

LRP, Inc. - Purified

Paper

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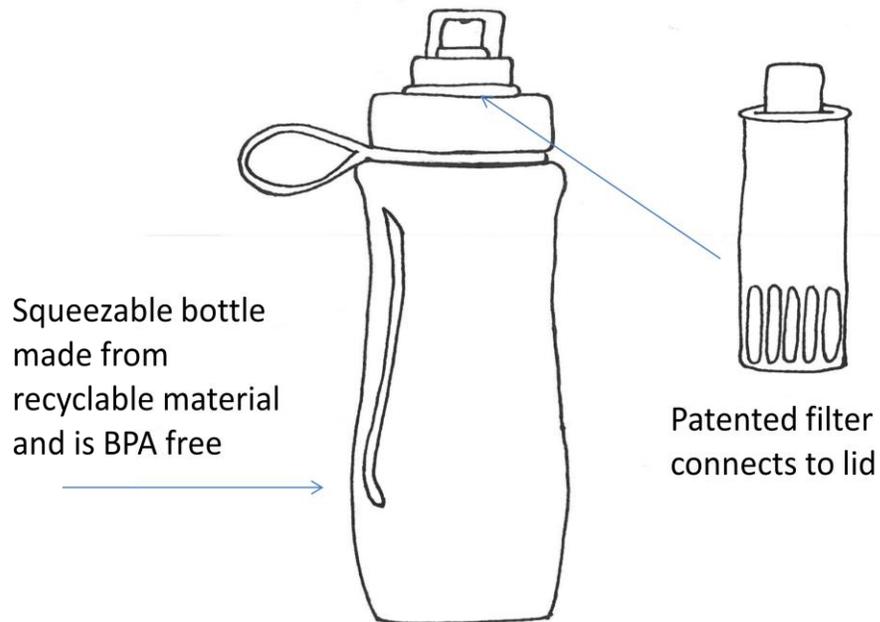
Alex Torres, Scott Sigmund, & Jessica Ward

Our business, LRP, creates products in the liquid refreshment market area. Our customer base is anyone above the age of 5 that wants clean and refreshing water wherever there is a tap to be found. LRP values a green oriented organization, which we support by partnering with the CDC (Center for Disease Control). Our company looks for many ways to expand our business with new products. We are currently working on a more sophisticated water filter that will be able to filter low quality water and make it safe to drink. In the area of athletic rehydration, our R & D team is creating filters that will have electrolytes, vitamins, and minerals so that athletes will be able to stay hydrated longer. Lastly, we are working on more flavors for our filters to keep our current customers excited for new tastes.

Our company came up with the idea after one of us went to the gym and saw that people working out kept spending money buying throw-away water bottles, rather than using the free water fountains. Our product, the Purified, is a water bottle that has our patented flavored filter. It will allow users to take water from any tap and have it filtered and flavored before the water hits the users' mouth.



Purified



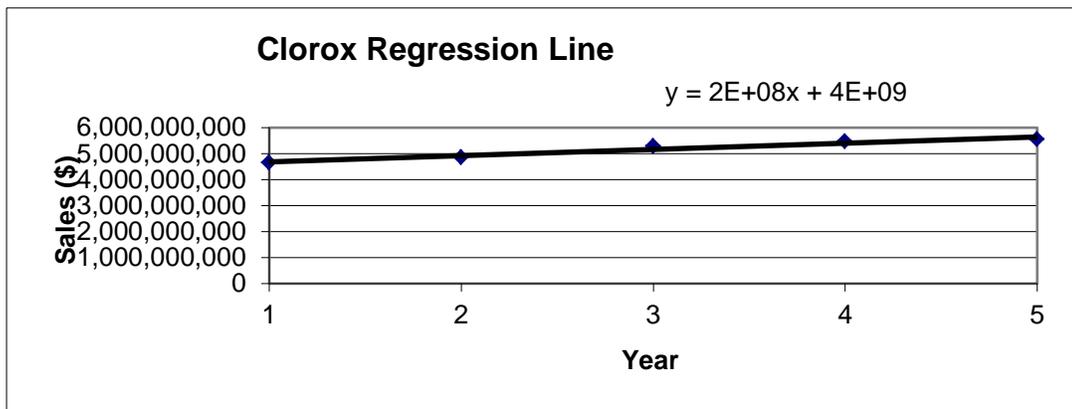
Our Customer Benefits Package will have several aspects to provide the customer with more value. We will create a website that will be updated daily and will allow the customer to see all of our products. They will also be able to purchase the items from the website. Our CBP will also include our products being sold through social organizations, in which our company will donate a dollar for each bottle sold to that organization. To provide our customer the chance to change the world, we will donate one dollar for each bottle sold to the Center for Disease Control. Our CBP will also inform customers about new promotions and products by having them register their email addresses. Whenever a customer's filter runs out, our CBP has created extra filters that can be bought from our website with different flavors. Our 1800PUREH2O hotline will allow customers to reach a customer service representative fast.

Our Strategy Development helps our company figure out our plan of attack on the market and gives us a path to follow. While scanning the environment, we conducted surveys at gyms, parks, and schools. We found that 83% of people would rather buy a bottle of water, which is at least \$2, than fill their bottle at a public fountain. Also, the surveys showed that 76% of people would use our product on a daily basis. We learned that people on average, would be willing to pay \$15 for our Purified bottle, and some even said they would pay up to \$20. The surveys' most popular choices for flavors were: Strawberry Kiwi, Orange, Lemon Lime, and Grape. Some of the order qualifiers were that our product needed to be durable and of good quality. The order winners were our flavored patented filters, which people were excited about.

Our lead competitor would more than likely be Brita. They are the leading company in the filtered water business, but our company will overcome this with a patent protecting our specialized flavored filters.

Our competitive priorities we will compete on are quality and innovation. Innovation is our main priority. By creating new and useful products, our customers will continue to come back to us for our products. Quality is another key priority. We believe that if it is not a product of high quality then, even though it is new and useful, it does not give the product value. Our core organizational competency that will allow us to succeed is our R & D team. The R & D team will constantly create new products that will have good quality and be useful to the customer. Our plan to maintain and support our R & D team consists of providing them with the right training and equipment, giving them a high salary and perks, and finally funding trips for them to go around the world to work with developing countries' water quality.

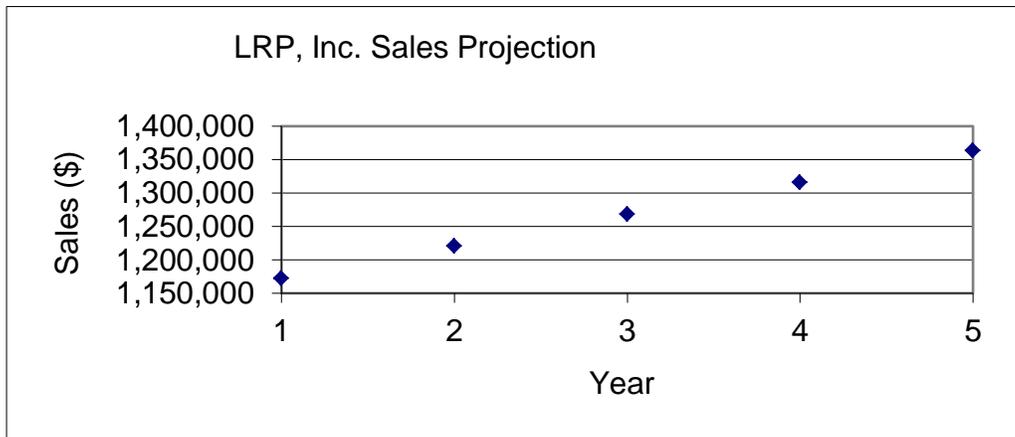
We used Clorox's previous sales to come up with a linear regression line to predict our first year's sales. We chose Clorox because they manufacture and sell water filters.



Using the regression line we forecasted Clorox's sales for the next 5 years.

| Year | Forecast Sales (\$) for Clorox. |
|------|---------------------------------|
| 6 | 5,864,500,000.00 |
| 7 | 6,102,800,000.00 |
| 8 | 6,341,100,000.00 |
| 9 | 6,579,400,000.00 |
| 10 | 6,817,700,000.00 |

Using the regression formula and our survey results, we estimated our percentage of industry sales would be .02 percent. With this information, we forecasted our sales for the next 5 years. We predict a slight seasonal increase during the school year, since our initial target market will be school aged children and young adults in college.



LRP Inc. Forecast

| Forecast Sales \$ | Forecast Sales in Units |
|-------------------|-------------------------|
| 1,172,900 | 78193 |
| 1,220,560 | 81371 |
| 1,268,220 | 84548 |
| 1,315,880 | 87725 |
| 1,363,540 | 90903 |

Below is our fixed cost and variable cost list.

| | FIXED COST | | | | |
|-----------------------|---------------|--------|--------|--------|--------|
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Mortgage | 167200 | 167200 | 167200 | 167200 | 167200 |
| Utilities | 17800 | 17800 | 17800 | 17800 | 17800 |
| Office Equipment | 5000 | 5000 | 5000 | 5000 | 5000 |
| Machinery | 40000 | 40000 | 40000 | 40000 | 40000 |
| Equipment Maintenance | 10000 | 10000 | 10000 | 10000 | 10000 |
| Insurance and Taxes | 30000 | 30000 | 30000 | 30000 | 30000 |
| R&D Salaries | 150000 | 150000 | 150000 | 150000 | 150000 |
| Patent | 5000 | 5000 | 5000 | 5000 | 5000 |
| Travel Expenses | 20000 | 20000 | 20000 | 20000 | 20000 |
| Marketing | 35000 | 35000 | 35000 | 35000 | 35000 |
| Training | 20000 | 20000 | 20000 | 20000 | 20000 |
| TOTAL FIXED | 500000 | | | | |

| VARIABLE COST | |
|-----------------------|----------|
| Raw Materials | 1 |
| Direct Labor | 2 |
| Contributions | 2 |
| TOTAL VARIABLE | 5 |

| | |
|---------------|--------|
| FIXED COST | 500000 |
| VARIABLE COST | 5 |
| SELLING PRICE | 15 |

Based off of our fixed cost, variable cost, and selling price we were able to come up with our breakeven point. Our breakeven point is 50,000 units and we are projecting to breakeven in July of our first year. We were able to determine this using our calculations and forecasted sales.

$$\text{BE Units} = 500,000 / (15 - 5) = 50,000 \text{ Units}$$

| Year | Forecasted Quantity | Break-Even Amount | Carryover |
|------|---------------------|-------------------|-----------|
| 1 | 78193 | 50,000 | -28,193 |
| 2 | 81371 | 21,807 | -59,564 |
| 3 | 84548 | -9,564 | -94,112 |
| 4 | 87725 | -44,112 | -131,837 |
| 5 | 90903 | -81,837 | -172,740 |

In order to find the ideal location for LRP, Inc., we performed a location analysis. First, we chose the factors that were the most relevant to our location decision. We narrowed down these factors to proximity to customers, quality of life, site consideration, and proximity to suppliers. We applied a weight to each of these factors. We gave proximity of customers a weight of 40 because our R& D works very closely with our customers to enhance our existing products, as well create new quality products, which gives us a competitive advantage. The next most important factor is quality of life, which we assigned a weight of 30. We assigned this

weight because our R&D team is our key to innovation, which allows us to maintain our competitive advantage. We believe in a work life balance for our employees. The third most important factor is site considerations, which we assigned a weight of 20. In this area, we were looking for real estate cost, real estate location, and location to schools. The final factor was proximity to suppliers, which we assigned a weight of 10. In this area, we looked to sufficiently decrease costs by locating close enough to partner with our supplier. We chose to compare Houston and Dallas Forth Worth. We chose these locations because we wanted to be located in Texas, and these are the largest cities in Texas.

| | | Score | | Weighted Score | |
|------------------------|------------|---------|-----|----------------|------------|
| Factor | Weight | Houston | DFW | Houston | DFW |
| Proximity to Customers | 40 | 4 | 4 | 160 | 160 |
| Quality of Life Issues | 30 | 2 | 3 | 60 | 90 |
| Site Considerations | 20 | 3 | 4 | 60 | 80 |
| Proximity to Suppliers | 10 | 3 | 4 | 30 | 40 |
| Sum | 100 | | | 310 | 370 |

In the next part of the location analysis, we constructed a factor rating diagram. Using a scale of 1 to 5, with 1 being poor and 5 being excellent, we conducted research and rated each of the four factors listed in the paragraph prior for both Houston and Dallas Fort Worth. For

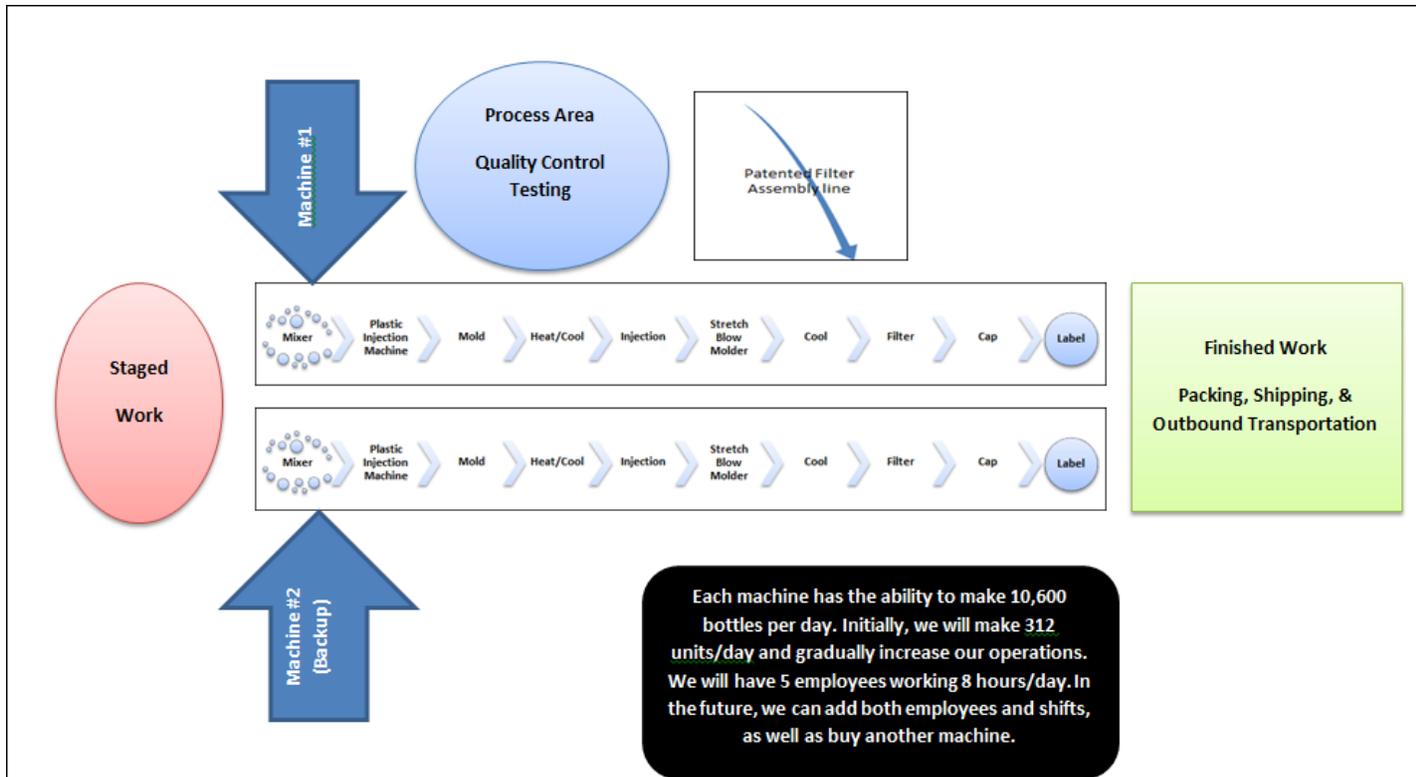
first factor, proximity to customers, we researched the amount of schools located in both Dallas Fort Worth and Houston. Since our initial target market is school aged children grades kindergarten through college, closeness to this market group is vital. As far as ranking in this area, Houston and Dallas Fort Worth both scored 4 out of 5. In the next area, quality of life, we took into consideration cost of living, weather, schools, and crime rates, among others. In this area, Houston scored 2 out of 5, and DFW scored 3 out of 5. The next factor of site considerations, our main consideration was the cost of the real estate for our location and the schools located around the area. This factor scored 3 out of 5 for Houston, and 4 out of 5 for DFW. The last factor of proximity to suppliers, we considered the location of our supplier. Our supplier is Allied Plastics for both our recycled plastic and polypropylene #5 plastic. They are headquartered in Dallas. They do have a plant in Houston, but since we want a close partnership, we gave Dallas Fort Worth a 4 out of 5 for this area and Houston received a 3 out of 5. After making all of the location analysis calculations, Dallas Fort Worth is the location of choice for our company.

2556 & 2564 Fabens Rd
 2556, 2564 Fabens Rd, Dallas, TX 75229



| | |
|-----------------------------------|---|
| Price: | \$830,000 |
| Price/SF: | \$40.65 |
| Property Type: | Industrial |
| Property Sub-type: | Flex Space |
| Additional Sub-types: | Manufacturing Distribution Warehouse |
| Property Use Type: | Vacant/Owner-User |
| Distressed: | Yes |
| Commission Split: | 3% |
| No. Stories: | 1 |
| Year Built: | 1972 |
| Clear Ceiling Height: | 16 ft. |
| No. Drive In / Grade-Level Doors: | 11 |
| Lot Size: | 43,996 SF |
| Tax ID / APN #: | 00000602703000000 |
| Find Out More... | |

Our facility is 44,000 square feet and is located in Dallas, Texas. Our facility allows us to have the ability to expand accordingly. We currently only utilize about half of the square footage in our facility. Our manufacturing layout inside of our facility is that of a hybrid. We utilize a process layout for our quality control and our R & D. Our R & D team is our core competency that allows us to compete on innovation. The job shop design of our process layout supports these efforts. The other portion of our manufacturing layout is a product design consisting of an assembly line. The assembly line process is where we make our bottles, filters, and lids. This layout supports our competitive advantage of quality for our customers, which are one of our core competencies. By utilizing this hybrid process, we are able to produce the Purified bottles, according to our competitive advantages of competing on quality and innovation. Our product is engineered to be of the utmost quality and we believe in doing it right the first time.



Before the Purified bottle and lids could be produced on the assembly line, we had to have plastic injection molds made, which are custom for both the bottle and the lid. The molds are made from chromium steel assembled into a block called the mold base. The molds are placed on a milling machine, and holes are drilled into each base for guide pins that hold the base together when the plastic is injected. The molds are then split into two. Next, the mold is placed on a grinder and the edges of the mold are smoothed. A computer guided tooling machine or CNC slowly machines the base with a copper electrode. Then, a second tooling called an EDM machine uses another electrode to tool the fine areas of the molds. A hole is then drilled for coolant to enter after the plastic is injected into the mold. The Purified lid has two parts. Therefore, there are two molds. The lid parts snap onto one another, and this is done using the same robotic and quality control process as the bottles. The filter production

process is patented proprietary information and cannot be disclosed. As demonstrated by our factory diagram above, the staged work sits waiting to go onto the assembly line. BPA-free polypropylene #5 pellets are mixed with up to 10% recycled polypropylene flakes in the mixer. Since recycled plastics lose their physical properties, recycled content can't exceed 10%. The automated mixer drops these pellets into a plastic injection machine that melts the plastic at 600°F, until it is in liquid form. Then, the machine shoots it into a molded starter form which cools instantly. It then moves into another stage which, heats the plastic again. The next machine is a reheat stretch blow molder. This machine heats the pre-form bottles and stretches them lengthwise and blows in air to make the desired shape for the Purified bottle. Each machine has the capability to make 10,600 bottles per day. However, we currently plan to make only 312 bottles per day with our five employees working eight hours per day. Our output, number of employees, and number of shifts work will increase with our success. Cold water cools and instantly sets the plastic bottles. A conveyor belt transports the bottles to be fitted with the patented filters, which is where the filter assembly line meets the bottle assembly line. After the bottles are fitted with a filter, they continue along the assembly line and our fitted with a cap. Before the bottles are placed into the finished product area, they are labeled with the Purified label. During the entire process, our quality control specialists randomly select bottles and run extensive quality testing on the bottles including verifying dimensions and capacity. In addition, to this quality control process, all employees are empowered at all levels to monitor for quality.

Our company utilizes a variety of JIT or Just in Time concepts throughout our organization. First, our workforce is broadly skilled and very flexible. Since we only have five

employees, it is vital that everyone be cross-trained. In addition, we utilize TPM or total productive maintenance in our facility. This means that all the maintenance to our machines is scheduled. We do not have to shut down operations due to malfunctions in our machinery. Another JIT concept we use is TQM or total quality management. We believe in continuous improvement, quality at the source, and doing things right the first time. All of our employees are empowered and take ownership in the company. Also, we utilize the JIT concept of treating all employees with respect. We are all equals at LRP, Inc., and job titles are meaningless. We value everyone as an important part of our team.

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