# [RE]verse Pitch Competition – 2020 LoFi Recycling Systems Executive Summary

We take plastic waste and turn it into home décor

#### Team

Samantha Panger Destin Douglas

# **Development stage**Seed

# **Funding Opportunity**

We would use the [RE]Verse Pitch funding on legal advice and insurance fees, to build our machines, secure a warehouse space, and to set up a web presence for advertising and ecommerce.

We will need an additional \$7,389 to cover operating costs for the first three months. This additional funding will be raised in a friends and family investment round. We will reinvest a portion of second quarter revenue into a mold for the grow light additions. We conservatively foresee being able to pay off the friends and family round from the profit margin of the first three years of operation.

Our Net Operating Income, after reimbursing our investors, will be put back into the business to hire more staff, create inventory, and acquire additional machinery. It will also be invested in additional shipping cost associated with our repotting program.

## PROBLEM/OPPORTUNITY

Over 19% of plastic used in the U.S. ends up in a landfill. Polyvinyl Chloride is difficult to recycle due to high levels of chlorine and additives and the material's different manufacturing processes. Overtime landfilled PVC emits heavy metals and phthalates which cannot be fully eliminated with landfill leachate treatment and can end up in our aquatic ecosystems. LoFi Recycling Systems aims to turn a PVC waste stream into useful home décor items which connect people to the natural world through the medium of indoor gardening. As Austin's population grew by 34.1% from 2007 to 2017, the new housing created took the form of higher density apartment buildings and high-rises, leaving many Austinites without access to a yard. The goal of LoFi is to repurpose a unique and challenging waste stream into products that help bring the lush green space of Austin into people's homes.

## **SOLUTION/PRODUCT**

LoFi seeks to create a plastic planter from recycled materials that encourages happy plants and happy people. We will use PVC flashing and unviable records from Gold Rush Vinyl to create unique and attractive indoor pots and planters with attached full spectrum, supplemental lighting for indoor spaces. We will also share our process with the Austin community by providing classes that enable an active role in repurposing local waste streams.

Gold Rush Vinyl is a successful Austin business that presses records with fast turnaround times. Each week Gold Rush presses 3,000 to 4,000 records and creates about 375-750lb of PVC waste. PVC flashing is the perfect material for our purpose because it comes from one manufacturer and can be thermoformed into new shapes

LoFi will build our processing machines using the Precious Plastic templates for a basic shredder and a compression machine (see attahed). LoFi will grind the PVC waste, heat the material, and press it into a new shape using a compression mold. The basic compression machine uses a recycled oven as the heating element. This manufacturing plan keeps the machine cost low and diverts another item out of a landfill. LoFi will be able to produce 4-5 pots per compression cycle. With packaging and labor, we will be able to make our simple products for under \$9 a unit which falls within a competitive pricing model for locally made home décor items. As we establish our presence and solidify our cash flow, LoFi will expand by developing a compression mold that will allow us to create attachable full spectrum supplemental lighting to our existing pot design. These attachments will use Gold Rush Vinyl PVC. Our aim with this modification is to sell illuminated planters for 10-20% under competitive market pricing.

When consumers buy a LoFi planter they will be able to bring their pots back to us as their plants grow. Through enrollment in our reporting program, customers can pay \$5 to receive the next size larger pot. After reporting their plant, customers can then send their smaller pot back to us for recycling. If 25% of our customers use this service, we could prevent up to 1,000 new plastic pots from entering the waste stream.

#### POTENTIAL RETURN/REVENUE MODEL

The number of nursery and garden businesses in the United States has doubled in the past seven years. Plant and flower growing makes up \$15 billion of the garden industry with a .7% annual growth. Garden centers say that succulents and indoor foliage plants make up roughly 31% of what they grow for consumers - a \$4.5 billion market share of plants perfectly suited for LoFi pots.

LoFi is a community focused, woman owned small Austin business. Our aim is to keep costs low by repurposing material and production facilities to provide locally made gardening supplies. Our revenue will be driven by sales of planters to local Austin nurseries such as The Natural Gardener, Breed and Co, and East Side Succulents. In addition, we aim to sell planters at craft fairs, farmer's markets, and online. We estimate a 12% ROI by the end of the first fiscal year.

#### COMPETITION

There are a wide range of plastic planters and planters with supplemental lighting available. Much of this competition includes seed pods and enables customers to grow food, which values them at a high price point. The plastic planter market has potential for growth in recycled materials and is underdeveloped particularly in the grow light sector. We would initially be able to price our illuminated planters at 10-20% under competitors pricing due to our low-cost source material and manufacturing process. When we partner with a nursery to create seed and starter plant kits we will be able to value our product at least 40% under the leading competition with a similar product.

#### **ENVIRONMENTAL IMPACT**

LoFI will work to divert a portion of the 38 million tons of PVC produced globally from landfills. Gold Rush produces fluctuating amount of waste each year but averages around 3,000lb of waste each month. This will exceed our initial forecasted sales, allowing us to accumulate excess material to stabilize LoFi's inventory through peak growing seasons, holidays, and our second fiscal year. We will be able to divert 1,400lb of PVC through sales within our first three months with roughly 4,000lb diverted by the end of our first fiscal year. That 4,000lb will stay diverted as customers return their pots to us for repurposing into new products. We estimate that our backstock will divert an additional 1,600lb of PVC waste. We will also create conversations about the need for recycling in the Austin community through classes reaching more than 100 people the first year.

#### **ECONOMIC IMPACT**

In year one we will be able to divert over 2 tons of Gold Rush Vinyl's PVC from Austin's landfills, preventing roughly \$20,000 in reduced environmental value. Our classes will increase recycling impact as people who see product transformation messaging are 30% more likely to recycle than those simply told to recycle. Through these benefits we will have achieved an SROI of \$1.24 of impact per dollar of initial investment.

LoFi is committed to paying employees a living wage. Our first year we would be able to afford one part time employee at \$15 an hour and an additional employee for craft fair

sales at \$18 an hour. As the company grows, we will add more staff and hours without compromising our living wage goals.

We are committed to partnering with Austin's nurseries to create seed and plant pairings in the future with an emphasis on native Texas plant varieties.

#### **THE TEAM**

Samantha Panger is an avid gardening student and volunteer at the Lady Bird Johnson Wildflower Center. Her background as a filmmaker includes operational logistics and mechanical repair. Samantha has streamlined logistics and budgets for National Geographic, Netflix, HBO, and Warner Brothers.

Destin Douglas is a first year MBA candidate at UT's McCombs School of Business focusing on small business finance and renewable energy. Destin is a native born Austinite, small business owner, and avid outdoors enthusiast. He hopes to use skills and experience gained from 5 years of running a small business to make LoFi a profitable and sustainable part of the local Austin business landscape.

#### **EXECUTION PLAN/GO TO MARKET STRATEGY**

April/May of 2020

-Build our machines, create our website and social media presence, reach out to potential points of sale in Austin. The timeline for receiving machine parts will vary depending on the evolving COVID-19 event.

June 2020

-Start selling pots of various sizes and provide one class a month. We anticipate growing seasons, craft fair weekends, and holidays to provide a boost in sales.

August 2020

-Start participating in Austin craft fairs such as Crafther Market and Renegade Craft Fair. Both fairs cater to women owned businesses and handcrafted goods. Participating in these events provides advertisement, exposure, and direct customer interaction.

November 2020

-Launch our plant light products. We will introduce them during holiday fairs to get direct customer feedback.

March 2021

-Offer two classes a month and increase staff. We also anticipate being in talks with a nursery to create seed and starter plant kits moving forward.