

My name is Ryan Schraffenberger.

I have been in the print industry for about fifteen years now. I greatly enjoy what I do, but I am absolutely tired of the waste that I witness. In 2017 I made a decision that I would start focusing on fixing this issue, and that I would begin by ensuring my own business was consciously reducing waste. I would help our customers reduce their waste, then continue by helping suppliers and competitors reduce their waste as well. It is my desire to help all those in the retail industry reduce their waste.

I do not believe that I am the foremost expert on this subject—but I try really hard. I have had a desire to improve planet Earth since I was a kid. Like most children, I was pretty fascinated by this sphere we float around on, and I am even more fascinated today..



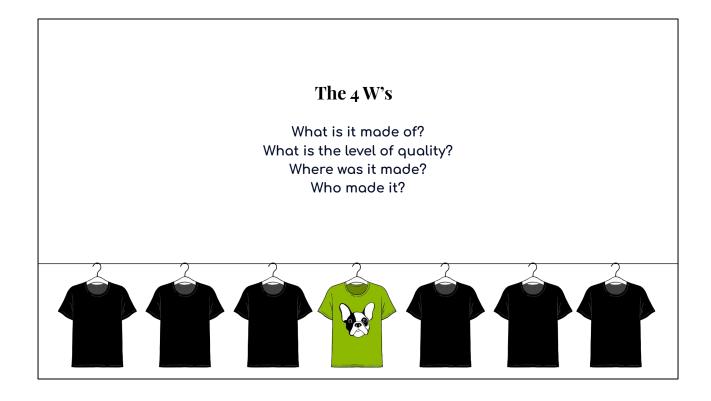
When most people hear the word *sustainability*, they speculate about things like "climate change" or "recycling." Although both of those are major players in sustainability, I am here to tell you that there is much more at play here.

The definition of sustainability is: the ability to continue or be continued for a long time; and the use of natural products and energy in a way that does not harm the environment.

When we think of sustainability in these terms, it tends to move us to observing things a little differently.

I personally prefer this definition from McGill University defines sustainability as meeting our own needs without compromising the ability of future generations to meet their own needs.

If we want to simplify it even more and more specifically for what we are talking about, when I say sustainability, I am referring to products that are built to last.



## The 4 W's

What is it made of? What is the level of quality? Where was it made? Who made it?

When I was in college, I collected a lot of free T-shirts. Since I was there for a couple of extra years after my freshman classmates (a victory lap of sorts), I left with even more free T-shirts than the average student. What did I do with these shirts? I may have worn them a couple times in college, or donated them, or stored them in the back of a drawer, or I may have just simply thrown them in the garbage when I realized I was never going to wear them again. We all have so many T-shirts that we have thrown away, and we will talk more about waste shortly.

My message here is that I want us to focus on quality. I want to print T-shirts that people will actually *want* to wear. I want to print the coffee mug that people reach for first when they make their coffee in the morning. I want to see people carrying the tote bag we printed from ten years ago.

I only want to *purchase* quality products. I only want to *offer* quality products.



## Earth Day, Every Day

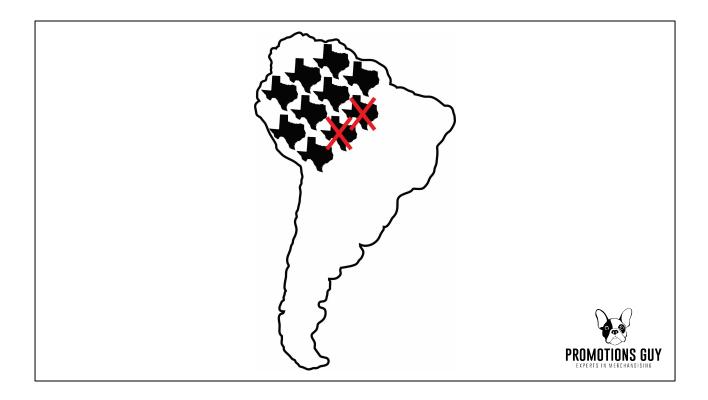


There are days I feel we treat Earth like a cell phone. We tend to think it can be replaced anytime, and we will choose to get upset with the manufacturer if it has any defects or stops working when we treat it poorly. Our Earth is intricate, and we need to understand that. Not only do we need to be thankful for the amazing things it produces and provides for us, we need to show it a lot more respect.

We are a planet full of consumers, perhaps better referred to as "over-consumers." At this moment in midyear 2023, we are overusing the Earth. If we continue with the current trends of today, we immediately require the equivalent of 1.7 Earths to provide the resources we use and to absorb our waste.

Since the advent of agriculture, approximately 12,000 years ago, humans have destroyed 83 percent of all wild mammals and half of all plants.

Do you think Texas is big?



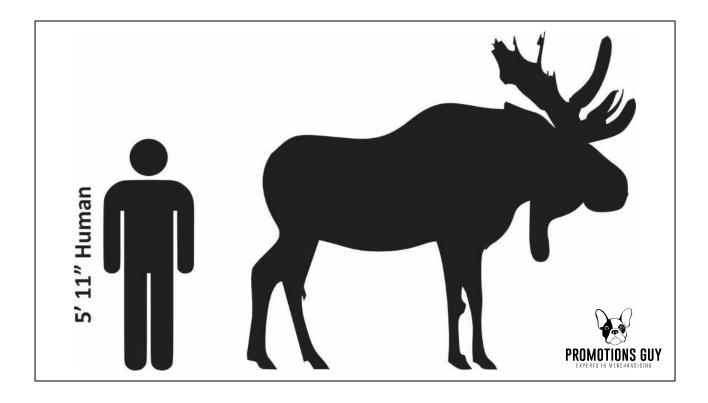
The Amazon rainforest is 2.72 million square miles. To put that in perspective, you could fit Texas in the Amazon 10 times.

My research shows that since 1970 we've destroyed a little more than 20% of the Amazon rainforest.

If we keep up with the analogy, we've destroyed the equivalent of 2 Texases!

Trees are so important they are what's often called "carbon sinks," which means they absorb carbon dioxide (Co2). Why is this important? Well, when carbon dioxide is released into the environment, that is how we warm the planet. Trees are natural carbon sinks, absorb said carbon dioxide, and do not allow the Co2 to pass through into the atmosphere.

Trees are 50 percent carbon, and when they are burned they release all of the stored Co2, which is then emitted into the atmosphere. According to *Scientific American*, "By most accounts, deforestation in tropical rainforests adds more carbon dioxide to the atmosphere than the sum total of cars and trucks on the world's roads.



The average American, according to panaprium.com, discards 70 pounds of clothing every year!<sup>X=10</sup> This is another moment to pause and simply reflect. 70 pounds. Every year! Let's say that you start throwing away clothes when you are 25 (we usually don't have money to spend on new clothes until about then, so we wear our stuff out pretty good) and you stop throwing away clothes at 65. Forty years of throwing away 70 pounds of clothes is a grand total of 2,800 pounds of clothing in the average American's lifetime. That is the approximate weight of twelve full-size refrigerators, 1.4 tons, or the equivalent, in sheer poundage, of three adult moose. Have you ever seen an adult moose? They are massive!





The history of printing started a very long time ago, around 3000 BC. As civilized people we have always been printing. It's often been the only way to pass messages through places, time, and generations of humans. The most important works of all time were, thankfully, printed and preserved, and we get to enjoy those today.

The apparel and promo world hasn't been around since 3000 BC! But it does date back a ways. I'm not going to dig too far, because I do want to keep this interesting.

The printing press was invented in 1436 but I'm pretty sure they were not printing bottle openers to give away at tradeshows.

I believe the promo industry started with the iconic political campaign button that dates all the way back to 1789 when George Washington was President of the United States



The decorated apparel industry is a \$25 billion industry, and I don't think it will slow down. This is equivalent to the promotional product industry, which does about \$21 billion annually.

The promotional products industry takes it on the chin every now and then for being a wasteful industry, and there sure is a lot of truth to the accusation. In late 2018, Fast Company published an article that vastly affected the promo industry. It was an article that brought a lot of unwanted attention at the time and made a lot of typical vendors extremely nervous. It was talked about heavily at a number of the conferences I attend, and people were trying to figure out what they were going to do about it.

The title of the article: "It's Time to Stop Spending Billions on Cheap Conference Swag." As my colleagues were catching their breath and trying to convince their big-spending customers that Fast Company was wrong, I was breathing a sigh of relief. I was excited about this article. It felt like the industry shakeup we needed to cross the chasm to a more sustainable place.

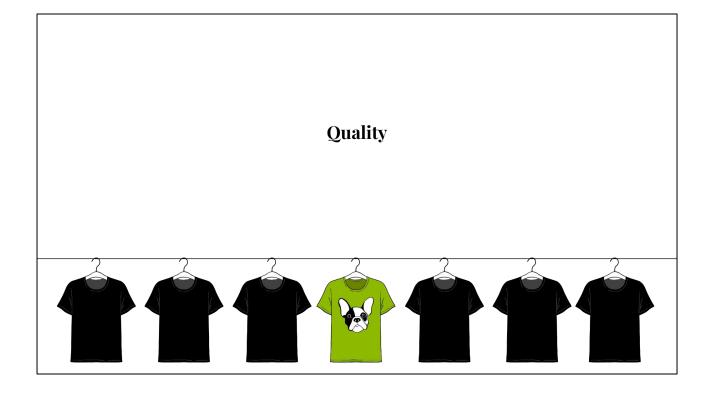
The subtext was: we're facing a full-on environmental crisis. Do you really need another flimsy tote or pen? This was getting all the tchotchke dealers in a real tizzy,

but this was the perfect wakeup call we all needed.

I'll summarize the article here. Elizabeth Segan, Ph.D., begins talking about how she loves a good tote bag, especially if it adorns the logo of one of her favorite businesses. But what about the other ten tote bags that are jammed in the back of her closet from all of the other trade shows? She goes on to talk about how the promotional product industry continues to grow at great rates. This is done while the biggest of the purveyors are fighting for rock bottom pricing and the fastest shipping (which is also bad for the environment). She talks about fast fashion, damaging environmental footprint, and terrible working conditions (we will go much deeper into each of these a bit later). According to the Advertising Specialty Institute (ASI), the promotional industry's primary supply chain is rooted in Chinese factories and has very weak regulations on worker protection and a damaging environmental impact. This definitely rattled ASI and the distributors/suppliers, yet it was a good turning point to start thinking about how we would react to this. Unfortunately, in my opinion, after about a year of most industry professionals focusing on sustainability, the novelty wore off and we were back to the original baseline.

This is what I'm trying to change, through this book and other efforts.

That is a very short background of the industry, but provides a segue into the next, and very important, topic: product quality.



The quality of a product is everything. This is where the rubber meets the road. If you ask me, product quality should be the most important part of the buying decision. This is what is actually behind a sustainable product. Sustainability is about something that will stand the test of time and actually last a while. If we sell garbage products, we are doing everyone involved a disservice.

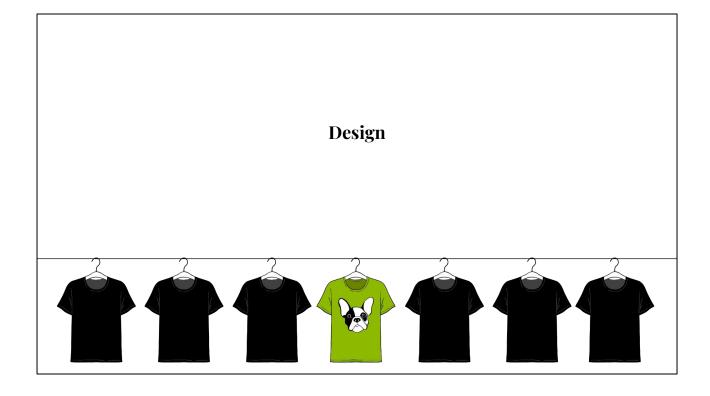
This all stems from businesses and brands wanting to maximize their budget by getting as many products into as many people's hands with the budget that they have. I have been getting a call that pretty much goes like this for years: "I have \$2,500 to spend, and there will be a thousand people attending the trade show. I need uniforms for my team and a table cover and some signage, so that should leave me with about \$500 for a thousand of something. Can you give me some suggestions? Maybe a koozie, lip balm, or a pen? This will have to include shipping as well."

This is where I have a conversation. The point of exhibiting at a trade show is to make a deeper connection with a potential lead. So first things first: let's focus on building relationships with the attendees. Do you think that lip balm is going to do this? Nope. Do you think a pen is going to create a customer for life? Nope. If that 40-cent pen still works when they leave the conference, I can almost guarantee the person you are trying to attract will never use it. I can almost guarantee that they already have a go-to pen that they always use. I then ask them if they want to pick fifty ten-dollar items or, better yet, twenty-five twenty-dollar items. These will be reserved for people you actually want to talk to. The people who you may actually convert, the leads that matter. This will also guarantee that your business is going to be talked about, when the logo is seen on higher-end products. The wonderful thing about this is that now your lead has something they actually want to use! You get to use the same budget, but the value of your lead is far better.

And this reminds me of a funny but very real story about trade shows and lip balm. I was exhibiting at a trade show in Tennessee and there was a guy across from us selling sun care products. He had a fishbowl of "free" lip balm sitting out for people to grab one as they walked by. He walked away to go get something to eat, and I saw a woman shove her whole hand in there and begin trying to take every single one he had in there. She wasn't trying to pull them out one at a time, she was trying to take them all at once. The vendor came back and spooked her, then asked what she was doing. Her arms were flailing; the fishbowl still stuck to her hand as she tried to explain herself. As you know if you've ever been to a trade show, there are always going to be people like that. Those are the exact people who are taking your cheap product (that you paid money to put your logo on) and shoving it in a corner of their house until *Hoarders* comes by to film their next segment.

We need to focus on offering products that are top quality so people only have to purchase them once. This goes down the entire supply chain, and it is equally important to all. Not only in the custom space but with all products, from cars to stickers that people put on their bumpers.

It is always better to sell or give away lower quantities of high-quality products than it is to sell or give away more of a low-quality product. I know you've heard it before, but it really is true here: *less is more*.



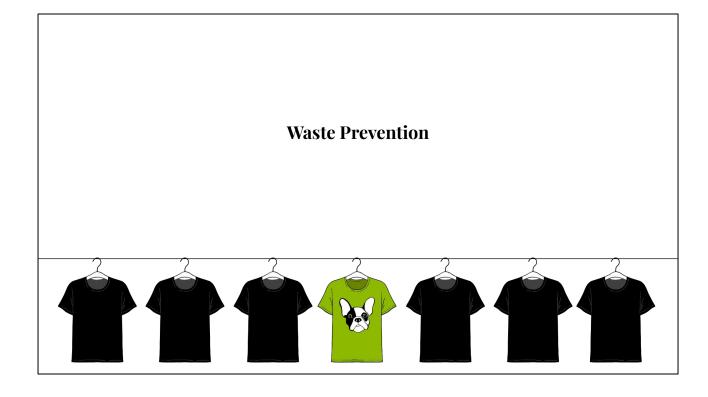
Do you remember the Big Johnson phase? If you don't, I'll refresh. It was and potentially still is a line of apparel with risqué designs and captions. Through my small amount of research I found that they sold \$20 million in 1996; they were booming. Here is what I think the issue is with merchandise like this: I think people believe it's hilarious in the moment, but they will never wear them again when they get home. Another example: you walk by one of those five-dollar T-shirt stores in Key West or New Orleans and have to get that super raunchy matching shirt for the whole group. The design is not something you will be able to wear to work on Monday, or even to the gym for that matter.

On the other hand, if the design is something classic people will want to wear it for years. Such products exist, and it would make a world of difference if we focused on printing things like this. Instead of printing a shirt for Grandma's ninetieth birthday, it might be better to find something else to commemorate that wonderful day.

We have brides trying to order koozies, coasters, and disposable cups with the newlyweds' initials. I've had people ask for laser-etched wine glasses with the date of their wedding to give to all of their guests. Do you think people are going to come

home and start making that their preferred wine glass? I think not. I recommend trying to come up with something different to commemorate the big day, something like a design everyone would like or even applying that money to the open bar.

This is coming from someone in the industry: you just don't need it.

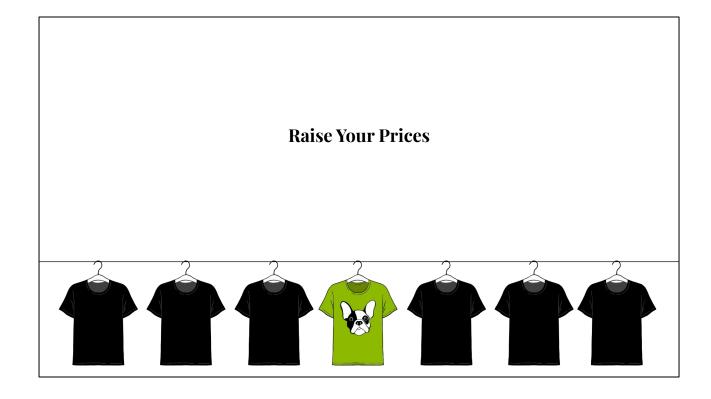


The quality of the imprint is as important as the product. There are two parts involved in print quality: will people use or wear this, and will the product withstand the dishwasher or washer? There are many different print methods out there, but in our industry these are some of the most popular: screen printing, pad printing, full color digital printing, sublimation, laser engraving, heat transfer, and embroidery.

It's also important that we steer a bit of focus toward reducing spoilage. Spoilage is an industry term for mistakes. I think we use it because it makes all the waste sound less damaging. When a mistake is made and the customer cannot use the product, it's a loss for everyone involved. Not just a loss of money for the printer, it's a loss of time for the customer, a loss of material, and an absolute waste to the environment. Much of this can be alleviated by implementing proper proofing techniques and sending physical product samples. The concept of proofing can be a little tricky. In my experience I've found that about 50 percent of people actually look at the proofs they approve. Many just approve them assuming we have done the proofing for them. We do look things over for obvious flaws, but we ask the customer to double-check our work; we are not perfect. We love to send samples; we always want to make sure the

customer is happy with the product before they receive five hundred of them. Our goal is to make sure we don't have to print something twice. It's a cost saver, a time saver—and most importantly, a planet saver.

The actual printing of the design must be of the highest quality as well so it will remain and potentially outlast even the product. Using proper inks and processes can make all the difference here. We need to make sure that the item can handle being put in a dishwasher, thrown in the dryer a hundred times, and left in your car trunk for two years. If the design wears out, people will likely stop wearing or using the product; it's that simple. It also goes without being said, but I'll say it anyway: if your logo or design is no longer on the product, what good is it doing for you?



Do you own or operate a gift or retail shop? If you do, then you know quality stuff is not cheap. If you've never heard of the triple constraint triangle, let me explain. It says this: "You can have it fast, you can have it good, you can have it cheap. Pick two." This is an old saying that has been passed around, but I really don't care for it. I would venture to guess that most businesses believe the saying is true, and they probably stand by it. Heck, I've even heard myself say it before.

If we create something cheap or fast, we are likely skipping important steps or looking past something that needs to be addressed and I believe that is going to be a less than stellar product. We should be focused on making products that are great!

I deal with retail outfits all over the country, and there is one thing that everyone has in common: they are afraid to raise prices. I'm no different. I'm always uncomfortable when I have to address a price increase. But the reality is that the end user cares a lot less than we think. The consumer wants a better product, something they can use or something they can gift to someone else that they can be proud of or allows them to remember the occasion. If you have a nice product that people want, they will pay money for it.

Let's use a stainless steel water bottle for this example. A guest comes into your store and would like to purchase a stainless steel water bottle with your logo on it to remember the trip or to have something to refill while he/she is visiting. They are most likely buying it because they actually *want* your logo on it. Your logo *increases* the value of the product. They would probably be far less interested in it if it was blank. To this guest, it doesn't matter if that bottle is ten dollars or forty dollars; they are still going to buy it. If you zoom out of this specific transaction and think about inventory and sales, you now only have to sell one bottle instead of four and you can accomplish the same goal. By doing this we've kept more products out of the landfill, and this also helps because the people who are actually going to use this are the people who are doing the purchasing. If it's cheap, people will buy it because it's cheap and throw it away when they get home. There is a time and a place for products like that, but I'm not going to get into that right now.

We often forget that price and value are not the same thing. Price is what you are willing to pay or what you end up paying for the item; value is a much more theoretical exercise about what you've received. Put more simply, price is what you pay and value is what you get. The price is much less relevant than the value. People want to feel like they received a great deal no matter what the price is.

Steve Jobs used to say that no one ever bought a Mac based on price. An Apple computer's true value becomes evident only when you factor in the lower requirements for support and training. Steve seldom fought on price, but he won wars because of value. Apple has found so much success in being a leader in value. It has never been, and likely never will be, the least expensive option. But when you think of top-of-the-line products, the name Apple is pretty synonymous with that idea.

This may not feel like it applies to us, but it absolutely does. We have a product people want; otherwise we wouldn't have a store to sell things. Customers come in and browse. Some will buy, some will walk out empty-handed. We need to sell value instead of price. Value is already added if you have a fun location, a good and pleasant atmosphere and you're somewhere that people want to be. Our shoppers need to leave with smiles on their faces because they feel they just got a great deal. We all win in this scenario. And the best part is: we can sell less and make the same

margins.

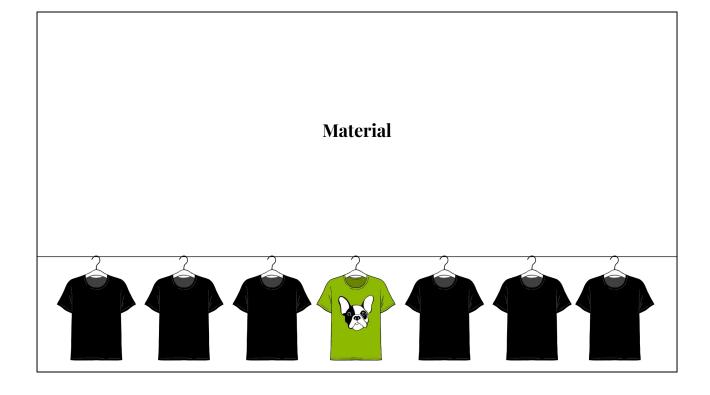
I also believe in many cases, people don't think highly enough of their brand. If it's logoed, people want it. I've seen this happen a lot. If you feel like your brand is not desired, let me know and I can try and help you.

## Life of a shirt

The topic of the T-shirt may be boring to some, but the making of tees is something I've been involved with for years. The simple T-shirt is a huge space for all of us to make a positive impact, and why not be more comfortable while we're at it? For the next few minutes we will discuss how the T-shirt—and most apparel, for that matter—is made. This includes the actual sewing of the garment, the labor conditions involved in the manufacturing, the materials that are grown, and how they are grown.

This can be applied to so many different products, we will just use the t-shirt because we all have them...and it's easiest.

To understand more about how a T-shirt is made, let's look at the life cycle of the typical tee. I will make this specific to our industry as we are decorating and reselling the garment. I have broken this down into eight stages: material, production, shipping, decoration, shipping, sell, use, and disposal. This is a complicated process that takes a lot of hands and many steps to complete. It is also done all over the world, which adds still more complications. With all that in mind, let's get into each of these stages in more detail.



To create a T-shirt, hat, sweatshirt, or just about anything, we need material. The material differs between products, but the material is where everything starts. When it comes to a standard T-shirt, to grow and process the cotton for one shirt, it takes an alarming 256 gallons of water. This is one shirt! Need I remind us: there are water shortages and droughts all over the world. Let's put this into an average bulk order of T-shirts, usually about 144 pieces. If we create 144 tees, that will require 36,864 gallons of water to grow and process the cotton.

There are a lot of chemicals that are used to dye apparel as well. In 2006, Chinese government investigators went to visit the Fuan textile mill in South China. The factory is owned by Fountain Set, the largest manufacturer of cotton knit T-shirt fabric in the world. The authorities paid a visit because farmers nearby had protested that the river flowing downstream from the factory was dark red. (In a joke that has been repeated to me many times, you can tell which colors are coming into fashion by looking at the rivers in southern China). The investigators found a hole in a concrete wall. When they crawled through, they found a concealed pipe that was dumping 22,000 tons of dye water per day directly into the river. Though the factory had a wastewater

treatment system, bypassing the system and dumping directly into the river shaved costs in their highly competitive business. In another factory a few miles west, employees took boats into the river and dumped dye neutralizer in an attempt to turn the water from red back to its brackish brown. The neutralizer was even more toxic than the dye, and dead fish bobbed to the surface. Local farmers were afraid to water their crops. This is obviously a major problem, and another reason why we must keep an eye on what our suppliers are doing down the chain.

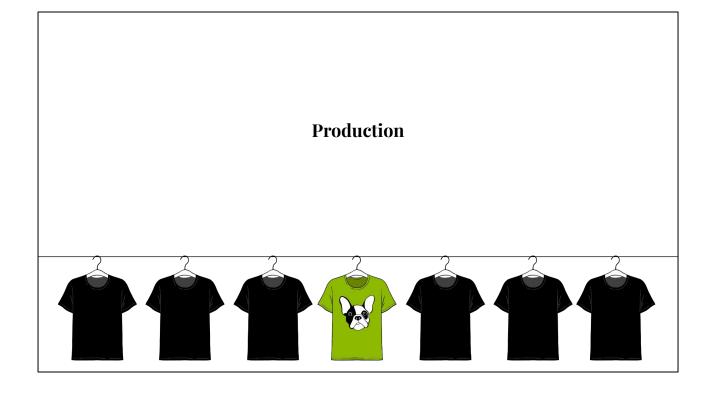
The good news is there is a better way. There are recycled options, but as I have been preaching thus far, recycled isn't *always* the answer; sometimes it's just better material that we need. We focus on using shirts made of organic cotton. Organic cotton avoids chemical fertilizer and pesticides and keeps consumers and farmers healthier.

There are many sustainable options when it comes to apparel materials; one of those is TENCEL. TENCEL is extremely soft, durable, and has moisture wicking capabilities.

Another wonderful and viable material is Modal. Modal is known for its stretchiness, it's also harvested from beech trees, which require very little water to grow.

There are so many different materials that can be used to make a T-shirt, but the second-most common is probably polyester. Polyester is durable, wrinkle- and shrinkage-resistant, and dries quickly. However, producing polyester carries a very large carbon footprint. According to estimates, 262 percent more CO2 is emitted to produce a single polyester T-shirt than a cotton shirt. But substituting polyester with recycled polyester offers up to a 90 percent reduction of toxic substances, a 60 percent reduction in energy usage, and a 40 percent dip in emissions.

The vast majority of the T-shirts we produce are made of organic cotton, TENCEL, Modal, and recycled polyester. These are all extremely sustainable materials, and we are proud to produce these. Our factories also recycle floor scraps. Here are some simple calculations to show some stats on using these materials in a tri-blend shirt. If we did an average order of 144 pieces, you'd save 10,994 gallons of water, 103 kg of CO2, and 31 pounds of recycled plastic. That is huge, and all that is done by selecting a better shirt. We can make such a difference from a wholesale perspective.

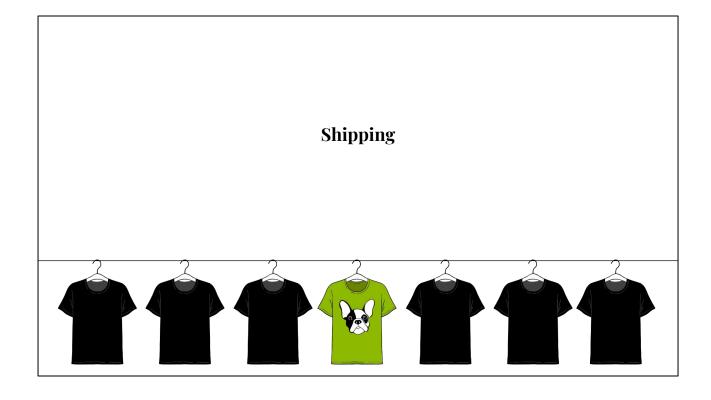


It would likely come as no surprise that most everything made today is made outside of the United States. Still, some of the numbers are especially surprising. Up until the late 1970s the United States produced at least 70 percent of the apparel that Americans purchased. As late as 1991, 56.2 percent of all clothes purchased in the United States were American made. By 2012, it was down to 2.5 percent. In 40 years, we went from producing 70% to 2.5%.

Most people probably would NOT believe how many people work in fashion around the world. Fashion employs one out of six people around the globe, making it the most labor-intensive industry on the planet. More than agriculture, more than defense. But get ready for this shocker: fewer than 2 percent of them earn a living wage. It's disappointing that we live in a world where people cannot earn a living wage. If you've ever been to a developing country, you know how heart-wrenching this fact really is. People don't stand a chance when it comes to corporations creating things for cheap.

There are many corporations that have taken this to the next level in various parts of the world. In some shadowy pockets of Bangladesh and other special economic zones, people are hired for 11 hours a day and are paid 10 to 13 cents per hour. Many of these places are using child labor as well. In Port-Au-Prince, Haiti, there are factories creating clothing for Disney. Many of these "employees" are paid \$15 per week and are under grueling pressure and sexual harassment. The ironic thing is that these employees could not even afford to *buy* a Disney shirt, let alone visit one of the parks. When you are working under those conditions, you are desperate. Any job is better than nothing, so they do everything they can to keep the work.

We can save a lot of material during the cutting and sewing process as well. Recycled yarns are made of pre-consumer waste, the industrial waste from manufacturing garments, meaning all the leftover pieces of fabric from the cutting process. The waste is sorted by color and re-spun into yarn. The process significantly reduces environmental impact by reducing the use of virgin material as well as the need for dye processes, thus saving energy and water use. This is an extremely important process that must become more commonplace. It's an extra step that many manufacturing plants would not be willing to add—but it does make a difference.

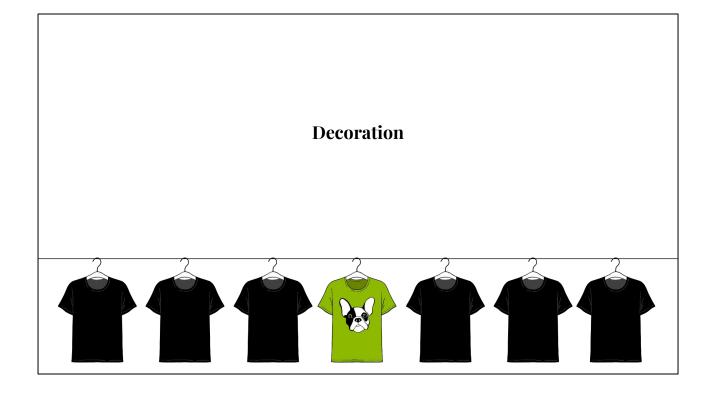


The shipping process is huge. We have to ship materials to sew, we have to ship sewn materials, and we have to ship the finished product, and then the wholesalers often ship to the end user.

Each "shirt" can be shipped at least four times.

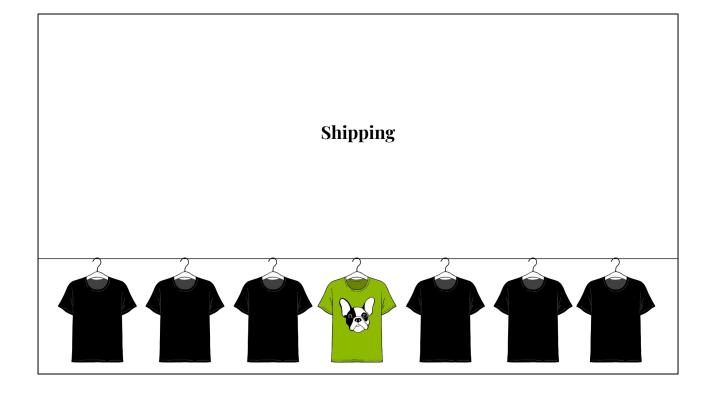
There are ways to reduce shipping, but this harsh reality is unfortunately the nature of the beast. In this phase of shipping we are shipping materials to be cut and sewn and then shipped for decoration.

We could definitely improve this by sourcing more pieces of the puzzle as locally as possible. When we source blank apparel for printing, we try to ship it as close as possible. This benefits everyone: it's less expensive, uses less resources, and the customer receives the product quicker. This is, however, and unfortunately, not always the case since there are warehouses all over the US. We all try to do better, but keeping things like jackets up north and tank tops down south is a good start. Shipping is unfortunately just a harsh reality of the market, but we should always try to do better.



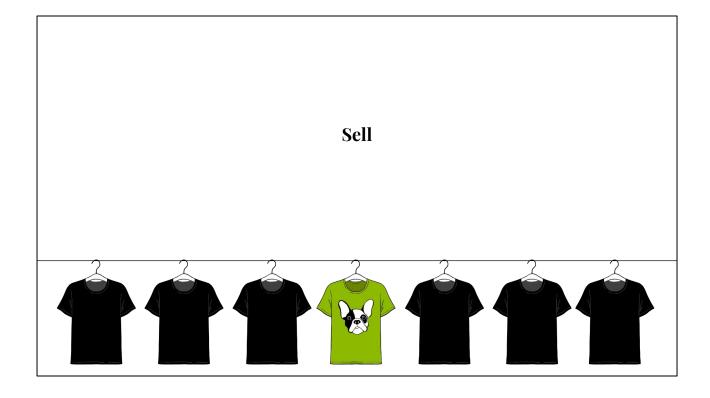
When we think about decoration, this includes all types and is not limited to screen printing. This could be embroidery, sublimation, 4-color process, and more. For today, we will talk more in depth about screen printing.

- We can use algae inks; these inks were created by Living Ink. This is a very sustainable option, but it also has its limitations as it is only offered in black at the moment. This can also be used in PC printers, which is great.
- We can print on items that are biodegradable since you can't recycle certain types of printed cardboard.
- We can use water-based inks, and this really helps with reclaiming screens and the waste involved in the process.
- We focus on doing more press checks to make sure material is printed right the first time.
- We use misprinted shirts for cleaning and testing new prints. The fully covered test shirts are cut up into rags. Then they can be sent to a textile recycler.
- We focus on reusing and not buying anything new if they don't have to.



This is not a typo. We ship again. This is a short section, but it's simple. When we ship to our B2B customers, we focus on getting them their product from the closest possible option. We have decorator friends all over the US, and if our warehouse isn't the closest or most convenient, we will outsource. Sourcing the job more locally gives us the opportunity to save everyone money and time all while helping with reducing environmental impact.

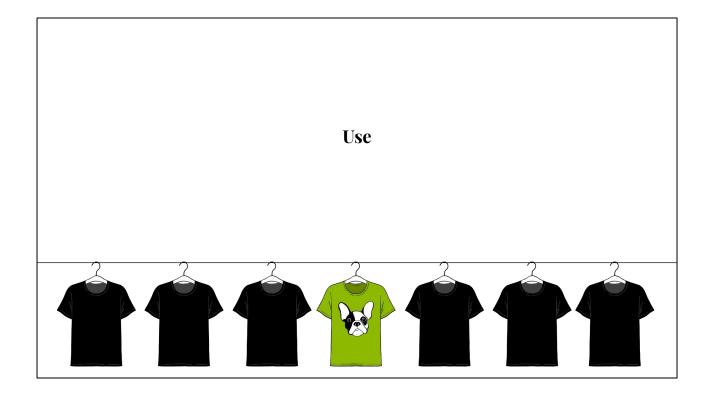
One of the biggest ways we reduce our freight impact is making sure we get the job approved and completed on time. This is one of my biggest pet peeves, and it is often completely avoidable. Shipping via air is not only expensive but it is terrible for the environment. We will follow up and hound our customers if we know their event or in-hands date is starting to cut it close.



This is where the retail operation gets involved. This could be an entire retail store, a gift shop at an aquarium, or it could be the handful of products you keep behind the bar to sell to visiting customers. There are a lot of ways to sell a product, but some are more environmentally friendly than others.

As I've preached in this book, focusing on quality products is the most important thing you can do as someone who orders products for retail. If you order quality products, you've successfully fought more than half the battle. With ordering quality products, it's just as important to order the *right* products. You want to make sure you order things people *actually want*. We want to make sure products are moving; stuff sitting on a shelf is a waste of space, money, and resources, and no one wins.

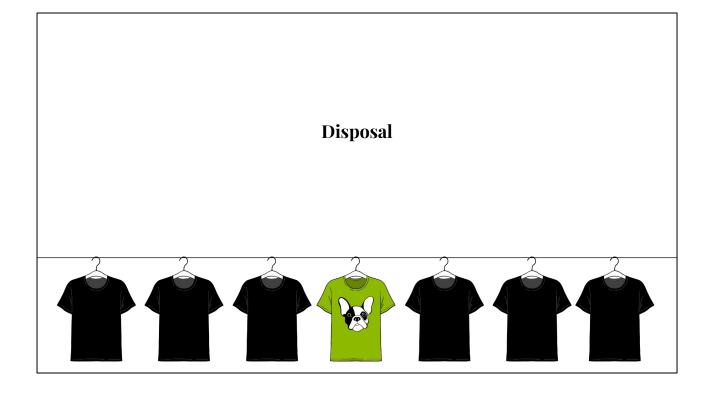
Something I've seen through my years is ordering the wrong sizes or quantities; this can add to waste as well. For example, you likely don't need more XXL shirts than mediums for a local marathon. There are many ways that we can do better when ordering and selling products, so let's give it a shot. We need to think well and do some research before ordering so we can avoid having overages that are wasted.



The next part of the life of a T-shirt is the actual use. The consumer phase of the T-shirt's life accounts for an even greater share of environmental impact.

The biggest wear on apparel is heat. If you're able, hang dry a T-shirt or wear it more than once before washing it, those things are great choices. I don't know when our culture started washing clothes after each wear, but I promise you, it's not necessary, and it's incredibly wasteful. If you wash your clothes every day you are wasting water, money, and time . Try wearing it a second time and see how it feels. If it doesn't feel good, it's likely not a quality product. You also need to remember that not all T-shirts are made the same.

As I've said before, we can make a major difference by buying less. I know this is weird coming from someone who makes a living off of selling more, but it's truth. According to a Greenpeace analysis published in 2015, the average person today is buying 60 percent more in garments than she or he did in 2000, and that person is keeping them for half as long. This goes to show that we use so much more today and get bored of something sooner than we used to. I know a big factor is access. We have access to everything and can make a whimsical purchase easily. We can be a better user of apparel if we put in a little effort.



The last stop: the disposal of the T-shirt is so important but often overlooked. Only 15 percent of used clothing in the US is recycled; the rest winds up in landfills—more than 5 percent of all the municipal waste generated annually. The authors of the Greenpeace report estimate that as much as 95 percent of all clothes thrown out could be reworn, reused, or recycled. Before you throw something in the garbage, give it another chance.

In America, we throw away so much apparel. Almost none of it is recycled or resold; most of it winds up in a landfill. Most people don't think of what happens next: garments made from oil-based synthetic fibers can take up to two hundred years to decompose! And sadly, donating clothes to Goodwill or another charity won't help much. Many "resale" garments are exported to developing nations, where only 30 percent are resold due to poor quality. The remainder are reprocessed into cheap yarn or tossed out as waste. Recently a number of nations have begun to impose restrictions on imported used clothing, including outright bans. I recommend researching local places where you can drop off old clothing. If it's unwearable and Salvation Army is not interested in it, you can leave it with a textile recycling operation and it may be able to be reused. Many municipalities have textile recycling options. If you Google it, you will find nationwide results as well.

## <image>

Now that we've somewhat wrapped our mind around the life of a T-shirt, let's dig into the chemicals that go into the making of this shirt. So I originally thought that cotton research would be the equivalent of doing my taxes, but I learned quite quickly that it's more like parasailing. The cotton industry is gigantic, and the potential environmental impacts are vast. We're going to start by discussing the chemicals and pesticides that are usually used in the creation of the average cotton T-shirt.

Cotton is grown from seeds, and it generally takes about six months before you can start harvesting. There are a lot of potential issues that can come up before harvesting, but after harvesting the product is sent through a gin. If you are a sustainable cotton farmer the gin will separate everything that can be used. If the cotton is organic, the seed goes to organic dairies for feed. Then there is the waste, which is dirty short fibers that go into mote bales. These usually go into things like mattresses. After this, the cotton farmer will end up with the plain material and dirt that is typically taken back and spread on the fields as fertilizer. This can also be used as feed if absolutely necessary.

All of that is the simple explanation. Now there are a lot of different aspects that

complicate all of this. After multiple "off the record" conversations with cotton farmers around the US, I learned that government regulations and giant corporations are the biggest threat to the domestic cotton industry. There are monster corporations that eat up the smaller outfits and have made this into their own version of the mob.

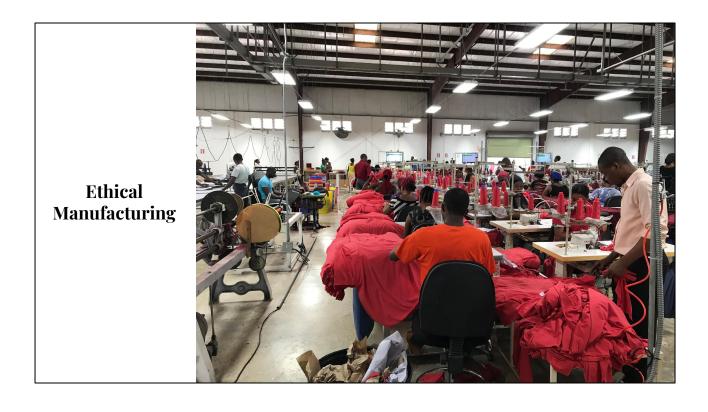
Today, of course, we have GMOs (Genetically Modified Organisms), and since the advent of GMOs we have the ability to spray herbicides over the entire crop and not kill that crop. Basically, herbicides are sprayed over the entire crop three to six times a year. Before GMOs you could only spray the weed because you would kill the cotton, and that was very time-consuming. There has been a tremendous increase in the use of herbicides with GMO seeds.

There are only a handful of companies that sell the seed needed for cotton, and the chemicals, and they are taking the bulk of the profit out of the work. When using GMOs, the user is required to buy new seed every year. The big seed companies provide 95 percent of the seeds, and they will no longer sell non-GMO seed. In the past, farmers were able to catch and reuse their seed, and this saved them a lot of money and, in turn, saved everyone down the line more money. The smaller companies were selling normal seed (non-GMO) and the bigger seed companies

bought up all the smaller companies so they could convert to GMO seed only.

GMO farming is very expensive. At the moment, GMO seed is around \$400 per bag, and the limited amount of non-GMO seed is around \$100 a bag. If you were able to catch your own seed it would be about \$50 a bag. Most fertilizer has tripled in price, and most chemicals have doubled. Really, every part of the cost of farming is way up.

We need to pay attention to how things are made if we want to make a sustainable difference.



People are too important to ignore. There are so many people around the world working under absolutely terrible conditions. Not only should we feel compassion for those people and do everything we can to support them and change laws, we need to do our part as buyers as well. We must take time to research and make sure we're doing the right thing and ordering our products from the right people—manufacturers who care about people.

I personally do not think there is a more important aspect of responsible retail; it has to be people.

Now a story from 2003 that you may remember. I don't want to name a specific brand or brands but here is an example of the working conditions.

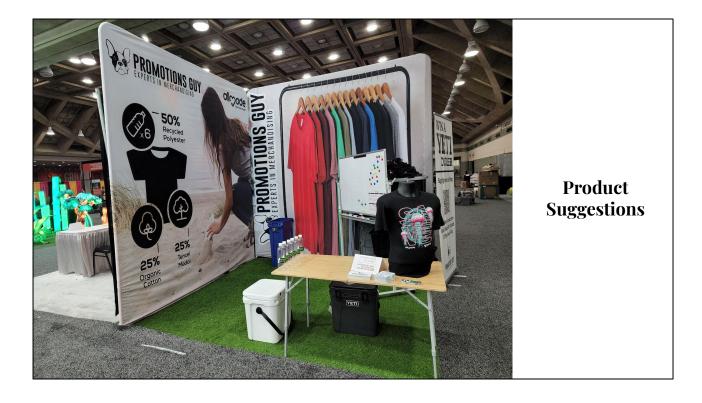
Official hours were 7 am to 4:45 pm—at 75 to 98 cents per hour—but there was *mandatory* unpaid overtime. The shirts retailed for forty dollars apiece at American department stores such as Bloomingdale's. The factory produced more than a thousand each day.

Just one shirt would pay an employees wage for a week.

When testifying in court, one worker said: Supervisors would "stand over us shouting and cursing at us to go faster [and calling] us filthy names," she continued. The temperature rose so high workers were "sweating all day." Fabric fibers and dust turned their hair "white or red or whatever the color of the shirts we are working on." The drinking water reportedly contained fecal matter. Workers were forbidden to speak. They could only use the restroom once in the morning and once in the afternoon, and before entering, they were searched. Normally, there was no toilet paper or soap. Women were subjected to pregnancy tests; if one came back positive, that woman would be fired. All were frisked upon entering the factory each day, and anything found, including candy or lipstick, was confiscated. They were patted down again when they punched out at night.

After the public caught wind of this, changes were made. The changes were significant, but the pay remained hopelessly low. "Really, you work just to eat. It's impossible to save. You can't buy anything. It's just to survive," Gonzalez told the Senate subcommittee. "I'm no better off than I was two or three years ago. We are in a trap."

The statistics speak for themselves regarding ethical manufacturing. There is a lot wrong with the apparel industry, but we cannot argue that it also has been a great engine for economic development. It offers women the opportunity to work and control the finances for their families. This is great because in many instances women do not even have the opportunity to work, let alone control the fate of their families. When women have the ability to control finances, this improves the community, and that reality can be profound in bringing people out of poverty.



I'd be crazy to offer up all of that information and not give you some suggestions. First, I recommend that you do your own research as much as possible, but if you're strapped for time and would like some ideas to run with, I'll deliver some here. If you need additional suggestions or would like to hear about something different, don't hesitate to reach out. As you know, we are all about high-quality products that you and your customers will love and use for many years to come.

So let's start with this: we need to make sure we are paying attention to the materials used to make the stuff we regularly purchase. This goes for everything from T-shirts to signage in the store. As you've learned fairly extensively, most things can be created better. One opportunity we don't often think about is signage. When ordering signage, make sure it is not made of PVC (polyvinyl chloride), which is one of the most common thermoplastic polymers in the world. Not only is this product bad for the environment, it's dangerous for our health too. It can be found in all kinds of products, so be conscious of it when you're placing orders.

Most people have heard of BPA (Bisphenol A) and the dangers surrounding it. I imagine most of this is blown out of proportion, but why not be on the safe side? It's

an easy thing to avoid using when making products. In our industry, this is most commonly found in water bottles, so just make sure it's BPA free and you're good to go!

I'd suggest, obviously, using our Allmade T-shirts since they are made responsibly from recycled plastic, organic cotton, and sewn under awesome conditions.

If you have success in plush sales, there are animals made of recycled plastic, and I highly recommend looking into this. Why not spend a little more for a better product? People will still buy them.

If you are a shop that uses bags, I recommend a nice reusable tote bag—even if this seems obvious, allow me to say it. But, if you must, there are now paper and plastic bags that are biodegradable.

If you're someone who hands out business cards or places hang tags on your stuff, I'd recommend using seed cards. These are cards that can be planted to grow various types of plants, primarily wildflowers.

For promo purposes, I'm a firm believer that drinkware is one of the most popular items out there at the moment. I will always recommend water bottles and tumblers as a great promotional item and an even better retail item.

Any products that serve multiple purposes are also great. Any combo-type products are good for everyone as well. As I've said previously, I love quality products, so no matter what you are looking for, just make sure the quality is there. If you are in charge of purchasing, don't be afraid to ask for samples; I love providing samples. I want everyone to be on the same page so we know what we are getting in the end, and that there are no surprises. If you can find products that are circular, that is a win; anything that can be reused again and again will almost always be a sustainable option.

