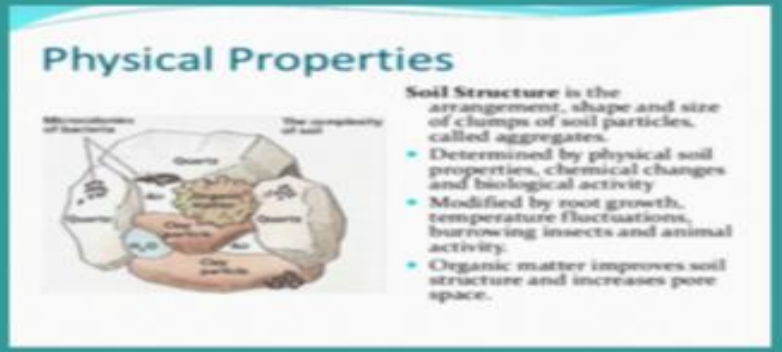


Its Duty

Carbon Cycle

"Carbon Cycle." UXL Encyclopedia of Science. 2002. Encyclopedia.com. 14 Apr. 2016<http://www.encyclopedia.com>.

Process



"Carbon Cycle." UXL Encyclopedia of Science. 2002. Encyclopedia.com. 14 Apr. 2016<http://www.encyclopedia.com>.

Ideal Plants

Orchids - They can produce oxygen day and night, do not need much water or sunlight to grow, and rid the air of xylene.

Peace Lilies - Can grow in temperatures under 55 degrees and rids the air of acetone, ammonia, benzene, ethyl acetate, formaldehyde, methyl alcohol, trichloroethylene and xylene.

Schefflera - Long lasting, soaks up benzene, formaldehyde, and toluene, and good for households where there is a smoker.

Sansevieria trifasciata: Tolerant of low light levels and irregular watering. Passively absorbs toxins such as formaldehyde and nitrogen oxides.

Aloe Vera: Easy to grow, frees home of benzene.

Materials

Materials for soil:

-Organic perlite- $14
-Organic peat moss- $13
-Coarse grained sand- $4

Materials for pot:
Clay-$4
Bamboo sticks- $10
Plants- Range from $15+

Air Pollution Monitor

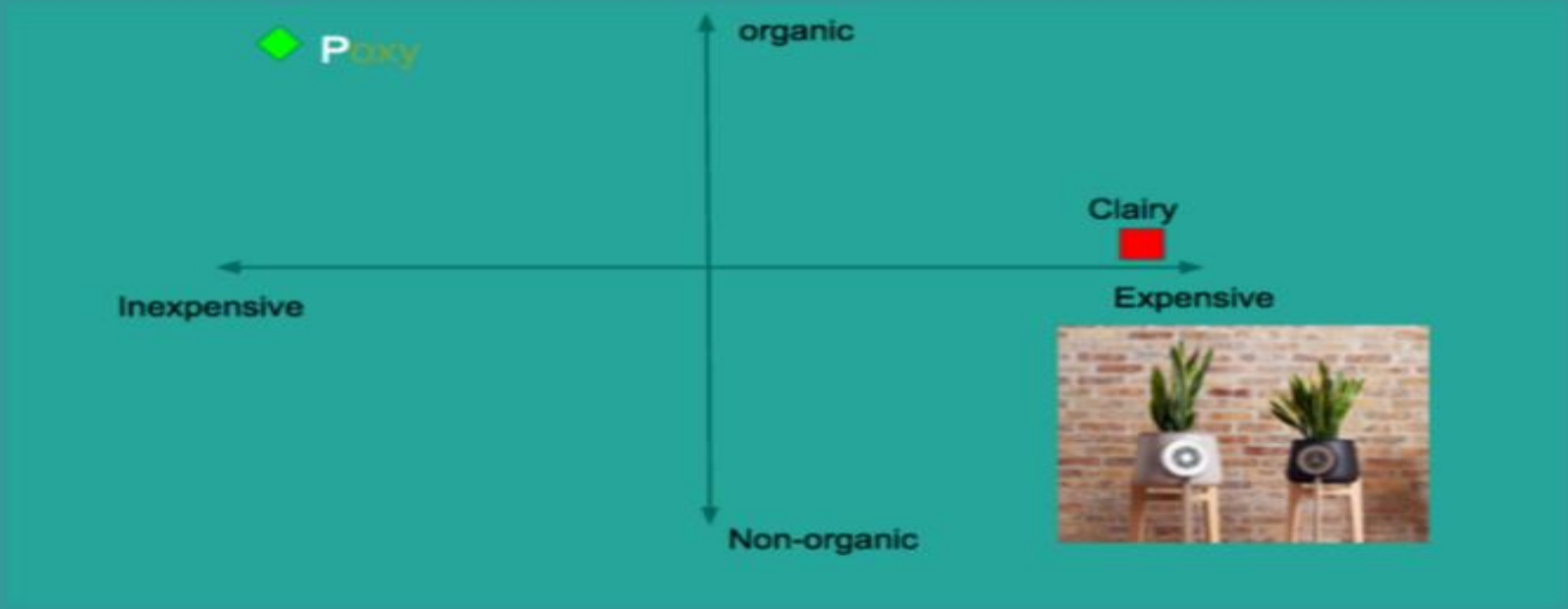
Monitors air quality and effectiveness our our pot

Fundraising

-Le Pain Du Jour Bakery Donation- $100

-Kool-aid gummy worms- $12.65

Competitors



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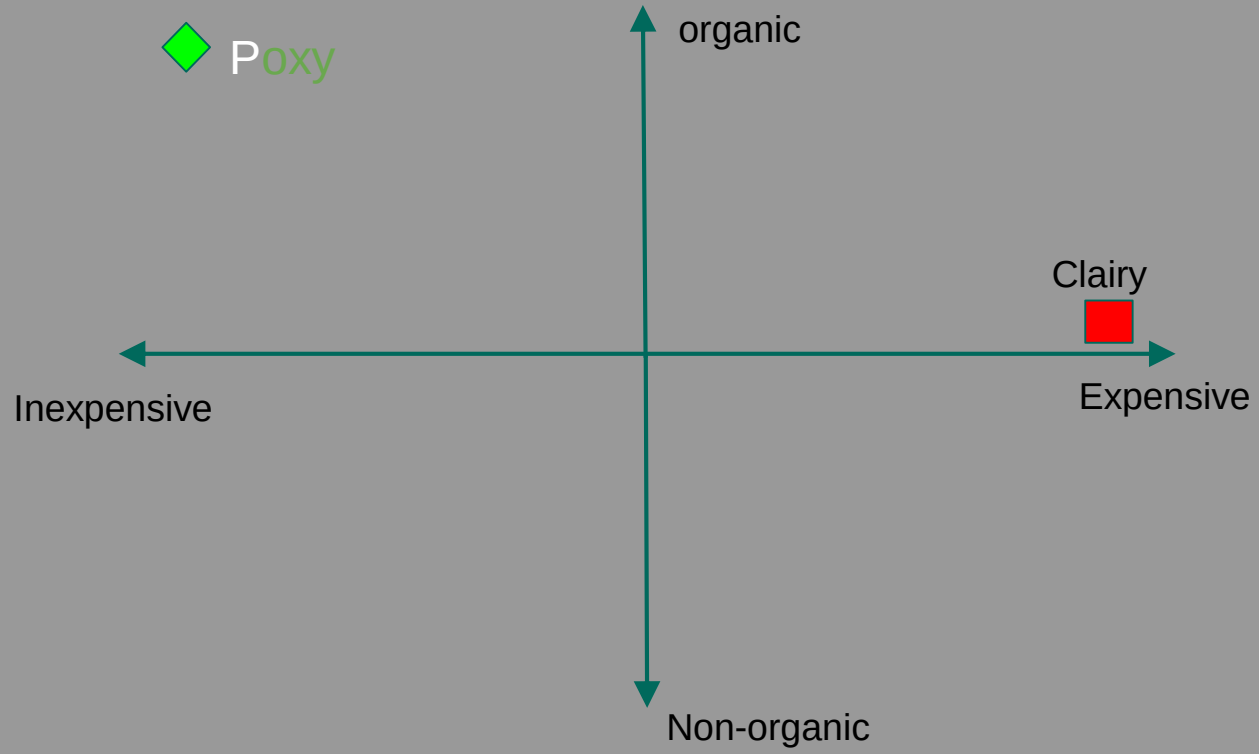

Individual Goals

Daniella- Product Organizer:

-Raise $500 dollars for materials + Air pollution monitor

-Organize a meeting with friend of Garcia that could benefit the outcome of our product by next week

-Obtain all materials by May 2nd
-Establish a convenient date for when all products will be completed and ready for sale by April 22nd

-Organize and neatly decorate booth for Senior Showcase

Josh- Product Researcher:

-Provide group with as much research as possible to help make the product work successfully.

-I aim to find the best materials so that our product can be as effective as other competitors out there.

-Help fundraise enough $$$ for our project.

-Overall have a successful outcome/useful product.

Daniel- Product Manager

-Manage group members and remind to stay on task
-Manage selling the Poxy Pots
-Reimburse Yoon for his donation
-Collect donations

Alonso- Product Designer

Make pots with extreme precision

-Make the first 5 pot by May, 10th
-I am proving the efficiency of or plant/ pot compared to other plants
-Successfuly sell all pots

Individual Goals

Daniella-

- Raise $500 dollars for materials + Air pollution monitor
- Organize a meeting with friend of Garcia that could benefit the outcome of our product by next week
- Obtain all materials by May 2nd
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Alonso-

- Make pots with extreme precision
- Make 5 pots by May, 10th
- Prove the efficiency compared to other plants

Josh-

- Provide group with as much research as possible to help make the product work successfully.
- I aim to find the best materials so that our product can be as effective as other competitors out there.
- Help fundraise enough $$$ for our project.
- Overall have a successful outcome/useful product.
- Buy all materials for soil by May 10th.

Daniel-

- Manage group members and remind to stay on task
- Manage selling the Poxy Pots
- Reimburse yoon for his donation
- Collect donations

APRIL

4 Ideation process	5 Ideation process	6 Ideation process	7 Created new product idea	8	9/10
11 Beach day- **day off**	12 Create blueprints for plant project	13 Finalize new project idea Finalize name and logo	14 Finalize powerpoint and blue print Practice for presentation	15 Practice & Present to CFG group Revise powerpoint	16/17 Purchase food for fundraiser Practice for pitch pol
18 -Create pot for prototype -Revise Powerpoint	19 -Practice for pitch pol -Add Adjustments to powerpoint	20 -Practice for pitch pol -Sell Kool-Aid gummy worms	21 **PASS PITCH POL** -Sell Kool Aid gummy worms	22 -Sell Koolaid Gummy worms	23/24
25 -Blue print for different shaped pots	26 Rerooting plants Started growing process Test out VOC08 air monitor	27 Fundraise Research best type of clay Test out VOC08 monitor	28 -Pick up ordered clay from city of industry -Visit a plant nursery	29 -Create price -Sell Kool-Aid -Collect data of VOC08	30/31 Drive to nursery get peat moss and other soil material

2 **FUNDRAISE**	3 **FOR ALL** -Work on pot design -make physical blueprint pot -Completed 2 pots -start	4 **MATERIALS** -Complete 3 more pots -Put all four inside of kiln -Begin data collection w/poxy design vs cigarette smoke -Purchase all materials from Hawthorne plant nursery after school	5 **ALL** -Take pots out of kiln and glaze them -Replace in the kiln for second fire -Continue data collection research on airc leaning process	6 **WEEK** Prom	⅞
9 -Re-stock on any materials from nursery -Buy more snake plant if needed -Collect more data	10 -Take pots out of kiln and assemble the first five after school -Fundraise -Further research on how to take care of succulents	11 -Start new batch of five pots -Produce at least 1 to 2 pots -Make compost and put in the soil -Assemble any unfinished pots	12 -Produce 3 to 2 more pots and put in kiln -Continue research of poxy plant	13 -Take pots out of kiln and glaze -Put back in kiln and wait a day -Test first batch day before and achieve positive results this day	14/15 -re-stock on any materials/fundraising -After testing effectiveness of poxy pots, create price
16 -Take pots out of kiln and assemble them -Take home and test them w/ VOCO8	17 -Start batch of possible 5 to 10 more -Produce at least 2 to 3 pots	18 -Produce 2 to 3 more pots -Put in kiln -Fundraise	19 -Glaze pots, Put back in kiln -Analyze results of air monitor	20 -Assemble pots -Continue research -Pay yoon back	21/22
23	24 -Continue research	25 Potential Senior Showcase Day Sell Pots	26	27	28/29