



DISEASE DEFENSE

A JA COMPANY

ANNUAL REPORT 2021

GLENOAK HIGH SCHOOL

VOLUNTEER - JUSTIN LEPLEY

TEACHERS - MRS. DEFAYS & MR. NIEPORTE

JUNIOR ACHIEVEMENT OF NORTH CENTRAL OHIO

\$3,855
IN SALES

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ABOUT DISEASE DEFENSE

Executive Summary

At the start of November many of our team members were quarantined. During this time period we could not escape the news of all the problems our society was facing including inequities with social justice, a polarizing impending election, and a global pandemic to say the least. These events motivated us to make a positive change in the world. This is when we developed the Shopping Shield, a washable fabric cover protecting users from the handle of a shopping cart (a surface with 270 times more bacteria than the handle of a public toilet) in an effort to protect the world and the environment.

Our Mission

Protecting people and the environment from germs and their effects.

Our Product: The Shopping Shield

A washable, durable, and stylish fabric cover designed to wrap around the handle of a shopping cart that is designed to keep you safe from germs while keeping the environment safe from waste.



DISEASE DEFENSE



Financial Breakdown

\$3,855

TOTAL SALES

422

UNITS SOLD

79%

PROFIT MARGIN

\$2.09

UNIT COST

\$10

PRICE

\$4.09

UNIT COST
+ OUTSOURCE

BREAK EVEN POINT

We broke even after selling our first 15 Shopping Shields to pay back our initial expenses.

SOCIAL RESPONSIBILITY

We are proud to give back to frontline COVID workers through donating 10% of our profits back to Partners in Health



As you can see from our financial reports, we were over zealous in our production of inventory. We did not properly forecast the market, and are now stuck with \$1,100 of Shopping Shields. Ultimately, we have learned a valuable lesson as this has greatly impacted our bottom line.

As a result, our net profit margin is only 12.6%, and each member will walk away with a share of the profits and \$183/each in inventory. We would have each preferred to have converted the remaining inventory.

Balance Sheet

Assets:	
Cash	698.00
Remaining Inventory	1,100.00
Total Assets	1,798.00
Owner's Equity & Liabilities:	
Net Profit	485.97
Sales Tax Payable	212.03
Value of Remaining Inventory	1,100.00
Total Liabilities & Capital	1,798.00

Income Statement

Revenue:	
Revenue from Sales	3,855.00
Total Revenue	3,855.00
Expenses:	
Production Supplies	1,403.90
Shipping Expense	446.10
JA Loan Interest Expense	30.00
Outsourcing	1,150.00
Bank Fees	58.66
Marketing & Promotional Fees	68.34
Sales Tax	212.03
Total Expenses	3,369.03
Net Profit	485.97



LEADERSHIP & ORGANIZATION



COMPANY CULTURE

Friendly Atmosphere



Monthly Company Dinners



Employee of the Month Program



Disease Defense regularly hosts sales contests, attends events together, and supports and challenges each other to maximize results. Over the course of the year, we went from strangers to good friends and eventually effective coworkers. We are extremely proud that we are able to maintain a fun and enjoyable atmosphere with sacrificing outstanding financial performance.

Competitive  Friendly  Supportive



HR
KATARENA BEUTER



SALES
MIHALIS SKONDRAS



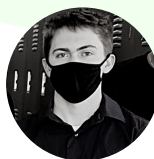
MARKETING
CAMREN LIPKINS



CEO
AEDEN BEGUE



FINANCE
DEVIN KERMUE



SUPPLY CHAIN
JANSON MAYNARD

A Year in Review...

A main priority in my role is to gain the attention of potential customers. That's why I made sure to have a fun, bold logo that stands out and lets people know what our company is about.

- Camren Lipkins

I've always loved to work collaboratively with multiple people at a time. The meshing of minds allows for a very easy atmosphere and flow of ideas. It is rather relaxing working in such an environment.

- Devin Kermue

I quickly learned that supply chain has much more to it than just buying fabric. Every decision I made had an impact on our unit price and our cash which is why I had to communicate closely with finance.

- Janson Maynard

DISEASE DEFENSE





Innovation

Our supply chain manager, Janson Maynard, brought this idea to our attention while we were in quarantine. His grandmother was complaining that shopping cart handles were not being appropriately cleaned, and we came up with this idea to help. We knew that this would be a well-timed product for our current market.

Product Development

When we sat down to design our product, we had a few key elements in mind:

- **Durability** - We use high quality cotton fabric, heavy thread with a strong stitch pattern, and super strong Velcro so that our Shopping Shield can be used over and over.
- **Stylish** - Our shields spanned a wide variety of stylish patterns in order to appeal to a wider range of customers. Also, with a variety of patterns, the customer trend was to purchase our discounted multi 3 pack.
- **Ease of use** - For customers to ultimately adopt our product, they needed to see that it was easy and effortless to use.
- **Environmentally Friendly** - This aligns with our core values. We have seen the large amount of waste due to Covid and personal protection, and added a reusable/washable bag that you transport your Shopping Shield to-and-from the store.

**Gross,
Right?**



**Shopping carts contain 270x more
bacteria than the handle of a
public toilet!**



More Lessons in Innovation

Production Process Specialization

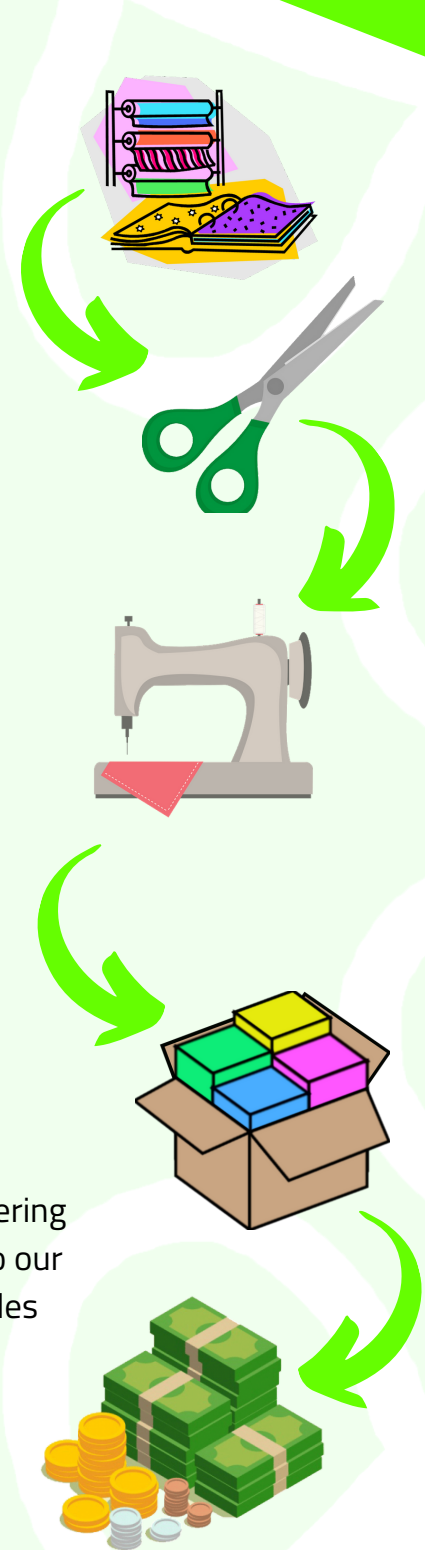
In order to maximize efficiency, we learned quickly that we each needed to learn a specific part of the production process. In the beginning, there were times that 4 company members were trying to cut fabric while 3 members were studying the sewing machine. We fell further and further behind, and were not meeting our goals of a quick turnaround. Because of this, we broke the tasks up by member. Those members really learned the job well, and efficiencies increased with less wasted materials and quicker production timelines.

Outsourcing

It was always our goal to make all Shopping Shields in-house to save on production costs. Because we were new to the world of sewing, there was a steep learning curve and slow production. On top of this, orders were pouring in faster than we could handle them. We brainstormed ideas on what we could do to combat this, and explored the idea of outsourcing. In the end, we were able to connect with 3 local seamstresses who were willing to sew our cut components for \$2/unit. This allowed us to fill orders in a timely manner during times with high demand.

e-Commerce

We developed a Shopify e-Commerce platform to streamline the ordering process. Customers are able to build their order from single shields to our discounted 3-pack. At checkout, shipping costs, product costs and sales tax are calculated and customers can complete their purchase with a major credit card.



Due to Covid, there has been a 600% increase in the amount of hazardous waste in the United States.

~US National Laboratory of Medicine



Marketing



The Canton Repository featured Disease Defense on the front page of their newspaper with an article about our company.



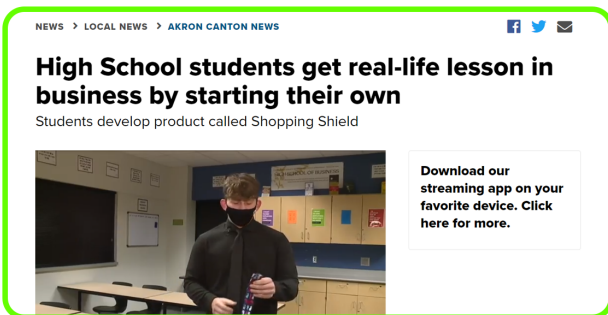
News Channel 5 featured us on their program with a story on Disease Defense. They also played the story after ABC's 'The List'



Social media allowed us to show our story through photos and videos. We used advertisements on several different websites, which ended up working as well.



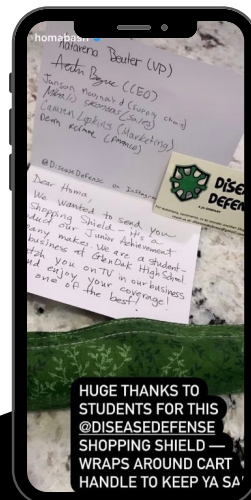
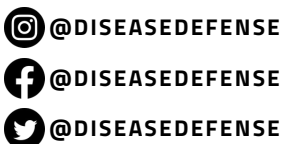
The majority of purchases are women ages 25-70, which falls perfectly into our target market.



One of our most effective marketing strategies was the use of **product ambassadors**. Local TV news celebrities such as Mark Johnson, Homa Bash, and Tracy Carloss all posted pictures of the Shopping Shield along with glowing reviews on their social media.



We have also ran ads on many platforms, such as Instagram, Pinterest, Facebook, and Google. These advertisements ended up providing us with a profit every time they were used. We received over 1,000 impressions and 12 sales!



Sales Breakdown



PUSH MARKETING

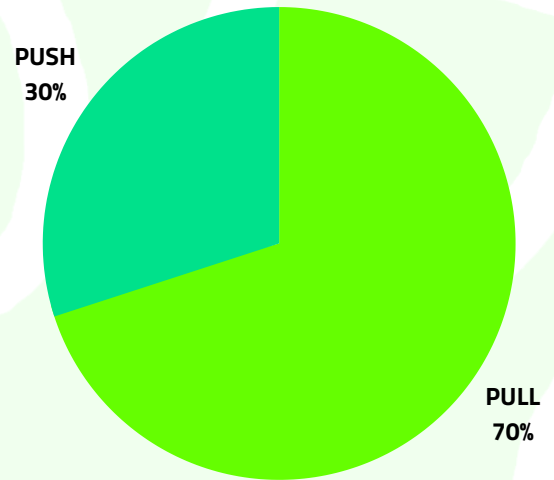
- Face to face sales
- Farmer's Market
- Shopping cart display
- Yoder's Bulk Food Deli
- Lepley & Co.



PULL MARKETING

- The Repository
- Social Media
- Ambassadors
- Advertisements
- Word of mouth

SALES GENERATION

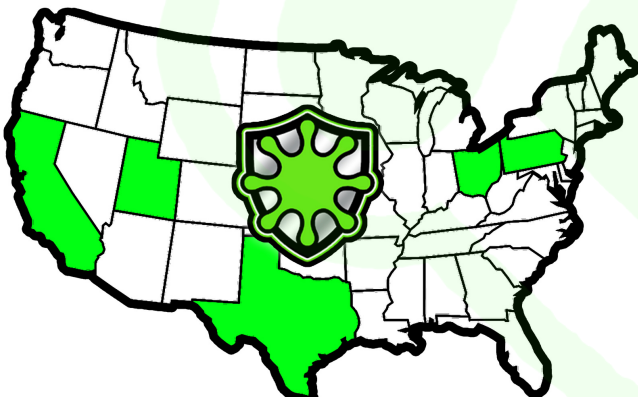


BUSINESS TO BUSINESS

We have a consignment deal with Yoder's Bulk Foods and Deli, which was recently formed. We also have been keeping some of our product in Lepley & Co. on a similar consignment deal.



Shopping Shields have been sold in 5 States!



PRODUCT FEATURES & BENEFITS

- Easy to use
- Reusable & washable
- Environmentally friendly
- Durable material
- Washable bag & instruction card
- Low price
- Provides barrier to germs



AVERAGE PURCHASE

The average Disease Defense customer purchases 2.6 Shopping Shields. This is due to our special promotional pricing of **3 for \$25**



3 Shopping Shields
Disease Defense



Lessons Learned Through Our Experience

Throughout this entire experience, we learned many valuable lessons that have left a lasting impression for us. Running a JA Company has shaped us for the future, and we would like to thank JA for this experience.



**Junior
Achievement**
A Member of JA Worldwide **USA**[®]



Handling Criticism

Although we were super passionate about our product, we quickly found out that not everyone shares the same sentiment. Because of the attitudes surrounding the Covid pandemic, we became the target of some very nasty comments on our social media platform. At first, this was really discouraging to our company. We talked about how to handle it, and decided we had to ignore the negative rhetoric and remain positive. We gained confidence because of our approach.

Copycats Are Everywhere!

Imitation is truly the best form of flattery. However, when it comes down to running a business, it can steal from your bottom line. Getting traction in the local media is great! But, we found that many folks were copying and replicating our shields. Our product remained unique as it was sold in a reusable washing bag. We did not let the issue of the copycat products kill our vibe, and we remained open-minded.

Shoot for the Moon - But Be Practical

We experienced a boom in sales, and therefore brought in some outsourcing labor to help fill orders. However, we did not correctly predict future inventory needs, and overproduced significantly. Unfortunately, we are holding onto 100 shields. We have learned this lesson the hard way; it has cost us money in product and in labor. This has been a valuable lesson learned, and it will definitely shape our thinking.

Mindset Matters!

Finally, we learned that it takes grit and resilience to run a business. This was a very challenging opportunity in many ways. We are all stronger for this experience, and are honestly looking forward to running our own ventures in the future.

