

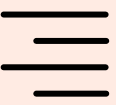
How to combine physical and digital fashion



**B**

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# TRANSPARENT

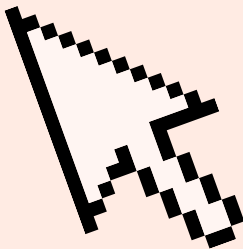


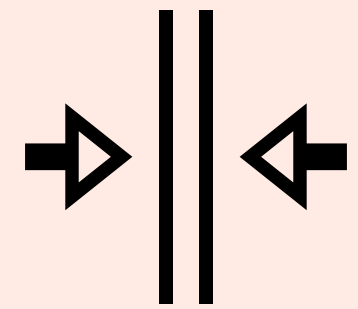
Figure 1: Author's own image and editing



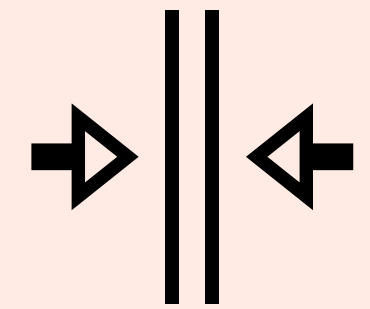
# THE PROBLEM



**COMPANIES ARE NOT TRANSPARENT  
ENOUGH WITH THEIR  
SUSTAINABILITY AND ETHICAL  
PRACTICES (MARSHALL, 2021)**



# NARROWING THE PROBLEM



Originally I did my IBM brief around the concepts of **sustainability**. However, sustainability covers quite a large area and can be quite hard to prove, with brands wrongly claiming sustainable practices (Truth In Advertising, 2022).

I then decided to narrow my focus on the issue of **transparency**, because without transparency true sustainability and ethical practices cannot be proven (Association of MBAs, 2021). My proposed company focuses on how to merge fashion with tech to provide transparency.



I started off with the ideas from my brief last semester.



I then began to conduct secondary and primary research in order to refine my ideas and conceptualize my brand.



I then looked into the business aspect of the brand.



Now that I had the concepts together I needed to work on branding, including getting a logo and conducting a photoshoot for clothing images.



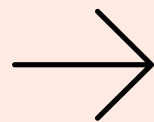
I finalized my ideas by putting all of the concepts together in a mock video outlining what the proposed purchasing process may be (Appendix A). This video utilized all of the above aspects together.

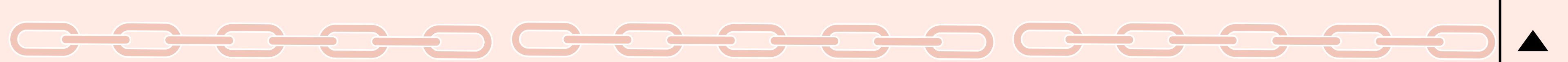




# USING BLOCKCHAINS IN FASHION

We can provide full transparency of the clothing creation process through the use of Blockchains, with each step of the creation process being uploaded and logged onto the blockchain for the owner to view and follow.





# Why Blockchains?

Although a database could essentially do the same functions as a blockchain, blockchains are more trustworthy and transparent because whatever is uploaded to the blockchain CANNOT be deleted or changed, unlike databases (Sharma, 2018). Blockchains are more trustworthy than databases and help prevent against greenwashing. Since they are also decentralized that will give each employee access to the blockchains in order to post their updates, and could open a channel of communication between the consumer and employees (101 Blockchains, 2020)

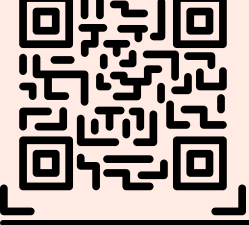




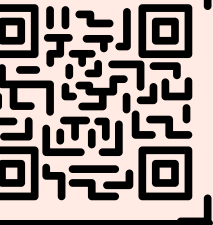
**Figure 2:** Author's own image and editing

# THEORETICAL COMPANY : TRANSPARENT

Transparent would be a clothing company that would merge the digital and fashion worlds together by providing full transparency of the creation process to the user through the use of blockchains.



# HOW?



In order to reduce waste, the clothing itself will be made-to-order, so the creation process does not start until the initial purchase is made. This purchase would have to be made on an online website or app. After the purchase the consumer would be given access to their unique blockchain. A special QR code can be made for each item, which will lead to the blockchain highlighting the item's creation process. Each step of the creation process of the consumer's unique garment will be uploaded onto the blockchain as it happens. This will reduce unnecessary waste as well as give the consumer the chance to follow along the entire creation process digitally through the blockchain, thus being as transparent as possible.



**Figure 3:** Author's own image and editing

Purchase  
of  
clothing



Creation  
of  
blockchain



Each step of the  
clothing  
creation process  
becomes logged  
onto blockchain



QR Code gives  
owner full access  
to follow  
creation of  
clothing on  
blockchain



Customer receives  
physical product  
with QR code on  
it that leads to  
the blockchain



Visual QR code  
can be scanned  
by anyone to  
show the  
creation process  
on the  
blockchain

\*The theoretical  
purchase  
process can be  
seen in Appendix  
A.



# INSPIRATATION



**Figure 4:** Image from <https://ifttt.com/explore/pizza-party-dominos-is-on-ifttt>

One company that does a similar tracking idea is the pizza company Domino's. They show you the process and timing of your pizza being cooked and delivered through visuals on a website. This helped inspire the idea of using this for clothing, although I would like Transparent's version to be much more in depth, with actual photo and video check ins of the creation process. Interactive elements could help keep the user more interested as well.

# QR CODES

Each consumer will receive a unique QR code that will lead them to their digital blockchain. This is how they can look back at each step of the creation process of their garment, and in the customization options the consumer can choose if they want their QR code to be visible on their final garment. Even post creation of the garment the QR code will act as a proof of the sustainability and ethics of the garment's creation.

Figure 6: author's own image, mock-up of Transparent jeans featuring the QR code

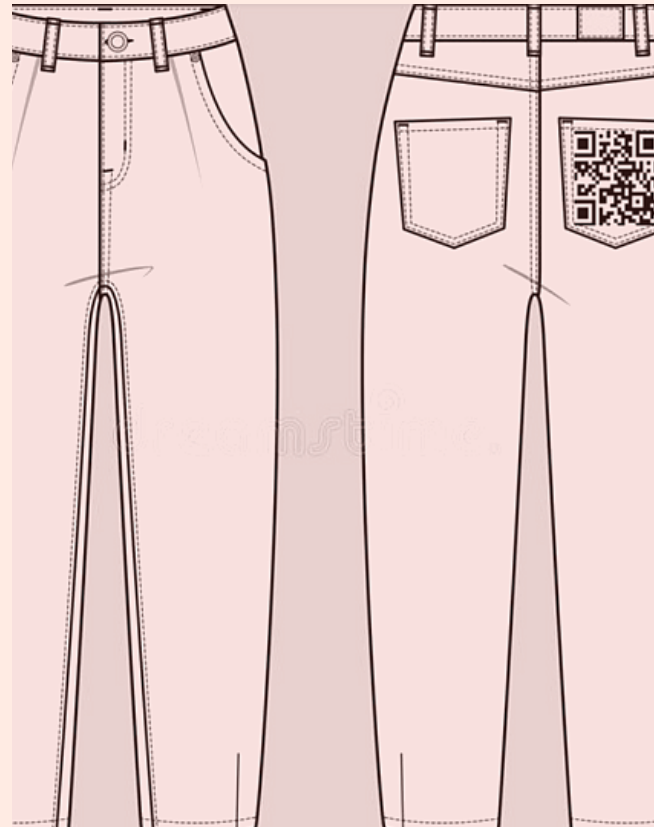


Figure 5: Author's own image and editing



# Mining Concerns

One concern about using blockchains is that the traditional blockchain uses "mining" which is essentially a computer solving complex math problems for hours, thus harmful for the environment (Hong, 2022). This method is known as "Proof of Work". However, Blockchains can be made and utilized without mining through the "Proof of Stake" method, which is more environmentally friendly and the method I would want our brand to utilize (Meijer, 2022).



Figure 7: Author's screenshot from the Nike design lab

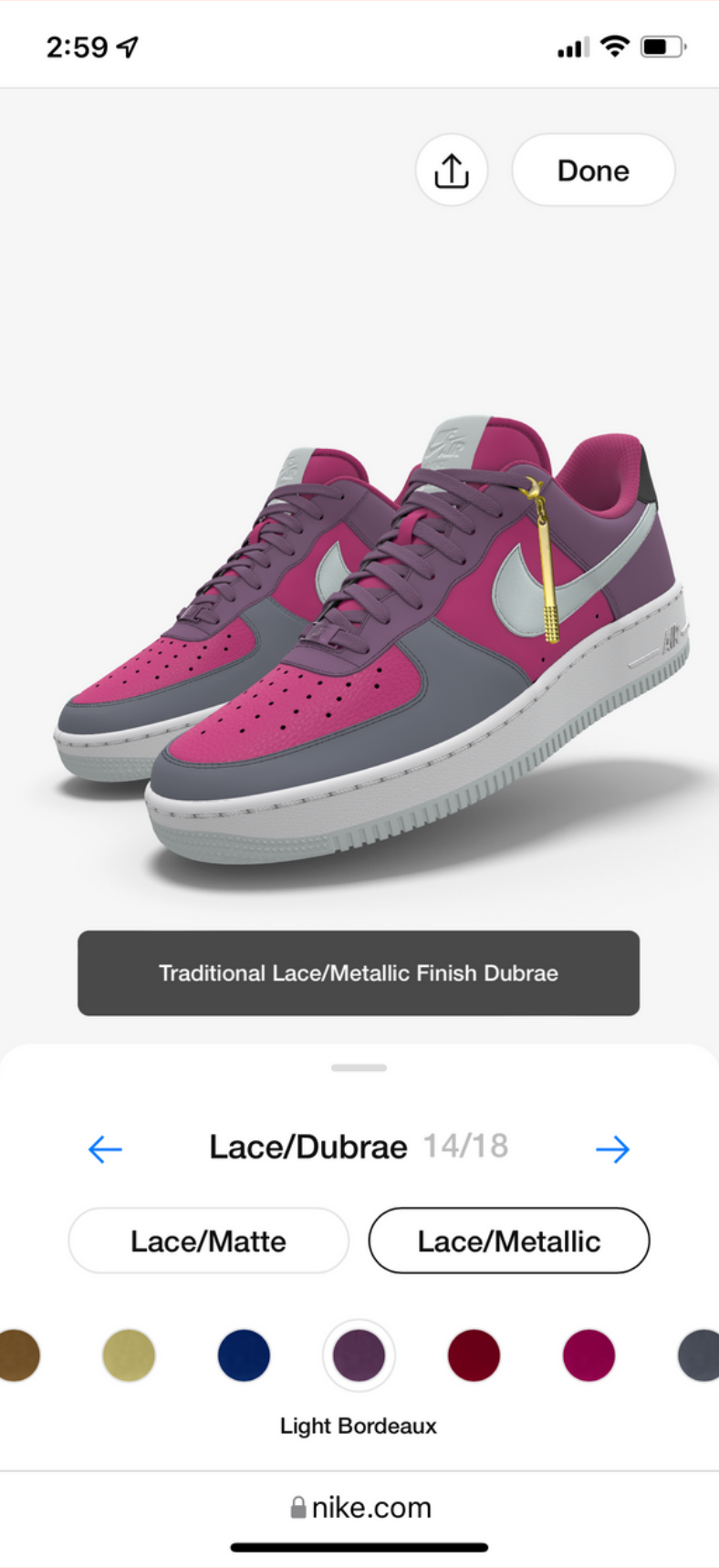
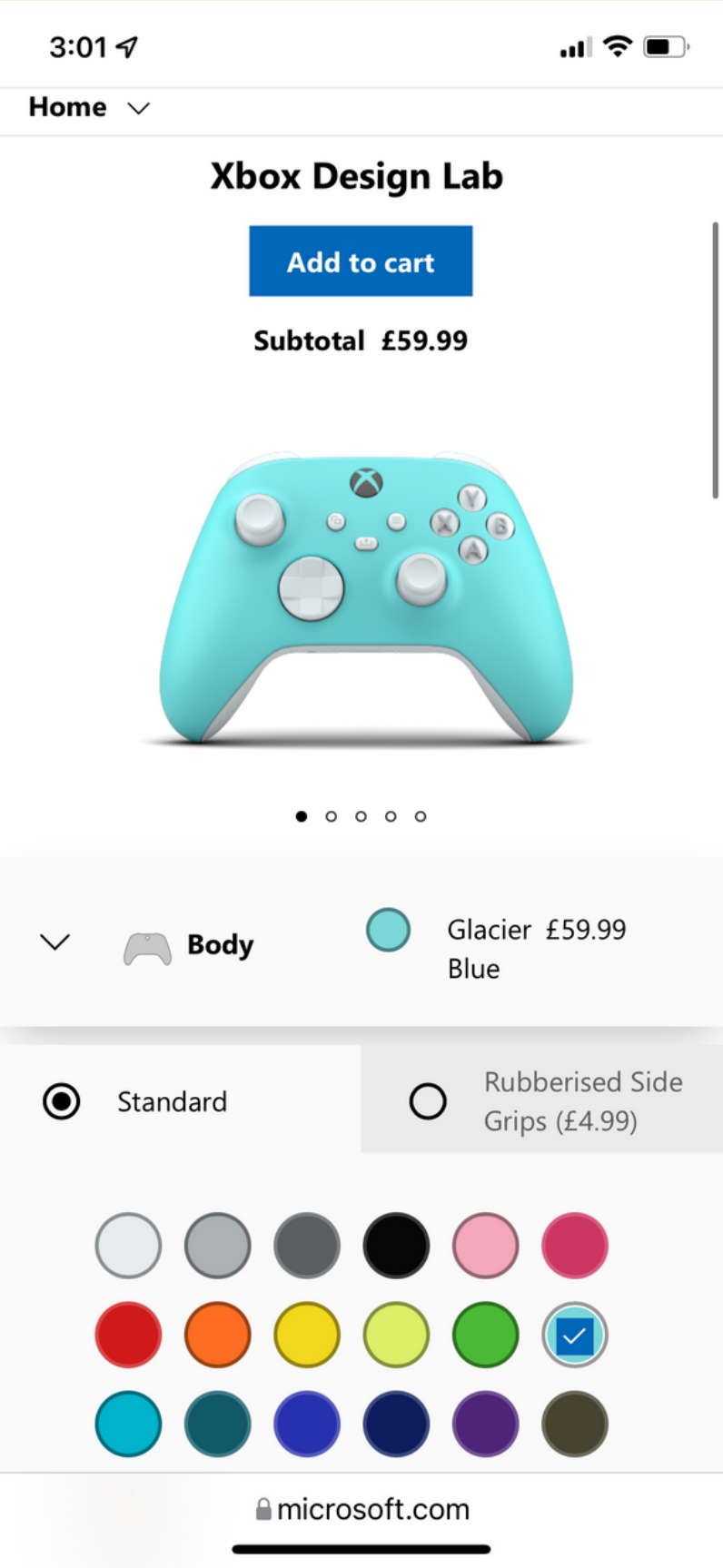


Figure 8: Author's screenshot from the Xbox design lab



Since the clothing will be created after purchase, the consumer will have the options to customize the clothing. Some existing companies that already utilize this feature include Nike and Xbox. I would like to go beyond what they do and also include choice of materials as well as color. A mock customization process can be seen in Appendix A in the mock buying process video.



# PERKS OF CUSTOMIZATION

### 1. INLCUSIVTY

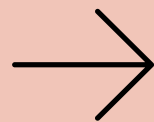
Since the clothing isn't created until purchase, in addition to traditional sizes we will offer customized sizing options to cater to all body types.

### 2. INTERACTIVTY

The customization gives the consumer control of the product to ensure 100% satisfaction. Everything from the materials used to the fit to the color will be customizable.



One negative aspect of the customization of the product is that it will take longer to produce than a typical mass made clothing item, however the consumer is already aware that the finalized product will be taking longer than typical clothing brands since they are specifically made to order in efforts to reduce waste. I was able to conduct in-depth audience research interviews and most interviewed agreed they are okay with longer wait times if it ensures sustainability.



# Persona: Allie



Allie is a 25 year old teacher who enjoys fashion and shopping, but is worried about the unsustainable practices in the fashion industry. She has a hard time trusting fashion brands that claim to be ethical and sustainable without proof. She knows what a blockchain is but isn't very knowledgeable on the subject.

Allie needs a way to  
ensure she is shopping  
sustainably for clothing  
in order to feel ethical  
about her shopping habits  
and set a good example  
for her students.



# COMPANIES/BRANDS ALLIE CURRENTLY BUYS FROM

1. **Misfits Market**- Company that ships sustainably sourced organic groceries saved from being thrown away from traditional groceries stores for small cosmetic defects. (<https://www.misfitsmarket.com/>)
2. **Patagonia** - Despite not making their own clothing, they "hold their suppliers to the highest environmental and social standards." They also donate 1% of all their profits to non profit environmental programs, coining this a "self-imposed Earth Tax" (<https://www.patagonia.com/our-footprint/>)

# Persona Map: Allie

## THINKS

- Wishes there was more sustainable clothing options that she could trust
- Is unsupportive of fast fashion and the waste it creates
- Confused as to how fast fashion companies are claiming sustainable practices and materials

## SAYS

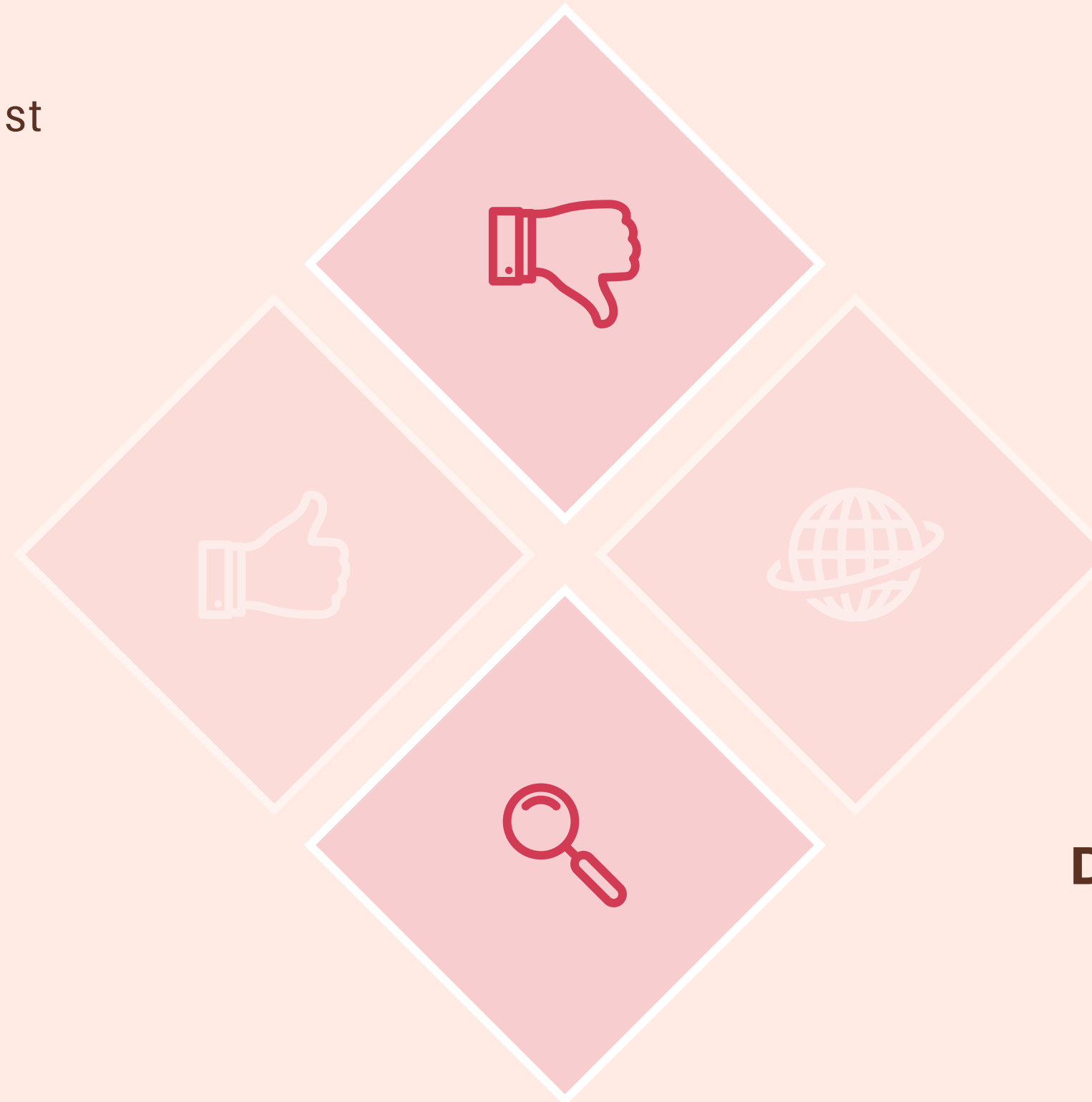
- Teaches her students the importance of sustainable practices
- Warns others to watch out for greenwashing marketing techniques

## FEELS

- Wishes to understand more about the world of blockchains
- Loves fashion and shopping
- Wants to create as little environmental impact as possible

## DOES

- Buys locally
- Avoids companies with unethical practices



# BUSINESS MODEL

After interviewing an industry professional, Riley Schafer of Nvidia, I learnt about the **Triple Bottom Line** business model. This model is essentially a concept that focuses emphasis away from just profit and instead highlights a business's environmental and social impacts as well (Miller, 2020). This business model would be ideal to utilize for Transparent since it would be a company focusing on doing good by the environment and society.

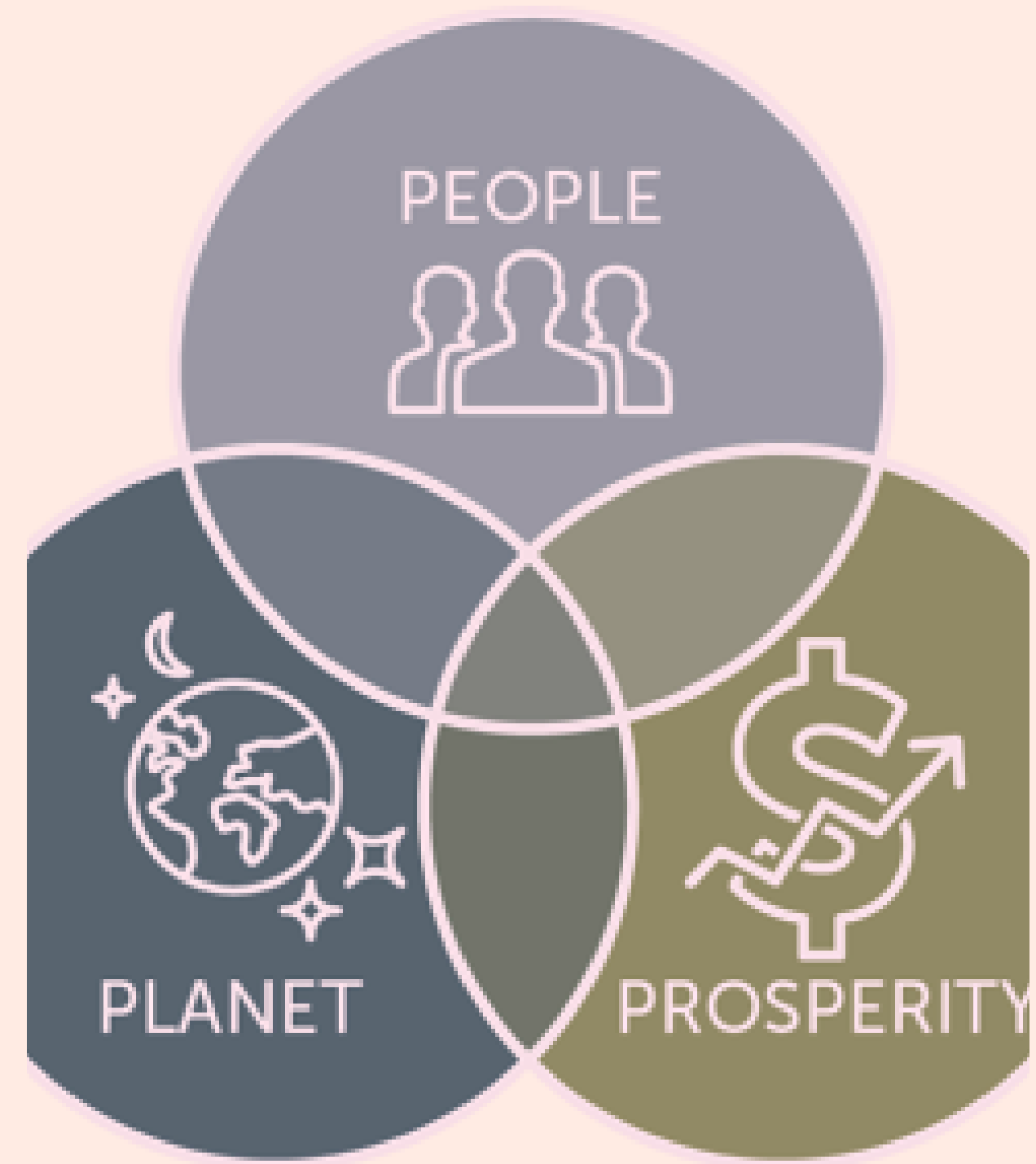


Figure 9: Image from <https://sustain.wisconsin.edu/sustainability/triple-bottom-line/>



**S**

## **STRENGTHS**


- Innovative combination of technology and fashion.
- Looking to provide transparency to help stop use of unsafe products and worker exploitation.
- Sustainable
- Customizable



**W**

## **WEAKNESSES**

- People may be weary of blockchains
- May be costly to produce, making the item expensive and take longer.
- Would need help actualizing the blockchains
- Consumers may worry about mining.



**O**

## **OPPORTUNITIES**

- People get the chance to learn more about blockchains.
- Can expand the company into a digital closet.
- Can set a higher standard for other companies to look up to in terms of transparency and sustainability.



**T**

## **THREATS**

- Blockchains are a very fast growing sector in the fashion industry, there is a threat of this idea being created by another company
- Being able to build trust

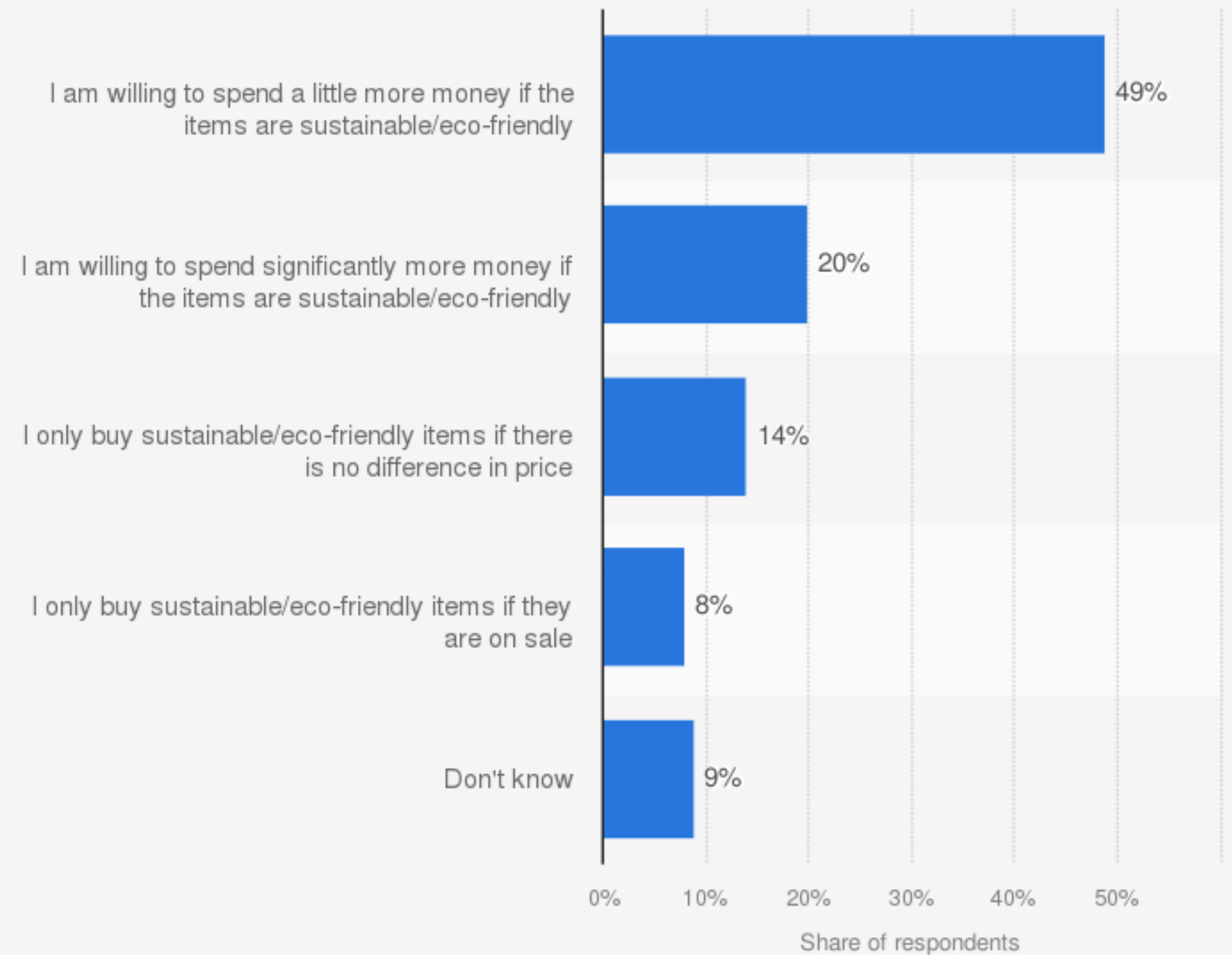
# ADDRESSING SWOT THREATS

By making the company a local operation, as in locally sourced materials and keeping the entire production within the company, ie: no contracting other companies, we can ensure the full creation process is ethical. We can also save on carbon emission by not having to ship materials as much.

One company that does this really well is the makeup brand Colourpop, centered in California. They make every aspect of their product in the same factories under the same company, and even offer tours to the public to see the process. This can help create trust, which was listed as a threat on my SWOT analysis.

Another threat listed in my SWOT includes the possibility of the price being higher than typical cheap options such as Primark. To address this threat I did some audience research through Statista and found this chart that shows of the 407 people surveyed, 69% of them were willing to spend more money for sustainable clothing items (Statista, 2022).

**When thinking about the price of sustainable/eco-friendly fashion items, which of the following statements is more likely to be true?**



**Source**  
Statista Global Consumer Survey (GCS)  
© Statista 2022

**Additional Information:**  
United Kingdom; 18th February to 28th February 2021; 407 respondents; 16 years and older; respondents who purchased

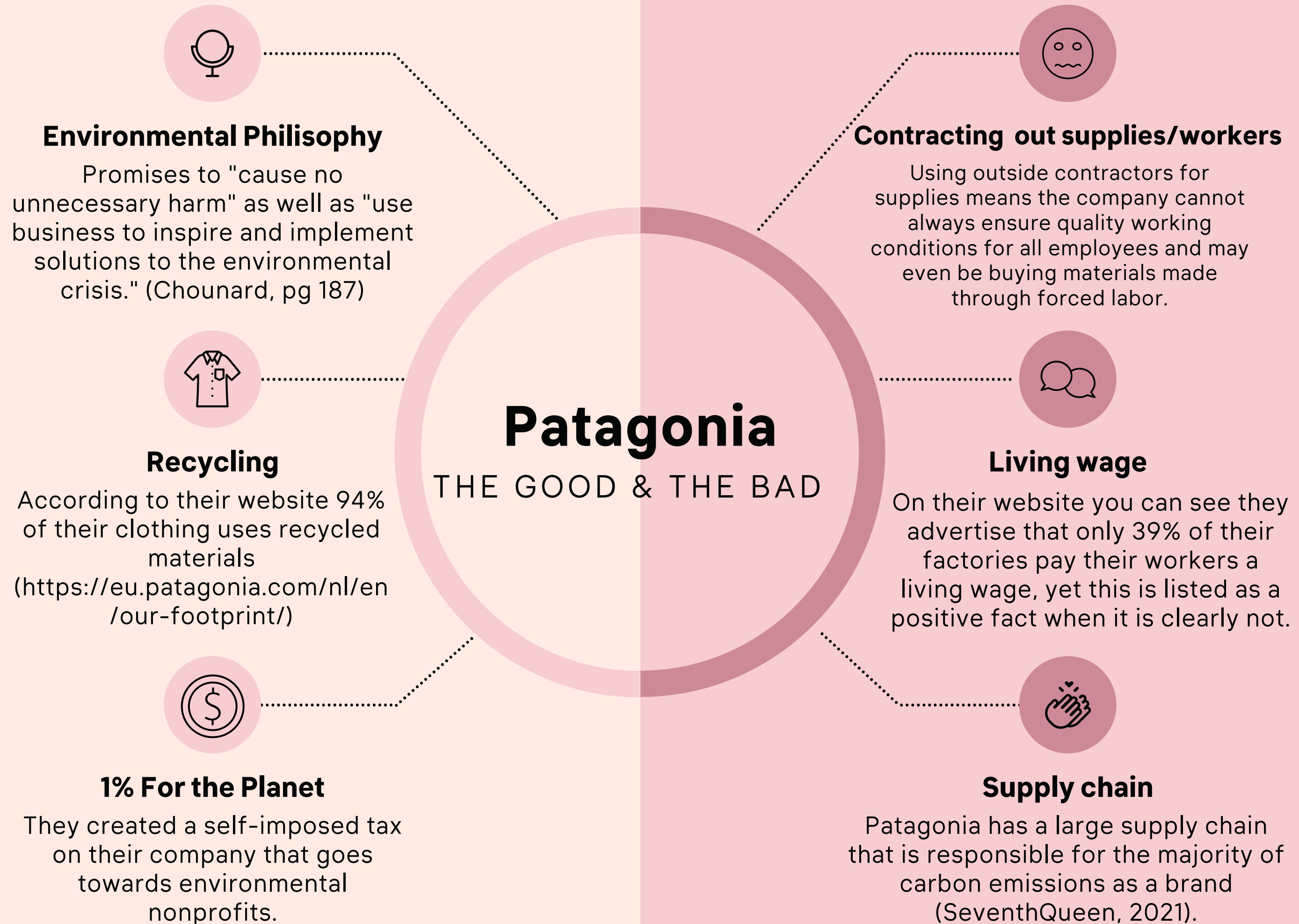
**Figure 10:** Chart from Statista



Figure 11: Image from <https://4dproducts.co.uk/how-to-spot-greenwashing-in-product-design/>.

After doing primary research with Riley Schafer, a friend of mine who specializes in business, she recommended I look into the brand Patagonia, and even shared her work project/presentation she had previously done on the company. Upon doing my own research on the brand I think Patagonia is a great company to analyze for a competitor analysis because they are known for their sustainability and environmentalism but when you actually delve into their history you find that may not be true. Patagonia contracts out their materials and workers through various companies around the world and have issues in the past with forced labor and human trafficking (White, 2015). Transparent can avoid these problems by following the previously mentioned local business plan, this way we control how all of our workers are treated and are able to ensure quality and safe working conditions for all.

I conducted audience research by interviewing business major Alex Atkinson, and one brand that came up as having advertised using recycled materials and being sustainable was Hollister. Upon doing research on the brand I learnt that there is no actual evidence to back their claims of being eco-conscious (GoodOnYou, 2021). They currently use very few eco-friendly materials and do not take any actions to reduce the harmful waste created by their production process. This is a perfect example of a clothing company greenwashing, which is the process of conveying false information in order to appear more environmentally sound (Kenton, 2021). The act of greenwashing is something Transparent can avoid by providing the full transparency of the creation process.



# POTENTIAL AUDIENCE MAPPING

ACCORDING TO RESEARCH  
DONE BY MINTEL  
(APPENDIX B) A RISE  
IN CONCIOUS  
CONSUMERSHIP AROUND  
SUSTAINABILTY WILL  
EMERGE IN THE AVERAGE  
CONSUMER, THUS MAKING  
TRANSPARENT A VERY  
RELEVANT BRAND FOR  
THIS PREDICTED TREND.

PEOPLE WHO ARE  
INTERESTED IN  
BUYING  
CLOTHING

PEOPLE WHO ARE  
INTERESTED IN  
BLOCKCHAIN

PEOPLE WHO  
WANT MORE  
SUSTAINABLE  
CLOTHING  
OPTIONS

PEOPLE WHO WANT  
MORE  
TRANSPARENCY IN  
THE CLOTHING  
CREATION PROCESS

# AUDIENCE RESEARCH OUTCOMES

I decided to conduct two in-depth interviews in order to learn more about my potential audience and see if they would be interested in a brand like Transparent. The first person I interviewed represented a part of Transparent's ideal demographic, someone who is extremely eco-conscious, and the second person interviewed represented more of the average American in their 20s demographic. Here are some key findings from the conducted interviews

## 1 . JORDAN BOULAY

I found Jordan was very knowledgeable and conscious in his consumption habits, but did admit he sometimes bought clothes thinking they were sustainable but unknowingly was being greenwashed by advertising. He said he would be okay with the longer wait times needed for Transparent's made-to-order creation process. He did say he knew nothing about blockchains, and although willing to learn he was not super interested to.

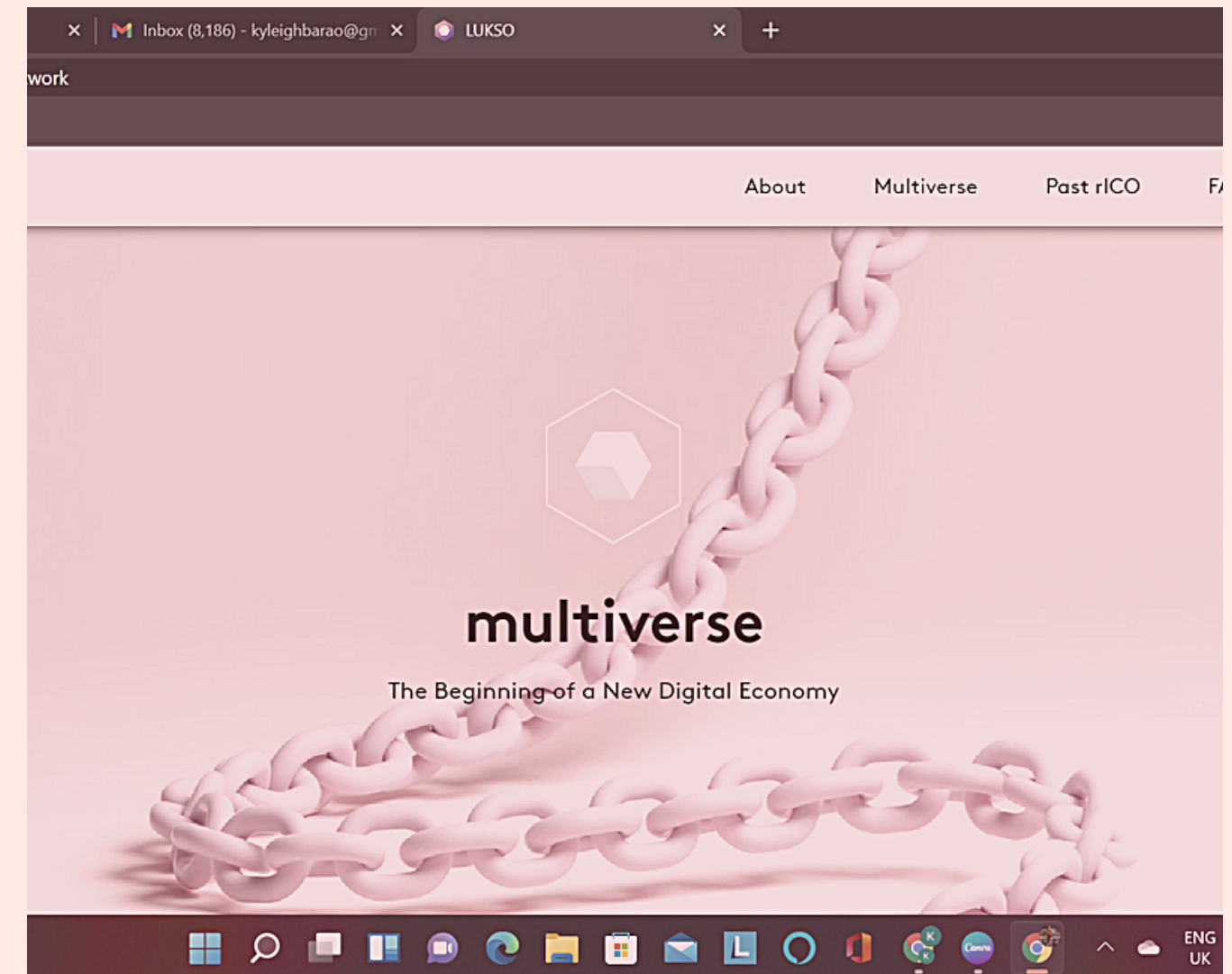
## 2 . ALEX ATKINSON

Alex admitted that although he knows he should be more eco-conscious in his shopping habits, he tends to find sustainable options too expensive. He said he wouldn't love a longer wait time for the clothes but it wouldn't be a deal breaker. However, he was extremely interested in the blockchain aspect and said he's been learning about them in his free time and would love to learn more. He said the blockchain aspect appealed to him more than the sustainability aspect of the company which was an interesting take.



# WHAT ALREADY EXISTS

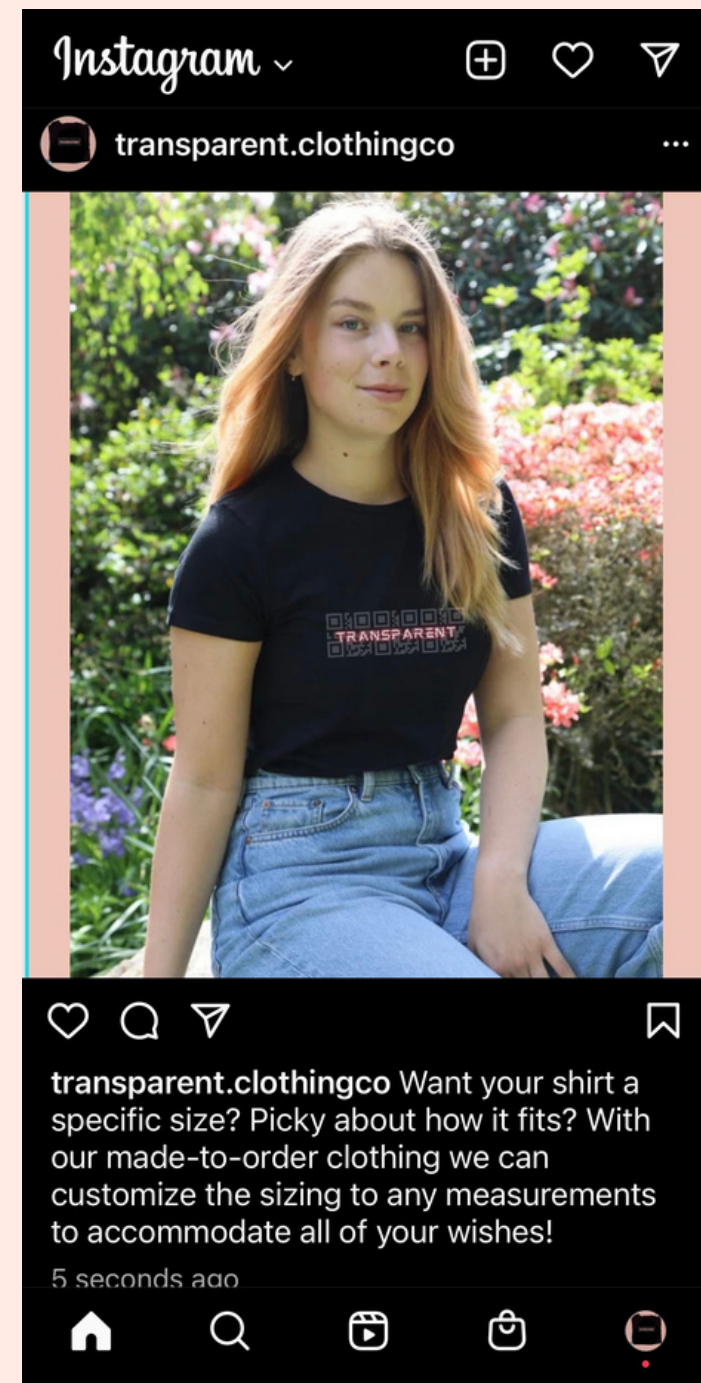
Virtual Blockchain **LUKSO** aims to provide transparency to consumers in order to help prevent counterfeit luxury clothing. Lukso uses digital certificates to prove authenticity. They also create and set standards for physical-digital consumer products.



**Figure 12:** Screenshot of <https://www.lukso.network/>



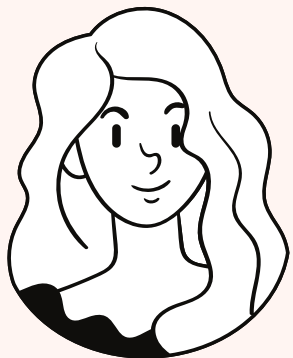
# Mock Social Media Posts



**Figures 13-16:** Screenshots from the Mock Transparent Instagram account

# The team

A big part of this project included collaborating with others to create the final outcome. Here are the individuals I worked with in every aspect of this project.



Eden Sinclair

Eden is my mentor from IBM, and we conducted weekly meetings throughout the term in order to check in on the progress of my project and come up with ideas together. She helped teach me about branding as well as giving good feedback on my completed work, and having the meetings kept me on track with completing my work throughout the project.



Riley Schafer

Riley has a bachelor's degree from Denison University in business and works for the company Nvidia. Through interviewing her I was able to conduct primary research on business models and which ones would work for my company, as well as insight on a project she did on Patagonia.



Serena Marques

Serena has a bachelor's degree in graphic design from Stonehill University and works as a professional graphic designer. Serena was able to take my rough sketch and ideas for a logo and make them a reality for the brand.





Jordan Boulay

Jordan has his bachelor's degree from Northeastern University in Public health and is currently pursuing his Master's degree also in public health from Brown University. I was able to conduct in depth audience research with Jordan, and chose him because he is a very eco-conscious person who shops sustainably in everyday life.



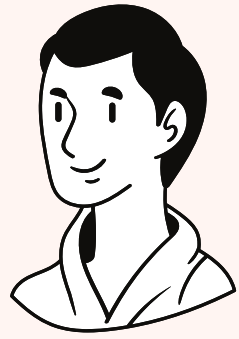
Florein Postema

Flo is currently a second year student at Solent University studying music management. Flo was able to help model for some of the images for the brand.



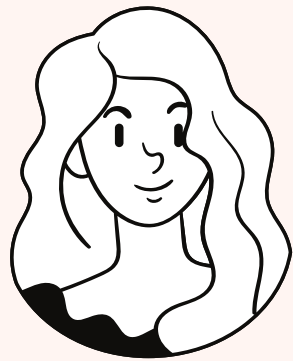
Alex Atkinson

Alex is a Business Major at University of Ohio. I was able to do a short audience research interview with Alex, which helped give me insight into the average 20-something year old guy and their shopping habits and opinions, as opposed to someone who I know is specifically sustainability based.



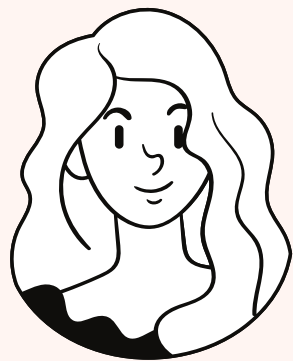
Nikhil

Nikhil works for IBM and collaborated on project extreme blue, which was a blockchain and NFT based project IBM did in partnership with Burberry. I was able to have a meeting with him and other IBM mentors in order to conduct primary research and finalize concepts about my brand.



Charlotte

Charlotte works for IBM and collaborated on project extreme blue, which was a blockchain and NFT based project IBM did in partnership with Burberry. I was able to have a meeting with both her and Nikhil and other IBM mentors in order to conduct primary research and finalize concepts about my brand.



Ashlyn

Ashlyn is an artist and student from California and helped me come up with concept for brand's logo idea and helped make mock images as well.



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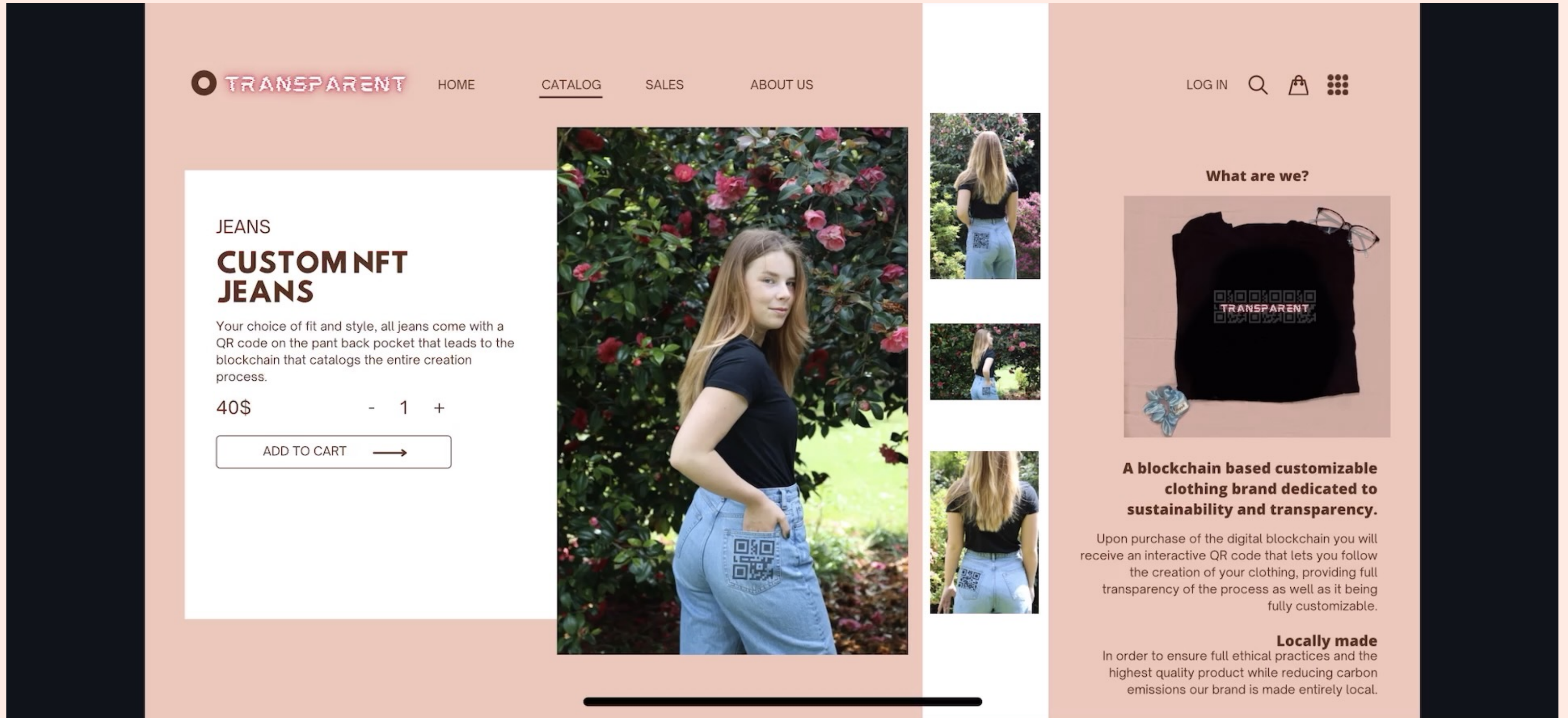
Appendix A- Mock Purchase process video

Appendix B- Mintel chart

Appendix C- Mind Map

# Appendix A

## Theoretical Purchase Process Video

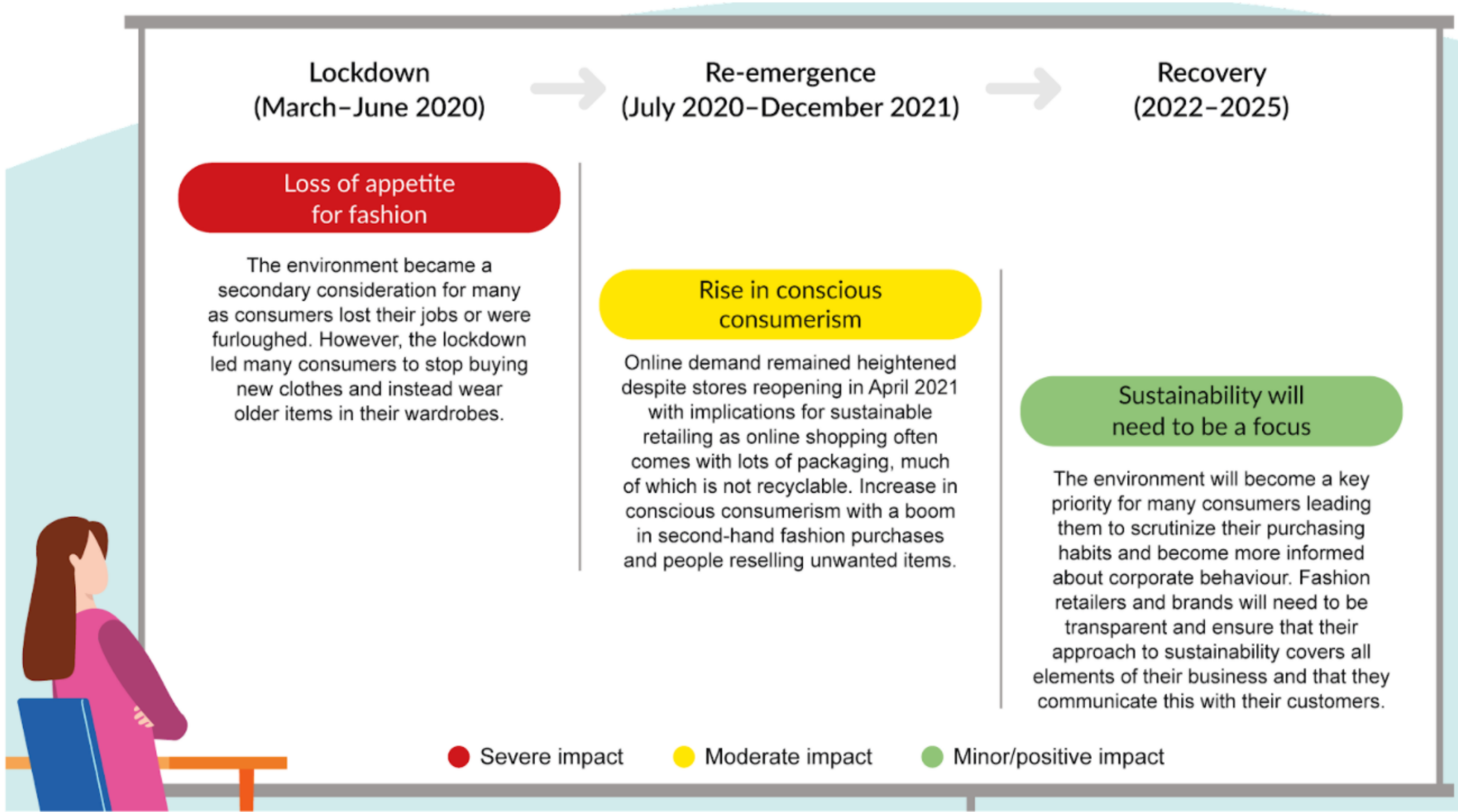


Video can also be accessed at [https://www.youtube.com/watch?v=Sp\\_q1HDnkGA](https://www.youtube.com/watch?v=Sp_q1HDnkGA)

# Appendix B

## COVID-19 impacts sustainable fashion

Short, medium and long-term impact of COVID-19 on sustainable fashion, August 2021



Source: Mintel



Figure 17: Image from Mintel

# Appendix C

## Mind Map

