

ID Cover Page

Summary of WP Team

**The entrepreneurial journey of founding an impactful, local, and transparent fashion
brand**

-

Impact assessment

Georg Vincent Reckhaus (49592)

Work project carried out under the supervision of:

Advisor: Prof. Ricardo Zózimo

A Work Project, presented as part of the requirements for the Award of a Master's degree in Impact Entrepreneurship and Innovation, from the Nova School of Business and Economics.

**THE ENTREPRENEURIAL JOURNEY OF FOUNDING AN IMPACTFUL, LOCAL,
AND TRANSPARENT FASHION BRAND**



Nils Johannsen

Maria Patricia Schmeller

Eva-Marie Steinbömer

Georg Vincent Reckhaus

Work project carried out under the supervision of:

Prof. Ricardo Zózimo

10-01-2023

Abstract

This work project discusses the development of the hybrid D2C business “meiæs”. meiæs is a local, transparent, and impactful fashion brand producing socks and donating five percent of its revenues to the Hope Zones Foundation. This foundation focuses on preserving and protecting the ocean, with a special focus on Portugal’s coasts. Starting with developing a business model using the Lean Business Model Canvas by Maurya (2010), the authors cover essential aspects such as the problem and solution definition, market size, sales and marketing channels, and team. Eventually, hypotheses are developed which are rejected or accepted in the individual parts. The authors’ main findings were that meiæs was not able to achieve product-market-fit yet due to the immaturity of the business but will most probably achieve it in the near future once the first batch of socks has sold out. Moreover, using short-form videos (reels) on Instagram are the most effective form of advertising, and enlarging the company’s network can increase future funding and partnership opportunities. Lastly, meiæs socks were found to be more sustainable due to their low raw material CO₂ footprint of only 1kg per pair of socks.

Note: As “meiæs” is a brand name, it is always written in lowercase letters, even at the beginning of a sentence.

Keywords: entrepreneurship, start-up, sustainability, hybrid D2C business model, fashion, consumer goods

Table of contents

List of figures	I
List of tables	III
Part I: Group part.....	1
How to read this document.....	1
1 About meiaes: impactful, local, transparent	1
2 Methodology and data collection	2
2.1 Primary research	2
2.2 Secondary research	4
2.3 PDCA framework.....	4
3 The entrepreneurial journey of the meiaes founding team.....	5
3.1 Cycle 1: hummus made from peas	5
3.2 Cycle 2: algae snacks	6
3.3 Cycle 3: socks made from SeaCell	8
3.4 Cycle 4: socks made from organic cotton.....	12
4 Introduction of the Lean Business Model Canvas	15
4.1 Problem definition	16
4.1.1 The negative influence of the fashion industry on the environment.....	16
4.1.2 Consumers' shifted mindset toward sustainable clothing	17
4.2 Solution definition	18
4.3 Key metrics.....	19
4.4 Unique value proposition	20

4.4.1	Competitive market analysis	20
4.4.2	Resulting unique value proposition	23
4.5	Unfair advantage	25
4.5.1	Team composition as an unfair advantage.....	25
4.5.2	Partnerships as an unfair advantage	26
4.5.3	Network as an unfair advantage	26
4.5.4	Access to funding as an unfair advantage	27
4.6	Channels	28
4.7	Customer segments and market analysis	29
4.7.1	Market analysis.....	30
4.7.2	Target group and customer segments.....	31
4.8	Cost structure.....	32
4.8.1	Product pricing strategy	35
4.8.2	Impact pricing strategy	36
4.9	Revenue streams	38
4.9.1	E-commerce sales.....	38
4.9.2	Event sales	38
5	Introduction and justification of individual parts	39
Part II: Individual part.....		41
6	Impact assessment (Georg Reckhaus).....	41
6.1	Customer perspective.....	42
6.1.1	Unsustainable consumer behavior in the current fashion industry.....	42

6.1.2	Results from the customer feedback survey	43
6.1.3	Interpretation of the results and hypothesis	45
6.2	Sustainability of meiæs ocean socks.....	45
6.2.1	Research method	46
6.2.2	Impact assessment of the raw material used in meiæs socks.....	46
6.2.2.1	Comparison with other socks	49
6.2.2.2	Certifications and labels.....	49
6.2.2.3	Donation to the Hope Zones Foundation.....	50
6.2.3	Interpretation of the results and hypothesis	50
6.3	Transparency	52
6.4	Learnings from the impact assessment.....	52
Part III: Group part.....		54
7	Limitations	54
8	Reflection on the entrepreneurial journey – key learnings.....	55
9	Conclusion and the future of meiæs	56
10	References	A
11	Appendix	B

List of figures

Figure 1: PDCA framework	4
Figure 2: Hummus made from peas - first and second product testing session	6
Figure 3: PDCA cycle one - hummus made from peas	6
Figure 4: Algae snacks - product testing session.....	7
Figure 5: PDCA cycle two - algae snacks	7
Figure 6: PDCA cycle three - socks made from SeaCell	8
Figure 7: First sample from a Portuguese supplier (without SeaCell)	11
Figure 8: First sample from a Turkish supplier (with SeaCell).....	11
Figure 9: Second sample from a Turkish supplier (with SeaCell)	12
Figure 10: PDCA cycle four – socks made from organic cotton	13
Figure 11: Final sample of meiæs socks with individual packaging (paper tag)	14
Figure 12: Meeting Tiago from "The Captain Socks" at Nova SBE.....	14
Figure 13: Lean Business Model Canvas - meiæs.....	16
Figure 14: Excerpt from the website about the unique value proposition.....	25
Figure 15: The meiæs founding team (Nils, Marita, Eva and Georg).....	25
Figure 16: Introduction meeting with Blue Bio Value team (Friday 11th November 2022)	27
Figure 17: Five channel phases of customer experience).....	28
Figure 18: Socks market size in Germany and Austria (TAM, SAM, SOM)	31
Figure 19: PDCA framework for meiæs cost structure	35
Figure 20: meiæs online shop – products - ocean socks	36
Figure 21: meiæs online shop - product description with donation and transparency notes.....	37
Figure 22: PDCA framework - impact assessment	42
Figure 24: Customer feedback survey question - product attributes	43
Figure 25: Customer feedback survey question - willingness to pay	43
Figure 26: Customer feedback question - sustainability attributes	44
Figure 27: Customer feedback question – customer consumption behavior.....	44

Figure 28: Proportion of raw material in the impact assessment	51
Figure 29: Transparency of ecological footprint and cost structure on the website.....	52
Figure 30: PDCA framework - meiæs potential future product offerings.....	57

List of tables

Table 1: meiæs - customer feedback survey.....	3
Table 2: Excerpt from supplier list (26 fashion producers in Europe that meiæs has contacted)	11
Table 3: meiæs' key metrics.....	19
Table 4: Competition to meias - Dopazi.....	21
Table 5: Competition to meiæs - Patron Socks	21
Table 6: Competition to meiæs - Sock Up Your Life	21
Table 7: Competition to meiæs - Von Jungfeld.....	22
Table 8: Competition to meiæs - Snocks.....	22
Table 9: Competitive market analysis and USPs	23
Table 10: The meiæs founding team - skills and competencies	26
Table 11: Total costs to produce 100 pairs of organic cotton socks by „The Captain Socks“	34
Table 12: Total costs for the foundation of meiæs until 18th November 2022.....	34
Table 13: Overview of bundles and profits per bundle (before additional costs)	36
Table 14: Impact assessment overview - one pair of meiæs ocean socks	48
Table 15: Key learnings of each founding member	55

Part I: Group part

How to read this document

This work project is written by four different authors. The first 40 pages are the group part, to which every author equally contributed. It is focused on the development of the business model using the Lean Business Model Canvas, a framework modified by Maurya (2010), based on the Business Model Canvas proposed in 2005 by Osterwalder (2005). It is elaborated on why this framework was chosen in a separate chapter, “Lean Business Model Canvas”. Firstly, the founded fashion brand meiaes is introduced. Secondly, the four cycles the team went through are explained to identify and refine the entrepreneurial idea. Third, every aspect of the Lean Business Model Canvas is described, and the actions and decisions leading to hypotheses and goals for the business are analyzed.

The following 60 pages of this work project are written individually. Meaning that every author covers a specific focus area. The focus areas are: “Product, supplier, and product-market-fit” (Nils Johannsen), “Marketing and sales” (Marita Schmeller), “Partnerships and company acceleration” (Eva-Marie Steinbömer), and “Impact assessment” (Georg Reckhaus). At the end of the group part, a justification for each focus area can be found with an explanation of how each individual part is used to critically evaluate the set hypotheses and goals. Lastly, the remaining 4 pages jointly report about learnings during the foundation of meiaes and give an outlook on its future

1 About meiaes: impactful, local, transparent

Most of society is unaware that the fashion industry's projected carbon dioxide equivalent emissions are 1.2 gigatons annually and are therefore responsible for around 10% of the global CO₂ emissions (World Bank 2019). The share of “unsustainable” yarns used to produce clothing pieces, such as polyester, is set to be around 52%. Only 17% of brands are transparent about

their annual carbon footprint at the raw material level, while 93% of brands do not pay workers a living wage (Clean Clothes Campaign 2022). Alarming facts that are mainly driven by the ever-growing fast-fashion industry. When most consumers think about the (fast) fashion industry and its negative impact on the planet, they tend to focus on the above-mentioned effects. But the direct effect it has on the ocean and its inhabitants are equally important. That is why meiaes was founded – an impactful, local, and transparent fashion brand supporting ocean-related projects.

meiaes aims to contribute to a more sustainable fashion industry by offering socks for young, fashionable, and conscious-minded customers who desire to positively impact the environment and especially care about the ocean. meiaes is a fashion brand producing high-quality socks made locally in Porto, Portugal, from organic cotton. The aim is to be fully transparent about the origin of the socks, including the production and the environmental and economic impact. Having a particular focus on social responsibility, five percent of the brand's revenues are donated to ocean preservation projects in Portugal.

2 Methodology and data collection

The team used primary and secondary research to validate assumptions and the approach of meiaes as a business. The Plan Do Check Act (PDCA) framework was used to explain processes and decisions. These aspects are explained in the following.

2.1 Primary research

An online survey was conducted to better understand the meiaes customer. The main goal was to validate the idea before selling the socks and to know what to focus on in the communication with potential customers. The survey was published using the Qualtrics software. It was spread over the personal network of the researchers. The survey was posted online on 27th October 2022 until 7th November 2022. After the survey was closed and all data collected, incomplete

data sets were removed, and an IP filter was applied to ensure no more than one survey was conducted on the same device, ensuring the high quality of the data. In addition, answers were checked for so-called „straight-liners”, where the participant always clicks the same response to finish the survey as quickly as possible. A total of 163 people completed the survey. The following table gives an overview of the participants’ characteristics.

Table 1: meixes - customer feedback survey

Participants (N =163)		absolute	in percentage
Average age		24	
Sex	Female	75	46%
	Male	88	54%
Job	Student	126	77%
	Employed	22	14%
	Self-Employed	0	0%
	Senior citizen	0	0%
	Unemployed	7	5%
	Other	7	5%
Average income per month		1.200€	

The survey was divided into five sections. It started with an introduction to the research project, and the indication to trade all answers anonymously. The second part of the survey began with demographic questions before the third part asked about the participants’ sustainability preferences. The questions were focused on consumer behavior and the consumer’s evaluation of different attributes when choosing a new pair of socks. The order of the given answers was randomized to ensure minimal influence on consumer perceptions. The results are discussed in different chapters. The most significant learning from the survey was that a big sample is difficult to achieve. Researchers subsequently need to find multiple ways to approach their

target group and convince them to participate. Screenshots from the survey can be found in appendix 1.

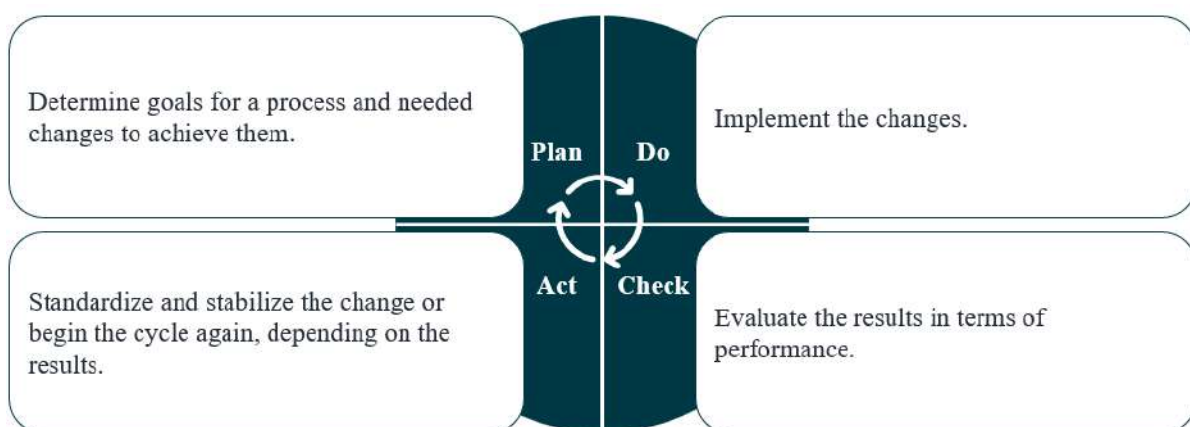
2.2 Secondary research

For the secondary research, mainly published survey results from prestigious market research organizations and market trends were used as a basis. In addition, many academic papers were analyzed and used, especially to better understand the PDCA framework (introduced in the following) and the Lean Business Model Canvas.

2.3 PDCA framework

During the entrepreneurial journey, the meiaes founding team underwent different cycles of re-evaluating ideas, learning from failures, and adapting to new circumstances. To be most efficient, the Plan Do Check Act (PDCA) framework for continuous improvement (Lean Enterprise Institute 2022) was applied. The framework starts with the first step, “Plan” where the goals are determined. During the second step, “Do” the plan is conducted. In the third step, the results are “checked” and critically evaluated until conclusions are drawn and implemented in step four, “Act”. Depending on the results, the cycle will be re-entered, or measurements to stabilize results will be undertaken.

Figure 1: PDCA framework



Successes and failures paved the entrepreneurial journey of meiaes. Most failures made the team realize that being an entrepreneur is mostly about being resilient and solution-oriented toward the challenges that occur during the process. Using pro and contra listings for problems and joint decision-making processes, and majority voting supported meiaes in finding the right solutions. Based on the events and unforeseen circumstances that happened, the team discussed alternatives and conducted the option with the most significant success rate regarding input, output, and outcome. After every decision, a reflection was made to improve the efficiency and adaptiveness of the team continuously.

3 The entrepreneurial journey of the meiaes founding team

The following chapter evaluates the different cycles during the entrepreneurial journey while using the PDCA framework for analyzing and ultimately agreeing on the final product.

3.1 Cycle 1: hummus made from peas

The first cycle started with the planning of a project in the food sector, as the whole team was motivated and interested in creating a venture in that field. The main goal was to identify unsustainable foods where no suitable alternative exists in the market yet and try to do it differently and more sustainably. It was found that there is a huge problem with water used on avocado plantations. A single avocado needs around 220 liters of water to grow (GRACE Communications Foundation 2022), which makes the famous product “guacamole” unsustainable. The team decided to develop a better alternative and searched for alternatives to avocados (“Plan”). Peas were identified as a good alternative, as they are rich in proteins and have the same color as avocados. In the next step, the team prepared different dips made from peas and tasted them. The dip was also given to friends to investigate how people would react.

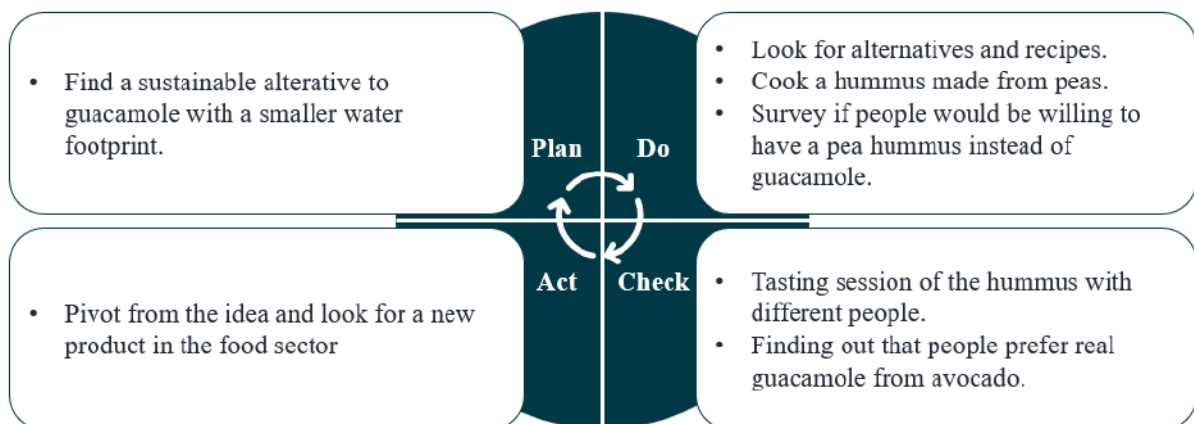
Figure 2: Hummus made from peas - first and second product testing session



During the checking phase, the team noticed that the dip had a similar color and texture, but the taste differed significantly from

traditional guacamole. The project was evaluated as difficult to pursue because of obstacles such as keeping the product cold during the sales process and selling it to supermarkets. As a result, the idea was pivoted, and a new cycle was entered. The key learning was that offering a food-based product comes with more challenges than expected, such as making the product long-lasting and being in compliance with several food regulations.

Figure 3: PDCA cycle one - hummus made from peas



3.2 Cycle 2: algae snacks

Building upon the learnings from cycle one, cycle two was entered. The team decided to stay in the food industry but focus on something that does not need any refrigeration, as this was seen as the main blocker for the pea hummus. Georg brought up the idea of producing a snack from algae as he had previous scientific touchpoints with the resource during his first masters. Everyone understood its potential, as it has a high nutritional value (Ścieszka and Klewicka 2018). It can be produced sustainably with marginal land use and a fast-growing cycle (Taelman

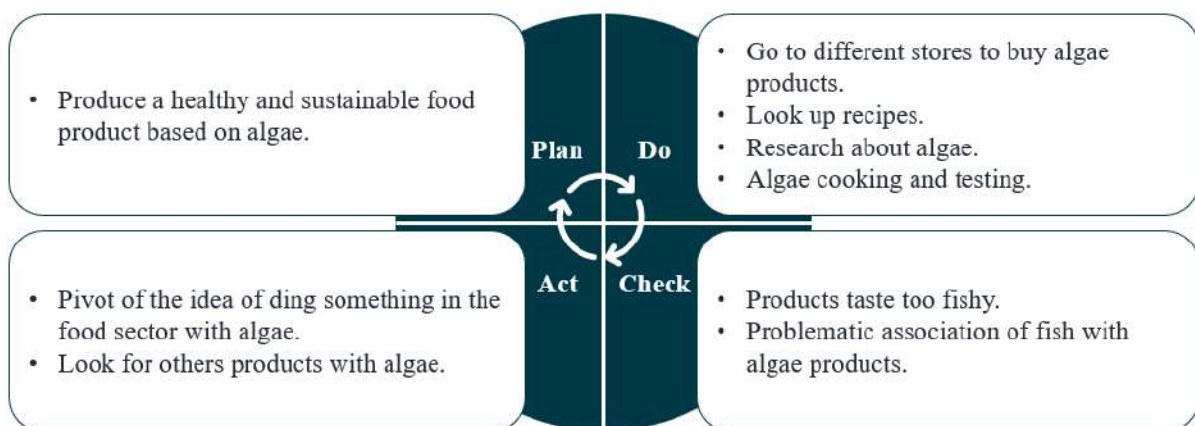
et al. 2015). Especially for vegans, it can be used as a supplement for omega 3 and omega 6. A tasting took place to get an impression of the current product offering of algae snacks in the food market. The list can be found in appendix 2. The team went to local Asian stores in Lisbon and ordered different products online, such as algae chips, algae noodles, or simple algae powder.

Figure 4: Algae snacks - product testing session



All in all, the team was not convinced of the taste of a single product. All products tasted a lot like fish and had a very strong smell. Therefore, the group explored producing different algae snacks by themselves. The plan was to make healthy algae chips. Simple nori-paper was bought (the same paper used for sushi), seasoned, and roasted in the oven. However, after many trials, the fish taste was still very strong, which the team considered problematic. It was concluded that the team would focus on algae as a sustainable resource but not within the food industry.

Figure 5: PDCA cycle two - algae snacks

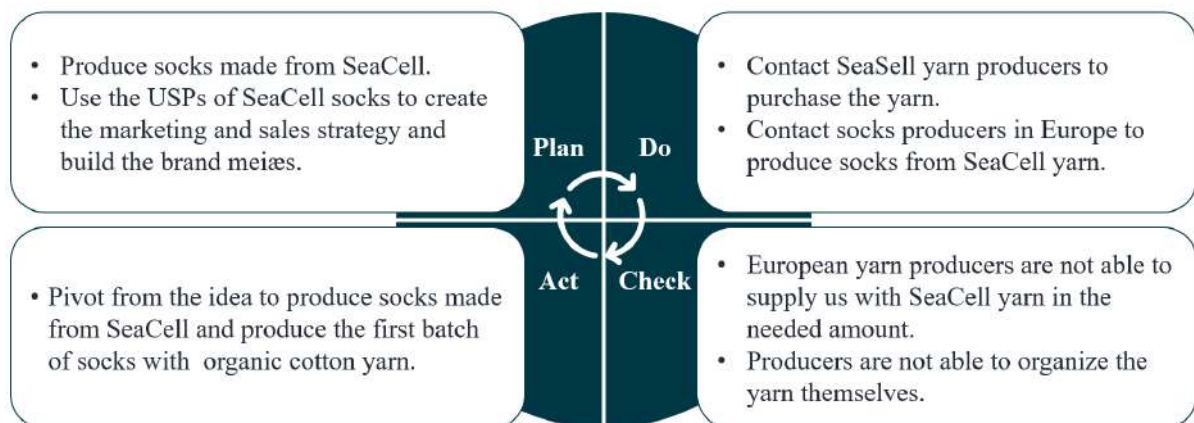


The key learning in this cycle was that taste is personal and connected to associations, like the association many humans have of fish and algae. This makes creating a product from algae difficult.

3.3 Cycle 3: socks made from SeaCell

The PDCA cycle was again entered to work on the next business idea. Since a former project group member was already active in the fashion industry (Julius Holzer), the idea of using algae as a natural resource for producing “sustainable” clothing was evaluated. The “Plan” phase was entered by conducting secondary market research about yarns made from algae.

Figure 6: PDCA cycle three - socks made from SeaCell



SeaCell yarn was discovered, an algae-based material with several appealing promises about its environmental impact, quality, and health benefits. The leading manufacturer of SeaCell is smartfiber AG from Germany, founded in 2005 and providing many different brands with their SeaCell yarn since then, which also gives meïæs a proof-of-concept. The team was in contact with them during the start of the “Plan” phase to ask for help in finding potential suppliers and partners. SeaCell is produced in a similar way to other naturally occurring plant-based yarns. From farms in the Icelandic Fjords, manufacturers obtain algae known as *Ascophyllum nodosum*. It is processed and combined with cellulose to create the final SeaCell yarn. The method used to harvest the algae is safe and environmentally friendly. SeaCell acquired the EU

Ecolabel (the official European Union voluntary label for environmental excellence) and complies with the requirements for OEKO-Tex Standard 100 (one of the world's best-known labels for textiles tested for harmful substances), and is certified for infant goods. The SeaCell material employed will impact both the environmental advantages and biodegradability. Fabrics made entirely of plants that use standard SeaCell fibers, and no extra nano-silver are biodegradable. The SeaCell fiber ultimately is both, biodegradable and compostable on a biological level. For individuals looking to update their wardrobes, the notion that clothing made from algae has health benefits was intriguing to the team. SeaCell can maintain its nutrients because of the particular drying procedure and non-chemical processing. As a result, the fibers are filled with antioxidants, Vitamin E, calcium, magnesium, iron, and plenty of other minerals. The antioxidants in the vitamin E boost should battle free radicals and slow the aging process while nourishing exhausted skin. Therefore, SeaCell can be seen as the perfect yarn alternative for customers with skin-related problems. The founders noticed that many people in their surroundings suffered from skin diseases on the feet, due to walking a lot in bad quality shoes. Common issues were bad odor or fungus. Hence, the team decided to produce socks made from SeaCell. Another supporting argument for socks is the fact that no special cut is needed for them resulting in a faster finalization of the final product (compared to e.g. a t-shirt).

Socks made from a combination of SeaCell and organic cotton will be lighter and more breathable, offering greater all-day comfort, especially during the warmer months. The fibers can tolerate sweat far better than cotton since they are also more absorbent and durable. It was noticed that SeaCell is a highly sought-after product because of its qualities as a comfortable, natural material with positive effects on the environment and human health. Due to the associated expenditures, there are still few options available. However, several businesses incorporate seaweed materials into their shirts, undergarments, and activewear, providing meañs with proof that the yarn is durable, comfortable, and ready to use in clothing pieces.

Examples include Pangaia, Tommy Hilfiger, Lululemon, Speidel, and Deap. Pictures of the brands can be found in appendix 3.

The examples indicate interest and a need for product innovation with SeaCell in the market. In addition, there is an approximate premium of 30% to 50% when it comes to prices for the fashion pieces produced with SeaCell. It would not be a surprise if other brands also started using algae-based textiles in the future. Simply using a high-quality blend can maximize the advantages of algae apparel for fashion businesses. Currently, SeaCell has both pros and cons. As experienced, production costs are still very high (compared to other yarns widely available) because there are hardly any manufacturers of this specific yarn in the market. This might reduce the percentage of SeaCell in each clothing piece, making the final product less useful. The claims regarding health advantages like vitamin transfer (Ross 2022) seem a bit far-fetched, and the team could not set up long-term experiments with socks made from SeaCell. However, there is little doubt that the developed production techniques are more environmentally friendly than other cotton alternatives. The “Do” phase was started by contacting smartfiber AG and more than 30 different socks producers in the whole of Europe. While doing so, the following issues were experienced:

(1) Many suppliers did not get back to the team, although several reminders were sent and offices called. This process started at the end of May 2022 and ended at the end of October 2022.

(2) Several suppliers had a minimum order quantity of 1000 pairs or more, which would mean a very high initial investment that did not comply with meiaes’ lean business approach as well as the available funding. It was decided not to move forward with them due to the high risk of losing too much money by not selling the stock.

Group Part

(3) Almost all suppliers did not have the SeaCell fabric in storage and were also not able or willing to purchase the yarn. It was decided not to continue with these suppliers because they did not fit meiaes' value proposition.

(4) As many suppliers had a break during the summer months, the lead times for producing the socks were set to a couple of months, leaving the team with the risk of not receiving the first batch of socks in time before the deadline of this work project. The whole supplier list can be found in appendix 4.

Table 2: Excerpt from supplier list (26 fashion producers in Europe that meiaes has contacted)

Name	Location	Website	Status	Price per Pair	Lead Times	Minimum Order	Seacell Yes/No
Trex Socks	Bulgaria	www.trexsocks.com	N/A	N/A	N/A	N/A	No
Spartasocks	Lithuania	https://spartasocks.com/	in contact	1,6 Eur/pair	sample	1000	can order it
Steven	Poland	https://steven.pl/kontakt	in contact	N/A	N/A	no MOQ	Yes

However, the team was able to order three different samples of socks from two different producers (one from Portugal and one from Turkey). The Portuguese sample did not contain any SeaCell, but the Turkish sample did. It was even possible to provide feedback for improvements, and the team received a second sample from Turkey. However, as meiaes wanted to produce locally in Portugal to have the lowest environmental impact, the Turkish supplier was ultimately rejected. The CO₂ emissions that would have occurred while transporting the socks to Portugal would pollute the environment too much.

Figure 7: First sample from a Portuguese supplier (without SeaCell)



Pros: Fast lead times and shipment, good quality with high needle count.

Cons: Medium production costs, not produced with SeaCell fiber.

Figure 8: First sample from a Turkish supplier (with SeaCell)



Pros: Fast lead times and shipment, produced with SeaCell fiber, low production costs.

Cons: Bad quality, low needle count, no local production, wrong hex codes used for colors.

Figure 9: Second sample from a Turkish supplier (with SeaCell)



Pros: Fast lead times and shipment, produced with SeaCell fiber, right hex codes used for colors.

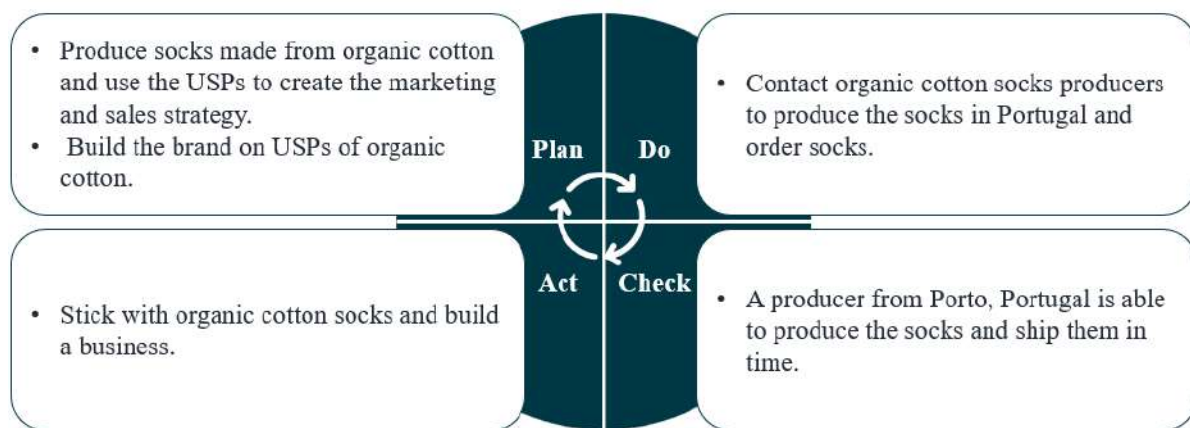
Cons: Bad quality, low needle count, no local production, logo in bad quality when socks are worn and therefore stretched.

In the “Check” phase, the team finally realized that it was not able to find a suitable manufacturer that (1) had SeaCell yarn available and could provide it in the requested amount of a maximum of 500 pairs in the desired quality, and (2) was able to order SeaCell themselves from any other independent yarn supplier. In addition, the costs for producing socks made with SeaCell were around two times higher than producing socks from usual organic cotton. In addition, due to the unavailability of SeaCell yarn, the lead times were two to four months, according to several producers. The “Act” stage was entered, and the team decided to pivot another time to start with a D2C business model with a social purpose (donating five percent of revenues made to ocean-related projects in Portugal), selling organic cotton socks.

3.4 Cycle 4: socks made from organic cotton

As it was not possible to produce socks made from SeaCell due to several limitations to the availability of the yarn in the market and production lead times, it was shifted to producing the first batch of socks with organic cotton. Organic cotton was the first alternative most of the contacted suppliers offered, which is why this option was the most realistic choice.

Figure 10: PDCA cycle four – socks made from organic cotton



This decision was also made based on the fact that CO₂ emissions were to be as low as possible by producing locally in Portugal instead of, e.g., in Turkey. A further elaboration on how the unique value proposition of meiaes shifted through this decision is given in the corresponding chapter in this document. In line with the PDCA framework, the manufacturer “The Captain Socks” from Porto, Portugal was contacted. This manufacturer offers a private-label solution to produce socks for other brands. As they produce locally in Porto, Portugal, their values and production processes align with the vision meiaes has regarding local production. The team met Tiago, founder of The Captain Socks, while visiting the ESG fair at Nova SBE in September 2022, discussing a potential collaboration and partnership.

As the team agreed on the partnership, the “Do” phase was entered. The first sample of socks made with organic cotton was ordered. Tiago was provided with an earlier sample of the socks made with SeaCell fabric, the designs for the socks and the individual packaging, and the order quantities. The first pictures of the sample socks were received on November 8th 2022.

Figure 12: Meeting Tiago from "The Captain Socks" at Nova SBE



During the “Check” phase, the materials and production processes of the socks were tested. The socks are made from 80% organic combed cotton, 17% polyamide, and 3% Elastane. This combination makes the socks seamless for superior comfort. A thicker toe and heel are included for the socks' greater durability. The breathable mesh at the top of the foot and a fit-enhancing arch band ensures comfort and accuracy of fit. A cushioned palm will protect from any impacts while walking. The socks are locally produced in Porto, Portugal, under fair and ethical conditions, which made them an ideal fit for meiaes' first product. Also, they come with a paper tag that serves as packaging displaying product information to the customer.

Figure 11: Final sample of meiaes socks with individual packaging (paper tag)



Entering the “Act” phase, it was thus finally decided to stick with producing organic cotton socks with meiaes' new partner - The Captain Socks. The first batch of 200 pairs of socks was ordered, and the team started to build the business.

Note to the reader: Due to an unforeseen delay of 16 days meiaes could not receive the total amount of 200 pairs of socks in time for the launch of the online shop that was initially planned for 20th November 2022. The package with 200 pairs of socks was lost by CTT and could not be found yet as all requests from the meiaes team were ignored by CTT. However, meiaes was able to launch the shop with 100 pairs on Sunday, 04th December 2022, after ordering another 100 pairs from the supplier.

4 Introduction of the Lean Business Model Canvas

The Lean Business Model Canvas framework by Maurya (2010) is used as a basis to analyze the fundamental premises of founding the fashion brand meiæs. The framework was modified explicitly for lean start-ups, where a one-page business model is used as a substitute for the more traditional option of a complex and extensive business plan. A traditional business plan is unsuitable for fast-moving start-ups due to its static format. Therefore, a dynamic model, such as the lean business model canvas, is an appropriate framework. It was decided to use the Lean Canvas because of its great focus on the problem and solution. An entrepreneurial project can only lead to success if product-market-fit is reached. In order to reach that, one needs to have a suitable solution to a validated problem that is big enough to be addressed. Besides, aspects such as “unfair advantage” and “cost structure” are addressed. They are important because nowadays, almost every market niche is already served. This means that only businesses that are creating and creatively using their competitive advantage can survive. For meiæs, the lean cost structure and unfair advantage contribute to a competitive advantage. Hence, depicting them is of particular importance. The Lean Canvas was also compared to the “Flourishing Business Model Canvas”, an innovation toolkit that helps managers create thriving businesses that are both financially and environmentally sustainable (Flourishing Enterprise Co-Lab 2022). However, the ultimate decision was made to use the Lean Canvas (Maurya 2020) as the lean aspect remained the most important factor for the team when choosing the model. In the next chapters, an evaluation of all sections of the canvas will follow independently. A full-page Lean Business Model Canvas can be found in Appendix 5.

Figure 13: Lean Business Model Canvas - meiaes

Problem	Solution	Unique Value Proposition	Unfair Advantage	Customer Segments
1) People need new socks regularly (due to wear and tear). 2) People desire to have an impact and need an easy way to do so. 3) There is no sustainable socks brand that produces locally in Portugal while donating revenues to ocean-related projects. 4) The fashion industry is responsible for 2.1 billion tonnes of CO2 emissions each year. 5) Only 17% of brands are transparent about their annual carbon footprint at raw material level. 6) 93% of brands don't pay their workers a living wage.	Ethically, locally, and transparently produced socks made from 80% organic cotton. 5% of total revenues are donated to ocean-related charity projects that the peer group cares about. Fair wages for producers. Short transport ways to reduce CO2 emissions to a minimum.	For young, fashionable and conscious minded customers, who want to have a positive impact on the environment and especially care about the ocean, meiaes is an impactful fashion brand producing socks made locally and transparently from organic cotton. that is donating a part of their revenues to ocean preservation projects. Unlike other fashion resellers producing socks made from unsustainable fabrics, our solution supports their customers in creating a positive impact during ordinary purchase decisions and is an ethical clothing choice.	1) Nova SBE network & study program 2) Experience in corporate venture building, venture capital, start-ups, entrepreneurship 3) Close advisors from the fashion industry 4) Access to funding from FFF	1) Customers that are interested in buying more sustainable and fashionable clothing 2) Young & fashionable customers, that actively search for impactful solutions in their everyday life, customers knowing about pressing issues of the ocean and planet earth 3) Present givers (e.g. for Christmas to friends and family) 4) Active people & athletes (surfers, joggers, golfers). 5) "Lifestyle" customers
Key Metrics		Channels		
1) CO2 footprint 2) Amount of revenue donated 3) Marketing traffic 4) Reducing overstock by supply & demand match 5) Generated revenue 6) CAC		1) Shopify shop 2) Social Media (Instagram, Tik Tok) 3) LinkedIn 4) Local selling points (Nova SBE shop, local markets, etc.)		
Cost Structure		Revenue Streams		
1) Raw Material – Organic Combed Cotton, Polyamide, Elastane 2) Fabricants (Knitters, Yarn producers etc.) 3) Freight, Shipping, Procurement 4) Shopify shop 5) Marketing 6) Employees 7) IT Infrastructure 8) Other overheads		1) D2C 2) B2B sales to partners 3) B2B2C sales through partners		

4.1 Problem definition

The problem that meiaes is facing is two-sided: On the one hand, meiaes is faced with the negative influence and perception of the fashion industry on the environment. On the other hand, meiaes is faced with the fact that an increasing number of people, especially Gen-Z, are becoming aware of these circumstances and want a more sustainable clothing choice, which is currently not given in sufficient volume. meiaes is going to address the fashion industry's negative impact on the environment prior to the shift in consumers' minds.

4.1.1 The negative influence of the fashion industry on the environment

It is evident that the fashion sector has an enormous negative impact on the environment (United Nations 2019). Industry-related issues include water usage, (micro-) plastic waste, and greenhouse gas emissions (CO₂), while most CO₂ is produced during the manufacturing and logistics processes. If there is no significant change in how the fashion sector operates, it is predicted that the manufacturing and retail of clothing will emit 1.6 gigatons of carbon dioxide equivalents by 2030 (Statista 2022a). The global fast fashion market is projected to reach 260.93

billion \$ by 2028, from 210.19 billion \$ in 2021, at a CAGR of 3.1% from 2022 to 2028 (Industry Research BIZ 2022).

Plastic is another considerable challenge when it comes to fashion. Especially microplastics in the clothing that comes off during a regular washing cycle and ends up in rivers and oceans. The tons of plastic trash created from wrapping and shipping textiles worldwide is adding even more negative impact. Often, these plastics are not disposed of correctly, ending up in water systems which amounts to 500.000 tons of new microplastic in the earth's waters every year. It is reported that more than 100.000 marine mammals are killed annually by plastic trash, and around 90% of seabirds carry plastic in their stomachs as they mistake it for food. (European Environment Agency 2022)

Even though much research is being done on the impacts of plastic consumption on people, it is evident that people constantly eat microplastics. What also causes the worsening state of waters on earth are the dyeing and finishing processes of textiles. Mostly hazardous chemicals that can harm workers' health and leach into rivers and groundwater systems are being used. The State's Environmental Protection Administration in China, the largest exporter of clothing in the world, said that roughly one-third of the nation's waterways are deemed as not clean enough for direct human contact. Another significant source of water contamination is the use of fertilizers in the cotton industry, used for non-organic cotton, which severely pollutes runoff and evaporation streams. (Just One Ocean 2022)

4.1.2 Consumers' shifted mindset toward sustainable clothing

Times have shifted after movements such as "Extinction Rebellion" and "Fridays for Future" gained momentum, and more consciously minded generations got an increased purchasing power (Han and Ahn 2022). According to a survey carried out by Deloitte (2022), the adoption of sustainable lifestyles is increasing. However, consumers feel the need for more support when

it comes to regular purchasing decisions to become more sustainable. An overview of what prevents consumers from living a more sustainable lifestyle can be found in appendix 6.

It was the third time that Deloitte (2022) surveyed consumers on their beliefs and behaviors related to sustainability. Over that time, their research has revealed that consumers are increasingly considering sustainability and the environment when making consumption decisions. However, additional work must be done to improve consumer access to information and the cost and availability of sustainable solutions. The study also found that consumers are finding more innovative ways to save money while being more sustainably aware, such as by adopting a more conscious lifestyle and selecting more durable goods that can be reused or repaired simply.

4.2 Solution definition

The results of the problem analysis highlight the need to improve access to information about more sustainable consumer decisions. They also highlight that people are more aware of their purchasing power and want to use it wisely.

Based on primary and secondary research, founding a hybrid D2C fashion brand tackling the above-mentioned issues was the most logical next step. A hybrid organization operates between institutional logic, charity logic, and commercial logic (Battiliana et al. 2012). *meiæs* contributes to the change of the fashion industry by ethically and fairly producing socks while using more sustainable resources (organic cotton). Further, *meiæs* aims to educate customers about the state of the oceans and environment and how they can contribute towards a better future of same. Moreover, customers are enabled to do good with their purchases as the brand is donating five percent of its revenues to charity, actively fighting ocean pollution. In this manner, *meiæs* is offering a solution to the two-sided problem.

4.3 Key metrics

Key metrics help to measure success, set milestones, and make the created value of *meiæs* measurable. As these key metrics are only measurable once sales have started, the PDCA framework will be used so that the metrics are planned here, tested (“Do”), and checked throughout the sales process. It will be acted accordingly, and metrics will be adapted. This means that the three last steps will be described and analyzed in the individual parts of this work project. Since *meiæs* is a hybrid company with a D2C business model, it is needed and wanted to fulfill additional key metrics related to their positive impact. Classic D2C metrics include (1) marketing traffic, (2) profit and profit margin, and (3) customer acquisition cost. *meiæs* impact metrics include (4) carbon footprint, (5) amount donated to charity, and (6) supply and demand match. It is only focused on these metrics at this stage of the business, as *meiæs* as a brand strongly believes that it should only be measured what matters, meaning that measuring too many KPIs would draw the attention away from the few essential ones. In the following table, individual targets and justifications for the targets are given. An in-depth analysis of the key metrics can be found in appendix 7. The calculations in the table were adapted to the delivered amount of 100 pairs of socks.

Table 3: meiæs' key metrics

Key Metric	Target	Justification
(1) Marketing Traffic (1.1) Instagram followers and accounts/people reached and (1.2) accounts/people reached on Instagram	100 Instagram followers by the start of sales on 04 th December 2022; Reach 1000 accounts/people on Instagram for at least one post	(1) Until 4 th December 2022, no additional financial resources were put into promoting <i>meiæs</i> ' social media presence Starting with official sales, some Instagram posts will be financially promoted → corresponding individual part: Marketing and sales
(2) Profit and Profit Margin	665,00€ profit; profit margin of 51%	ideal scenario: each customer buys the socks in a 1-pack and not in a bundle, and all 100 pairs are sold; the profit margin

		will stay the same as it is dependent on the price → corresponding individual part: Marketing and sales
(3) Customer Acquisition Cost	20ct per customer	planning with 150 customers and a marketing spend of 30,00€ (spent on the promotion of Instagram posts) → corresponding individual part: Marketing and sales
(4) Carbon Footprint	2kg CO ₂ raw material per pair of socks	keeping the production as local as possible, as well as using different raw materials → corresponding individual part: Impact assessment
(5) Amount donated to charity	64,95€	ideal scenario (100 pairs sold in 1-pack) with five percent donation from revenues → corresponding individual part: Impact assessment
(6) Supply and Demand Match	100 pairs will be sold, no additional requests	any form of overstock is harmful to the planet. Therefore, a pre-sale list (appendix 8) was distributed during Cycle 3: socks made from SeaCell. 137 people signed up to buy 211 pairs of socks → corresponding individual part: Impact assessment

4.4 Unique value proposition

To define the unique value proposition of meiæs, a competitive market analysis with similar businesses that act as competitors were evaluated first.

4.4.1 Competitive market analysis

The main advantages of this analysis are the ability to implement better business strategies, fend off competition, and gain market share. Furthermore, it helps to always keep up with market developments and trends and finally ensures that the offered products comply with or exceed current industry requirements (White 2022). During the research phase for meiæs' competitive market analysis, several businesses with a similar approach were identified. The main comparison aspects were the business model, mission, offered products, channels, and marketing strategy.

When conducting a market analysis of the selected target markets, the German, Austrian, and Swiss socks market, one quickly identifies the major players operating in the socks market, such as Adidas A.G., Asics Corporation, Nike Inc., Puma S.E., and Falke KGaA. They are all global players with large market shares in the sock industry (Wagner 2021; Research and

Markets 2021). As meiaes also operates in the sock industry, keeping these prominent players in mind is essential. However, as meiaes is pursuing a different mission, aiming at a different target group, and offering a different product range, the focus was set on those companies with more similar approaches. Hence, the following companies can be identified as meiaes' main competition and are more comparable regarding the key metrics meiaes is built upon. A more detailed analysis can be found in appendix 9.

Table 4: Competition to meias - Dopazi

Dopazi	
Origin	Germany, Warendorf
Business model	D2C
Sales Channels	E-commerce
Mission	Donating an amount of the revenue to ocean-related projects that aim at stopping to catch sharks in order to make profit from it
Product Range	Bags, sports shirts, and socks (tennis, sports, casual in black, white, and various colors)
Marketing strategy	Topics: Running, lifestyle, sports, and cycling
Details	Designed & Produced with organic cotton and high quality in Germany
Price Range	17-19€

(Dopazi 2022)

Table 5: Competition to meias - Patron Socks

Patron Socks	
Origin	Germany, Cologne
Business model	D2C, B2B2C
Sales Channels	E-commerce, Cinque (B2B2C channel)
Mission	Clean the ocean by recycling ocean plastic and using Polyamide made from recycled plastic from plastic bottles, donating 3% of revenues
Product Range	Socks (tennis, business, casual, ankle, sneaker in black, white, and various colors)
Marketing strategy	Topics: Ocean, casual lifestyle, business lifestyle, city of Cologne, skating
Details	Produced in China
Price Range	7,95-14€

(Patron Socks 2022)

Table 6: Competition to meias - Sock Up Your Life

Sock Up Your Life	
Origin	Neuhaus am Inn, Germany

Business model	D2C
Sales Channels	E-commerce
Mission	Operate as transparently and locally as possible and use organic cotton from Greece and produce the socks in Germany
Product Range	Casual and business socks in bright colors and patterns
Marketing strategy	Topics: nature, transparent insights into production
Details	Produced in Germany
Price Range	14,50€

(Sock Up Your Life 2022)

Table 7: Competition to meiaes - Von Jungfeld

Von Jungfeld	
Origin	Mannheim, Germany
Business model	D2C
Sales Channels	E-commerce
Mission	Revolutionize the socks market for men by offering colorful and stylish socks with different designs while only using organic cotton
Product Range	Socks, t-shirts, underwear for men
Marketing strategy	Topics: products, themes like Valentine's Day and Christmas
Details	Produced in Europe
Price Range	7,95-11,95€

(Von Jungfeld 2022)

Table 8: Competition to meiaes - Snocks

Snocks	
Origin	Mannheim, Germany
Business model	D2C, B2B2C
Sales Channels	E-commerce, Amazon FBA
Mission	USP is a six-month guarantee that replaces any socks that have e.g. a hole within this time frame after the purchase
Product Range	socks, underwear, and loungewear
Marketing strategy	Focused on founding and growth experience of Snocks
Details	Produced in Europe
Price Range	Bundles of 4: starting from 29,99€

(Snocks 2022)

To conclude, there is indeed competition in the market that meiaes must guard off in the future. However, the competition can be seen as proof of concept and market validation. All these businesses were able to gain a large enough market size that enables them to build a sustainable business model. With this market overview and, more specifically, by gaining insights about

the above-mentioned competitors, the team has already learned more about the German, Austrian, and Swiss socks markets and includes this knowledge into meiæs' future strategy and business model.

Table 9: Competitive market analysis and USPs

<u>Competition</u>						
<i>Local production</i>	yes	no	yes	yes	no	yes
<i>Organic cotton</i>	yes	yes	yes	yes	yes	yes
<i>Donating to ocean-related projects</i>	yes	no	no	no	no	yes
<i>Creating awareness about ocean-related problems</i>	no	no	no	no	no	yes
<i>Competitive pricing</i>	19,00€	14,00€	14,90€	11,95€	7,50€	12,99€

4.4.2 Resulting unique value proposition

The unique value proposition of meiæs can be described with three aspects: impactful, local and transparent. First, the socks are impactful as they are not only from sustainable materials but also positively impact society. The primary material is organic cotton, which is, compared to other materials, a far more sustainable alternative in the fashion industry. The used organic cotton is certified with the Global Organic Textile Standard (GOTS), ensuring that it was produced under fair working conditions. Additionally, different studies show that the quality of organic cotton is generally higher and, therefore, long-lasting (Soil Association, 2015). Using these materials, meiæs contributes to the Sustainable Development Goal (SDG) 12, “Responsible Consumption and Production”. With the five percent donation of revenues to ocean-related projects, meiæs has an additional positive impact. With these projects, the company builds awareness of the critical role of a healthy ocean for the environment and supports SDG 14, “Life Below Water”.

The second differentiation is the local focus of the business. meiaes defines local as the geographical concentration of all processes involved for the socks as close to the end consumer as possible to be more sustainable. Therefore, the socks are produced in Porto and will be stored in Lisbon. In the beginning, meiaes will focus on selling the socks directly in Lisbon and, therefore, have a short logistics and transportation process. One could argue that selling locally limits the customer base to the locally available number. But for meiaes operating locally, keeping emissions at a minimum is inherent to the hybrid business model. That is why producing and selling locally is not seen as limiting sales.

The third differentiation from other competitors is transparency. Transparency is defined as open communication of all production details and decisions. By doing so, the customer can understand the origin of all materials and products and what stages they have gone through until the sock arrives at the final location. The brand is in close contact with the supplier, who constantly informs about the origin of all materials and the stages they went through. In addition, also greenhouse gas emissions and other environmental impacts of the socks will be listed on the website. Furthermore, the selection and status of the projects meiaes is cooperating with will be transparently displayed. All projects are explained on the online shop, and meiaes will be in close contact with the involved people to ensure the donation arrives at the intended location. Other competitors in the market also donate some of their revenues, but often it is unclear what percentage is donated and how much impact is created with one purchase. In addition, meiaes offers a fashionable design and affordable pricing compared to competitors.

Figure 14: Excerpt from the website about the unique value proposition

OCEAN SOCKS
MADE FROM ORGANIC COTTON
DESIGNED & PRODUCED IN PORTUGAL

We care about the ocean.
That is why we will be donating 5% of total revenues
to support ocean-related projects in Portugal.

IMPACTFUL	LOCAL	TRANSPARENT
meiæs aims to make an impact and thus, we donate 5% of revenues to ocean-preservation projects in Portugal by our awesome partners. We care about the ocean, come and ride this wave with us.	meiæs produces locally in Porto, Portugal. Ethical production, fair wages and short transport ways make us stand out from the crowd. We care about our surroundings and you should do too.	meiæs aims to be as transparent as possible about how our products are produced, where the raw materials come from, and what costs and emissions occur. We care about transparency and you will like it too.

(meiaes.com)

4.5 Unfair advantage

The unfair advantage depicts factors that offer the company an advantage (even a competitive advantage) over other market entrants. On the one hand, this advantage was acquired through training and education, but on the other hand, it is also based on the privileged position the founding team finds itself in. That is why the advantage is also called an unfair advantage. In the following, the identified four factors giving meiæs an unfair advantage are described.

4.5.1 Team composition as an unfair advantage

meiæs is aware that the team is one of the most important success factors for a company. Long-lasting success can be achieved only with the right mix of soft and hard skills. That is why the team is considered to be an unfair advantage. The personal introductions of each founding

Figure 15: The meiæs founding team (Nils, Marita, Eva and Georg)



member can be found in appendix 10.

Throughout their personal life's, all of them have noticed that the current state of the world is bad and therefore educated themselves to fight current grievances. Their professional

experiences have contributed to the formation of skills, as depicted in table 10.

Table 10: The meiaes founding team - skills and competencies

Name	Skills and competencies	Business need
Nils Johannsen	Problem-solving mindset, effective communication, networking, and strategic business planning	Pursuing a vision considering and overcoming challenges along the way
Marita Schmeller	Prioritizing tasks, communication and presentation skills, organizational skills	Keeping the team on track and holding people accountable, organizing tasks
Georg Reckhaus	Interdisciplinary thinking, decision-making, adaptability, and sustainable mindset	Critically evaluating the product and processes
Eva-Marie Steinbömer	Communication skills, analytical thinking, and building long-term relationships	Establishing and nurturing partnerships to create value

4.5.2 Partnerships as an unfair advantage

As a hybrid organization, building mutually beneficial partnerships is crucial. Without them, the impact meiaes is trying to create would not exist. Because of this importance, partnerships will be discussed intensely in the corresponding individual part later in this document. Here, the focus lies on analyzing why partnerships are considered an unfair advantage. One primary reason is the way the partnerships are established. Since meiaes is founded as part of a master's program, it can still rely on the network as well as the reputation of the university. The project immediately gains more credibility and recognition by naming Nova SBE when introducing meiaes to a potential partner. In addition, through supervisors, the ability to establish direct contact with well-known organizations like Calouste Gulbenkian Foundation and other companies that work closely with the university is increased. Reaching these organizations from the cold would not be as convenient as meiaes first has to build trust and credibility.

4.5.3 Network as an unfair advantage

The whole team has already built up their own networks through diverse backgrounds and focus areas. This, in addition to the great relationship with Nova SBE, enables meiaes to reach

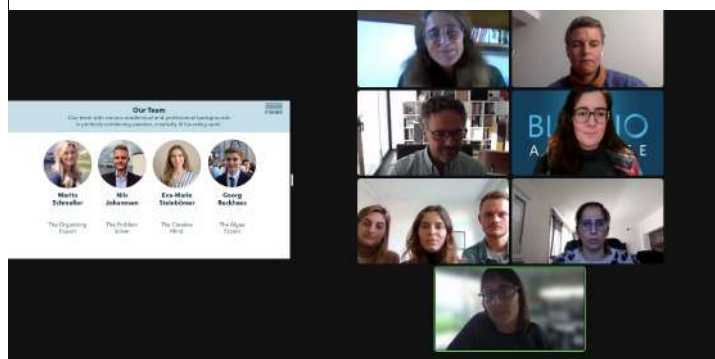
milestones faster and more efficiently. The founding team gained valuable insights into the fashion industry through its network and talked to different founders.

One example is Lisa-Marie Weidling (appendix 11) from “Story of Mine”. Marita Schmeller met with her to find out how Story of Mine was able to find a supplier producing with SeaCell. This network will also help generate the first sales, spread awareness, and promote the brand. meiaes firmly trusts in the quality and depth of its network, which is why it represents an unfair advantage.

4.5.4 Access to funding as an unfair advantage

At the start of the semester, while evaluating potential partnership opportunities, meiaes came across the BlueBio Value Ideation Challenge when actively searching for accelerator programs

Figure 16: Introduction meeting with Blue Bio Value team (Friday 11th November 2022)



for start-ups for and from the blue economy. BlueBio Value is an entrepreneurial initiative (supported by the Gulbenkian Foundation and the Oceano Azul Foundation) that

hosts an Accelerator and Ideation Session to create solutions to the problems of marine life and the ocean. meiaes applied for the ideation challenge and was accepted. It will be elaborated on the outcomes of this weekend in the individual part “Partnerships and Company Acceleration”. The prize for the winner of the challenge was set to 5.000€ starting capital. As the chance to get capital through this challenge was much higher than if meiaes had to look for funding in the traditional way, the team was motivated to participate.

Therefore, only the chance to win was already identified as an unfair advantage. Even if meiaes would not win the money, the challenge could allow the team to learn a lot and network, which

will certainly help with a potential future search for funding. Nevertheless, it is essential to point out that the first batch of socks was entirely financed by the private money of the team members, and no external sources of capital have been used.

4.6 Channels

Channels are a relevant touchpoint with customers, and their main purpose is to offer the means of communication and delivery of a company's product or service to its customers. An in-depth analysis of channels will be conducted in the individual part on marketing and sales later. In general, channels can be divided into two kinds: communication and distribution (Reiling, 2022). Communication channels are those channels that are used for reaching out to potential customers. In terms of marketing, these channels are "seeding" the market with information about the offered products and services to attract new potential customers. In terms of selling, it entails engaging with customers in the most effective and efficient ways to reduce acquisition costs to a minimum. Distribution channels are those channels that are used to getting the products or services to the customers. Those channels can be physical or non-physical or a combination of both. Furthermore, they can be directly set up by the company or by middlemen like wholesalers or merchants (Reiling 2022). Moreover, one can differentiate channels towards

Figure 17: Five channel phases of customer experience)



(Reiling 2022)

their tasks of serving in the five different phases of the customer experience. In the first phase, also called the "awareness" phase, a company wants to use channels to raise awareness about offered services and products. This includes advertising on social media or newspapers. The second phase, also called the "evaluation" phase, focuses on helping customers to evaluate

whether a company's value proposition can help solve their issue. Some tools to use are surveys or reviews. The "purchase" phase offers the customers a way to purchase the products or services. The company must decide whether they are offering the products online or in a brick-and-mortar store and if there is, for example, a self-checkout or a cashier selling the products. Next, the "delivery" phase focuses on delivering the value proposition to the customers. Is there a brick-and-mortar store, and the delivery, therefore, happens simply over the counter, or will the product be delivered at the doorstep. Finally, the fifth and final "after sales" phase of the customer experience provides post-purchase customer support through, for example, a return policy, customer assistance, or a call center (Maurya 2022).

To cultivate and maintain loyal customer relationships, meiaes will use a mixture of different (communication and distribution) channels elaborated later. The following mix provides efficient and adequate means of communication to satisfy how all different customer segments can be reached out to and be communicated with during the five phases of the customer experience. The aim is to create the most efficient and effective mix to deliver meiaes' value proposition.

The communication and distribution channels that meiaes is using to cover all phases of customer experience are Instagram, LinkedIn, the personal network, the meiaes online shop and events. Further elaboration on the setup and performance of these channels will be discussed in the marketing and sales individual part later.

4.7 Customer segments and market analysis

An extensive market analysis of current trends and potential customer preferences was conducted to define a target group and the different customer segments that meiaes serves.

4.7.1 Market analysis

To gain extensive insights and an overview of initial assumptions of the German, Austrian and Swiss socks market as well as potential customer segments, secondary research methodologies were used. In a report from the market research institute GfK Switzerland and Blacksocks (2022), it was published that Germany is one of the biggest markets for socks in Europe. According to the research, German sock consumers believe that one can never possess enough socks. On average, men and women both own around 24 pairs of socks and usually buy 13 new pairs of socks every year. In a European comparison, Germany can therefore be seen as the record holder (Blacksocks 2022).

Using this as a starting point to calculate the potential market size of meiæs, a total addressable market worth 2.126 billion € in Germany and Austria was identified (Market Data Forecast 2022; Deutsches Statistisches Bundesamt (Destatis) 2022). Furthermore, the Swiss market is also planned to be served in the future. Even though the Swiss market is smaller than the German and Austrian socks markets combined, the market introduction is relatively easy as the language remains the same and cultural perception is quite similar. In terms of purchasing habits, the discovery was made that women buy socks more frequently than men, who only do so two to three times each year (Statista 2011). This leads to the assumption that a package of three to seven pairs of socks is often purchased per order and should be included in the product offering. Based on the chosen design of the meiæs ocean socks, young adults between 18 and 50 years will determine the primary target group when it comes to demographic characteristics. The servable addressable market of 717.9 million € is therefore determined by the target group of people between 18 and 50 years (Statistik Austria 2022; Bundeszentrale für politische Bildung 2020) as well as the preference of purchasing more sustainable (even if more expensive) socks from the conducted survey. Finally, this means a serviceable obtainable market (SOM) of 179 million € where a market capture of 1% is achievable which equals a

purchasing power of 1.8 million € in Germany and Austria. A detailed explanation of this calculation can be found in appendix 12.

Figure 18: Socks market size in Germany and Austria (TAM, SAM, SOM)



4.7.2 Target group and customer segments

Based on the conducted online survey, the team was able to identify a target group that can be segmented into four different customer segments that serve as meiaes' target customers and that are reached by the selected sales and marketing channels. After gathering all answers, clusters were created according to the preferences when it comes to sock consumption and sustainability preferences. Due to the immaturity of the business, the team was not able to analyze how much value can be created through each type of customer segment. This analysis will be done at a later stage once data like average order value and average order frequency can be calculated in more detail and accuracy.

The first customer segment that was identified is the "Ocean lover". A person from this customer segment has a passion for the ocean and is specifically concerned about the problems

the ocean is facing nowadays and therefore wants to support projects that help to prevent or solve the problems. The person buys products that have good quality, are produced with low emissions, and is interested in companies that support environmentally important topics using the company's range to do so. This customer segment mainly buys from meiæs because of the mission of supporting ocean-related projects.

A person from the customer segment "Sustainable buyer" is concerned about global warming, social injustice, and ethical business practices. The person buys locally, sustainably produced goods and highly values transparency, honesty, and ethical practices. This customer segment buys meiæs socks because they are made from organic cotton and are locally and ethically produced. They are willing to pay more for socks knowing they are supporting a small business.

The third customer segment that was identified is the so-called "Fashion fanatic". This customer segment is interested in the latest fashion trends and values products that combine high-quality with fashion and lifestyle. The person buys either in local shops or online and is willing to pay a more for high-quality lifestyle products as this is an important part of their life. The main reason this customer segment buys meiæs socks is due to the colors, logo and design.

The last customer segment identified is the "Gift giver". A person from this customer segment is specifically looking for gifts for their friends or family members that are practical. Socks from meiæs offer a good opportunity as socks are a common gift people like to buy. On top of that, meiæs ocean socks are also supporting a good cause.

4.8 Cost structure

The cost structure had to meet the perfect balance between very economical and yet high quality and value based. For the production of the first batch of socks, that balance could be found. However, meiæs is still operating on a small scale, with a production run of 100 pairs of socks, and does not yet deal in large sums. This means that the cost structure can and will change in

the future. The PDCA framework was used to evaluate how much money the team needed to invest and how the costs will be distributed across the value chain.

With regards to planning the costs, the team was faced with the challenge of reconciling their limited budget, which is available to them as students, with their high expectations. The aim was to produce a small number of socks because the founders did not want to produce overstock. In addition, it was unsure how well the socks would sell, which is why the meiaes team did not want to take the additional risk of significantly higher costs (for production and storage). With these significant constraints in mind, several European suppliers were contacted (“Do”). It turned out that the team had to readjust their expectations due to the current situation of the fashion industry (“Check”), which is why an increase in the initial personal investment and pivoting from the SeaCell idea followed.

In the next cycle, meiaes met Tiago (The Captain Socks) and came to an agreement with him. It was the best mix that could be achieved, given the long search for suppliers and their offerings. meiaes is now comfortably offering valuable, high-quality products, which the founders buy at a reasonable price. Compared to the industry, the cost of 6,34€ is costly, but the small number of units (100 pairs) makes the initial investment per person bearable. meiaes, therefore, relies on a value-driven cost structure. Its priority is that the socks are produced as sustainably and fair as possible.

At the current volume, meiaes does not yet benefit from economies of scale, which is why the purchase price for the socks, including the label, are considered fixed costs. Other fixed costs are the IT infrastructure, which includes the website, the domain, the online store, and the initial set-up at the manufacturer (machine settings, color selection of the socks). Variable costs include the marketing costs, as well as packaging costs, and other costs such as customs duties. The sum of all costs is 755,01€.

Table 11: Total costs to produce 100 pairs of organic cotton socks by „The Captain Socks“

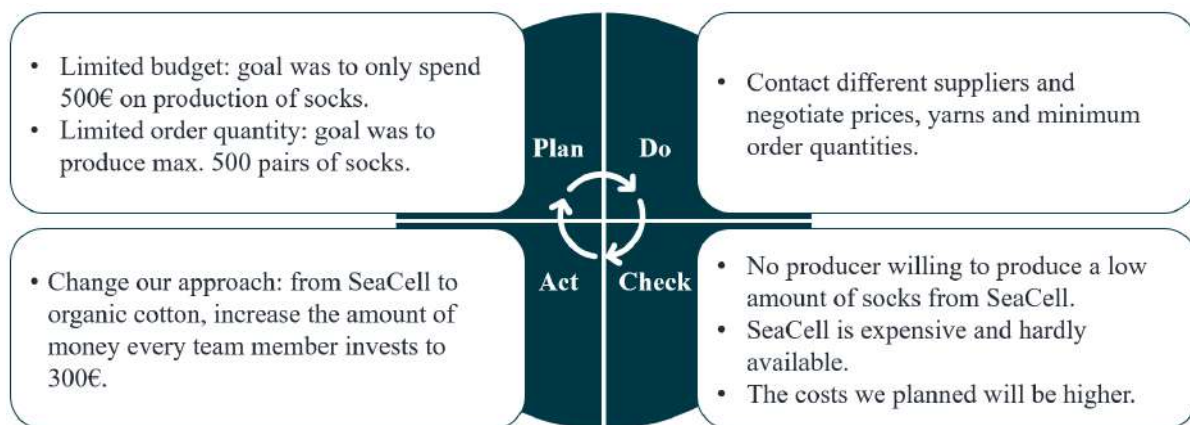
Costs for socks	Price	incl. 23% VAT	Amount	Total
Variable				
Price per pair	4,05 €	4,98 €	100	498,00 €
Price per paper tag	0,21 €	0,26 €	50	13,00 €
Fix				
Set-Up	100 €	123 €	1	123 €
Total				634,00 €
Cost per pair of socks 6,34 €				

Table 12: Total costs for the foundation of meiaes until 18th November 2022

Total Costs	
Fix Costs	
Socks	
Set-Up (Samples, Machines)	123 €
Production socks	498,00 €
Production paper tags	13 €
IT-infrastructure	
Shopify (special three-months offer)	3 €
Domain (for 12 months)	10,44 €
Legal	
Application (GbR)	70 €
Variable Costs	
Marketing	30 €
Others (toll fees, etc.)	7,57 €
Total	755,01 €

The founding team has ensured meiaes' cost structure is lean. Everything should be plannable and not have too many factors that should play into meiaes' pricing. Of course, the company is currently benefitting from the fact that it does not have to pay salaries or office space. Furthermore, it is ensured that any additional costs that might occur during the launch of the brand can be paid by the team and don't make the business a failure immediately.

Figure 19: PDCA framework for meïæs cost structure



4.8.1 Product pricing strategy

It is essential to convey through the price alone that it is a high-quality product that has been produced sustainably. Therefore, a pair of socks is offered for 12,99€. This can be considered a high price, but the competitors mentioned prove there is a valid market for socks in this price segment. Moreover, several studies show that consumers are willing to spend more money on something if it has a positive impact (Kappel 2021; Van der Merwe 2020).

Different pricing strategies were applied. Competitive pricing, value-based pricing, and bundle pricing. Regarding competitive pricing, it was primarily looked at meïæs direct and indirect competitors, positioning the firm close to them. Since meïæs competitors also applied the value-based pricing strategy, the two selected strategies did not conflict with each other. What was particularly important to the founders with the value-based strategy was that the company would have the option of donating at least five percent of the sales price to charity. Besides that, also all costs need to be covered.

Additionally, bundle pricing is used because it works well for a product like socks. Many people buy socks in multiples because they are worn frequently. Also, bundle pricing is an interesting psychological trick that is applied to get customers to buy multiple socks at the same time and

Group Part

spend more money. The bundles cost 35,99€ for a 3-pair package (discount of 8,28%) and 79,99€ for a 7-pair package (discount of 13,68%).

Figure 20: meiaes online shop – products - ocean socks



These prices were identified using the PDCA framework. It was planned with different prices, calculating the resulting profit and checking whether all costs could be covered. The named prices were reached through trial and error and the mentioned pricing strategies.

Table 13: Overview of bundles and profits per bundle (before additional costs)

Bundle price	Bundle count	Price per pair
12,99 €	1	12,99 €
35,99 €	3	12,00 €
79,99 €	7	11,43 €
Donation	Profit/bundle	Profit/pair
0,65 €	6,65 €	6,65 €
1,80 €	16,97 €	5,66 €
4,00 €	35,61 €	5,09 €
Ideal Profit	665,00 €	
Ideal Revenue	1.299,00 €	
Ideal Donation	64,95 €	

4.8.2 Impact pricing strategy

As the hybrid approach as a D2C business model suggests, meiaes will donate five percent of revenues to an ocean preservation project as this is part of the brand's identity. In this case, no framework was used, but it was relied on what other brands are donating. meiaes strongly

Group Part

believes that the donations, especially when “only” producing socks from organic cotton, are what sets them apart and convinces the buyer to purchase their socks. That is why this number was set to be as high as possible, and the price was adapted accordingly. When comparing this figure to other fashion brands that are donating part of their revenues, it is a high benchmark. Hence, a comparatively huge amount of money is donated. For example, “Pangaia” or “The Classic T-Shirt Company” are donating only 1% of their revenues, although their prices are relatively high. At a price of 12,99€ meiaes will be donating 0,65€ per pair of socks sold. This was also included in the product’s description to make customers aware of the donations before purchasing the product. The organization that is donated to will be introduced in the individual part “Partnerships and Company Acceleration”.

Figure 21: meiaes online shop - product description with donation and transparency notes

meiaes ocean socks - 1 pair
€12,99 EUR

Size: 35 - 40, 41 - 46

Quantity: 1

Add to cart
Buy it now

✓ Pickup available at Lisbon
Usually ready in 24 hours
[View store information](#)

0,65€ are donated to Hope Zones Foundation when purchasing this product

Our fashionable, athletic-looking, and comfortable ocean socks in white with the wavy logo. Made with organic cotton.

Details:

- Seamless, for the best possible comfort.
- A reinforced toe and heel, for increased toughness.
- A fit-enhancing arch band and breathable mesh at the top of the foot, to ensure high comfort and a superior fit.
- A padded palm, for impact protection.

MEIAES
ETHICAL, LOCAL, TRANSPARENT
DESIGNED & PRODUCED WITH LOVE IN PORTUGAL

	EUR
PRODUCTION	8,00
PACKAGING	0,40
LABEL	0,30
LOGISTICS	0,20
OVERHEADS	0,20
END PRICE	12,99
DONATION	0,65

RESULT OF RETURN-LOGISTICS IN DAYS:
UPON PRESENTATION OF THIS RECEIPT
THANK YOU FOR YOUR PURCHASE
JOIN THE MOVEMENT
SUSTAINABLE
HELP@MEIAES.COM

MEIAES
ETHICAL, LOCAL, TRANSPARENT
DESIGNED & PRODUCED WITH LOVE IN PORTUGAL

EXHIBITION PER PAIR OF SOCKS	
COSE (CM)	FOR
100	100
100	100
100	100

ORGANIC COTTON (VE COTTON)
COSE (CM) 100
BUTTER (L) 100
SHOULDER (CM) 100
TOLLO (CM) 100

RESULT OF RETURN-LOGISTICS IN DAYS:
UPON PRESENTATION OF THIS RECEIPT
THANK YOU FOR YOUR PURCHASE
JOIN THE MOVEMENT
SUSTAINABLE
HELP@MEIAES.COM

Materials
Shipping & Returns
Care Instructions
Share

Using an impact pricing strategy is backed by several findings from research. According to a survey carried out by Deloitte (2022), when buying clothing and footwear, people are generally becoming more conscious. They buy fewer new clothing items, mend their garments, buy used or refurbished apparel, and select businesses based on their sustainability and ethical business methods.

However, according to the survey, only 24% of consumers would be willing to pay more for sustainable products. According to the teams' conducted survey, 88 % of potential customers are willing to pay more for the socks if they are produced ethically, locally, and transparent, which is why the team decided to use this pricing strategy.

4.9 Revenue streams

meiæs is based on two main revenue streams through which money is earned. The first is the online shop provided by Shopify, and the second is events sales. Both will be explained in the following. The PDCA framework is used in a way that the revenue streams are planned here, supported by assumptions. The analysis will be conducted, and conclusions will be drawn after the start of sales, finishing with the Do Check Act stages in the individual part "Marketing & Sales".

4.9.1 E-commerce sales

Without an online store, the business cannot survive in a digitalized and globalized era. It allows reaching many customers to introduce and sell meiæs' products. Shopify was used as a suitable tool to build an online shop. This would not be possible in an offline store as easily, as one would have to take time for each customer individually or provide print materials. This would mean a large financial and time investment. Another reason for an online store is the simplicity of the purchase process. The store allows to collect customer data, map payment processes, and make invoices available.

4.9.2 Event sales

The second revenue stream is direct event sales, which are made through direct exchange with potential customers at events like weekend markets. The goal is to direct as many people from these groups to the online shop or to sell socks directly. This channel includes a lot of manual

work, and the effort is therefore significantly increased, but the team hopes that the personal exchange will lead to a larger purchase volume and, thus, higher sales.

5 Introduction and justification of individual parts

In the following, the reasons for the focus areas of each individual part are explained, and the hypotheses that will be tested in each individual part are described.

Product, suppliers, and product-market-fit: it is focused on this part because finding the right supplier with the highest quality product for the best price is an essential step to achieving customer satisfaction. Ultimately, achieving product-market fit will ensure that the product is needed and wanted, and currently, there is a mismatch between supply and demand in the market.

Marketing and sales: In the second individual part of this work, the deep dive into Marketing and Sales will be carefully examined. Both aspects have a crucial influence on the performance and success of meiaes as it creates the marching direction of how much awareness the brand will gain. Furthermore, generating sales is critical in setting up and leading a sustainable business. Without sales, a business cannot be considered a business as it does not generate revenue. The individual part, therefore, focuses on the way meiaes is planning on realizing sales and which sales and marketing channels are used to approach and communicate with potential customers and distribute products.

Partnerships and company acceleration: One part is dedicated to Partnerships and Company Acceleration, as these two aspects are essential parts of the business with regard to current and future operations. Both focus points are not direct parts of the Lean Business Model Canvas. However, aspects of the unfair advantage and solution as part of the umbrella term partnerships will be covered. Besides that, the team considers it necessary to report on future funding

opportunities, how the business will develop in the future, and what was already done to sustainably found and grow a business in Germany.

Impact assessment: The last section is an Impact Assessment of meiaes as a business. It aims to see how impactful meiaes is and to be transparent as both are in the identity of meiaes. From the beginning of the project, it was clear that the team wanted to be a counterweight to the fast fashion industry.

Part II: Individual part

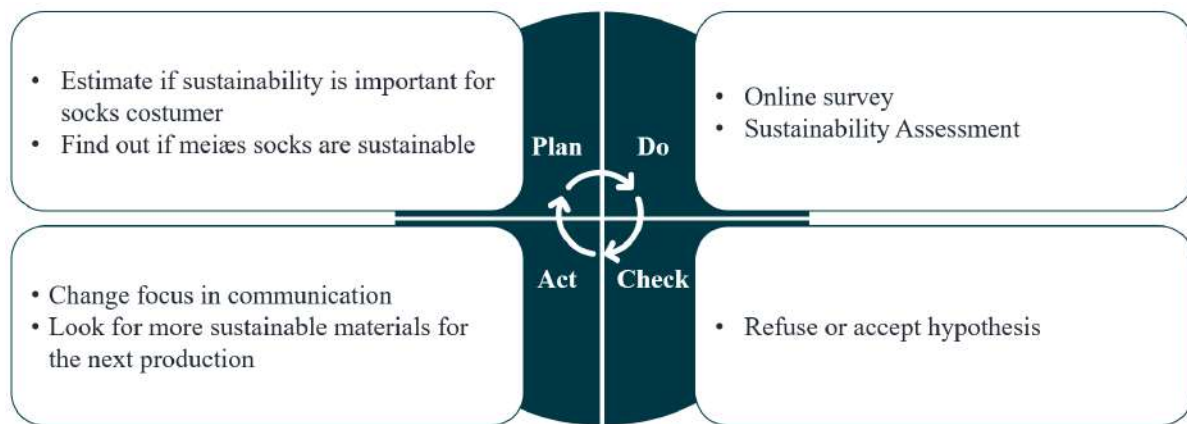
6 Impact assessment (Georg Reckhaus)

As meiaes aims to be an impactful, transparent, and local business, this individual part focuses on analyzing the sustainability of meiaes. Describing sustainable fashion is challenging, as there are various terms and criteria, such as "plastic-free," "organic", "conscious", and "recycled", used to determine how "sustainable" a piece of clothing or specific fashion brand is. Even some terms are in opposition to one another. For instance, some people would consider a product manufactured from recycled plastic sustainable, while others might think that plastic still negatively influences the environment. This means that goods can commonly have the term "sustainable" from manufacturers even while they still have an adverse environmental impact, making it challenging for consumers to shop for environmentally friendly clothing. To analyze the sustainability of meiaes, the PDCA framework was applied. In the first phase of planning, the following two hypotheses were established:

- (1) *"For meiaes customers, it is important that socks are sustainable, and they are willing to pay a premium for it."*
- (2) *"meiaes socks are more sustainable than the average sock due to its lower CO₂ emissions under 2kg per pair of socks raw material. The brand can therefore be considered "impactful"."*

The sustainability of the used material was evaluated in the second step of "Do" through an online survey. The survey and assessment results are detailed in the next chapter to assess the two hypotheses. The fourth stage of the framework, "Act," is discussed to comprehend how meiaes can become more sustainable in light of this.

Figure 22: PDCA framework - impact assessment



6.1 Customer perspective

The following chapter focuses on the first hypothesis and, therefore, on the customer. It starts with the problem of unsustainable behavior in the fashion industry before the results of the online survey are explained. Finally, it ends with an interpretation of the result and the hypothesis.

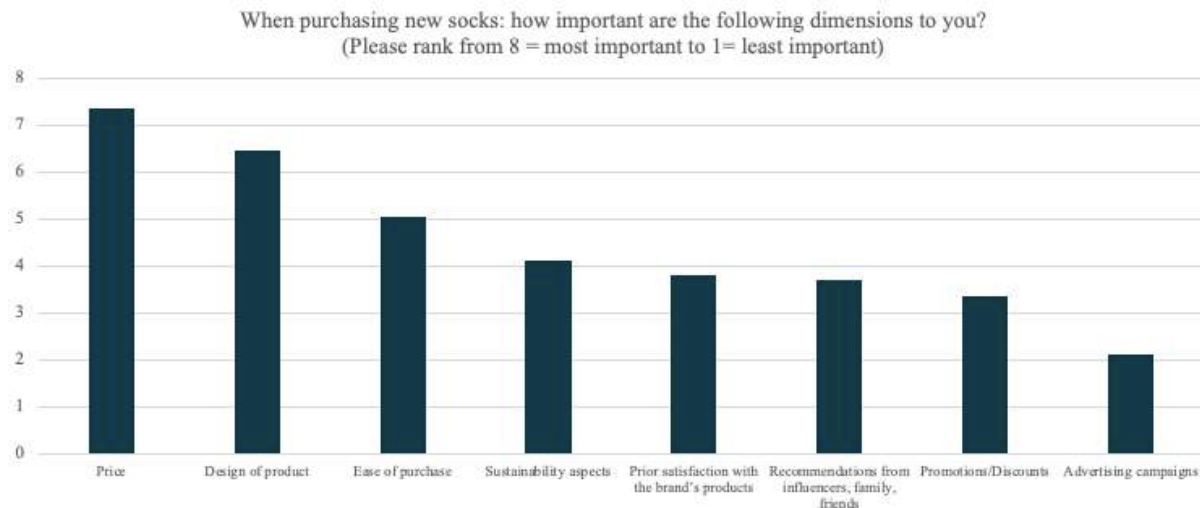
6.1.1 Unsustainable consumer behavior in the current fashion industry

As consumers become more aware of the importance of sustainability and start to consider it more when making purchasing decisions, the range of eco-friendly and sustainable solutions is growing. As a result, the sales proportion of "ethical" and "sustainable" clothing items has continuously climbed, reaching 4% globally in 2022 (Statista 2022b). This trend is estimated to continue, with the share of global sales exceeding 6% by 2026 (Statista 2022b). Fast fashion, however, is also on the increase and has an expanding negative influence on the environment (Statista 2022a). Consumers increasingly want to follow the newest trends exhibited on social media by their favorite influencers and celebrities. Different questions about this subject were posed in the survey to see whether sustainability is significant to meiaes' customers.

6.1.2 Results from the customer feedback survey

In the online survey, the participants were asked: “When purchasing new socks: how important are the following dimensions to you?”

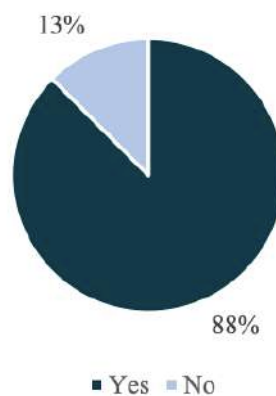
Figure 23: Customer feedback survey question - product attributes



The participant was asked to put the different attributes in order, which made it impossible to give two elements the same importance. The graph above demonstrates that price, followed by design and simplicity of purchase, was the most crucial factor. The socks' sustainability is only a little more significant than other characteristics. Given that socks are a fashion item, it makes sense that design is more relevant. The large number of students may make the cost more significant. But it still surprises how much more money and design matter.

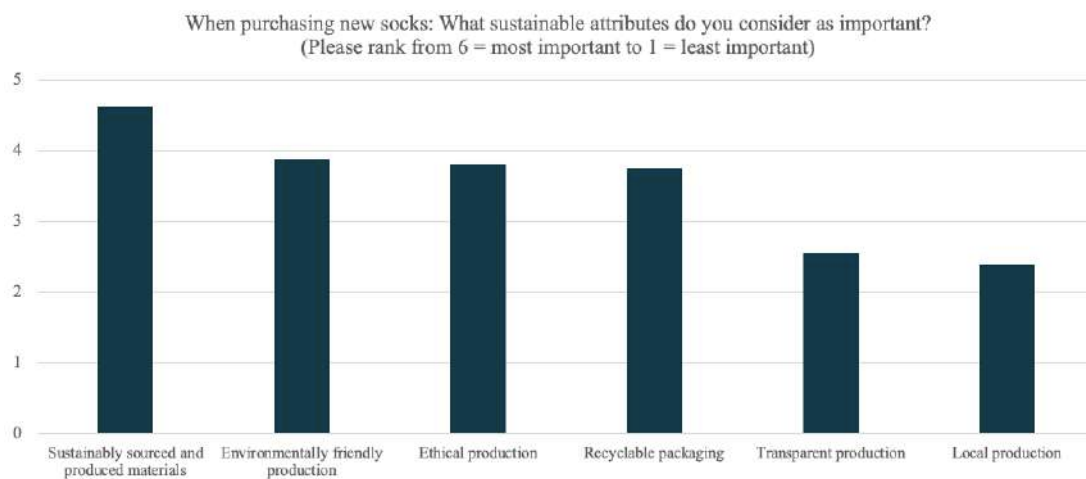
Figure 24: Customer feedback survey question - willingness to pay

Would you purchase sustainable and eco-friendly socks, even if they were slightly more expensive than other socks that are not considered sustainable?



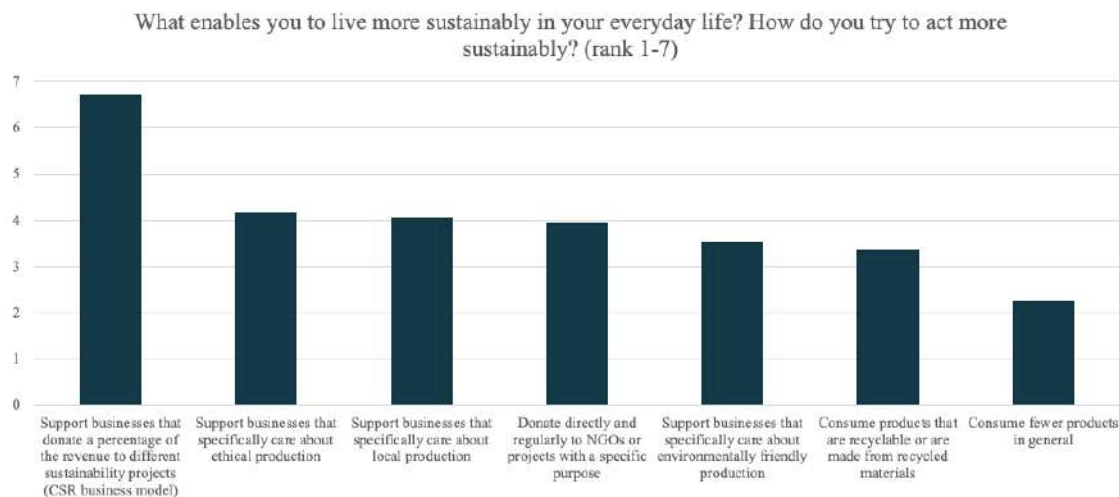
In addition, the participants were also asked if they would buy sustainable socks, although there were slightly more expensive (willingness to pay). Almost 90% of the answers said they would pay more for it. To see what elements of sustainability in socks are essential, it has been asked, “When purchasing new socks: What sustainable attributes do you consider important?” Surprisingly local production is the least important element. The sustainability of the raw materials is the most critical one. The environmentally friendly and ethical production and the packaging are equally crucial to the customer.

Figure 25: Customer feedback question - sustainability attributes



In addition to the product's sustainability, the survey also asked the participant, "What enables you to live more sustainably in your everyday life? How do you try to act more sustainably? (rank 1-7)". It aimed to see if the revenue donation would make sense as a selling argument. As

Figure 26: Customer feedback question – customer consumption behavior



seen in the graph above, the customer favors a donation model. It was the first choice with a significant distance from the next one. All the other possibilities had similar importance. The smaller product consumption is the last place, showing that people still want to consume many products but are often unwilling to act actively against climate change.

6.1.3 Interpretation of the results and hypothesis

The various survey results for the PDCA framework's third stage, "Check," led to the conclusion that while sustainability is an essential factor for the target market, it is not the most important one. The participants view socks as a fashion item. Therefore a good design and a reasonable price seem more critical. However, if a buyer must choose between two pairs of socks with similar price ranges and if both have a design they like, the sustainability elements of a pair of socks start to matter. Additionally, the majority of participants supported the donation-based strategy. Overall, the hypothesis *“For meiaes customers, it is important that socks are sustainable, and they are willing to pay a premium for it.”* can therefore be accepted. The communication of meiaes needs to be altered for the PDCA framework's fourth step, "Act." meiaes first concentrated on the transparency and local sustainability aspect. The poll found that the sustainability of the raw materials was more important. Thus the communication should put more emphasis on this.

6.2 Sustainability of meiaes ocean socks

The fashion business is expected to emit 1.2 gigatons of carbon dioxide annually, according to Niinimäki et al. (2020). Around 52% of the fibers used to make the apparel, such as polyester, are expected to be "unsustainable." With well-known clothing brands like Zara, Bershka, and Mango housed under its roof, Inditex is one of the leading garment retailers. Its total CO₂ equivalent emissions are 120,992 metric tons, increasing exponentially yearly (Statista, 2022b).

meiæs strives to be completely open and honest regarding sustainability. This chapter aims to evaluate the sustainability of meiæs raw material.

6.2.1 Research method

The influence of a product can be determined using a variety of techniques. The most popular method is a Life Cycle Assessment (LCA). This strategy will examine a product's entire lifecycle. The material would be transported to the factory, the socks would be produced, transported to storage, used by the client, and then the socks would be disposed of. The fact that only a few LCA analyses for socks have been conducted indicates how difficult it would be to take this method because more data would need to be available. Not just from the product but also from presumptions about consumer usage. According to how close a company is to the client company or the finished product, Tier-one, -two, and -three suppliers could be distinguished (Karaer, Kraft, and Yalçın 2019). Due to the lack of information from tier-one and tier-two suppliers, only the raw material of tier-three suppliers is examined to determine the footprint of the socks. Additionally, the socks' coloring is not considered because the producer has made it challenging to obtain precise information thus far. meiæs attempted everything to get the information and even contacted the yarn seller to be entirely transparent and focus on sustainability. Still, no one was prepared to provide a definitive response with sufficient details. 80% organic cotton, 17% polyamide, and 3% elastane make up the raw material meiæs' socks. The assessment used three dimensions: CO₂, water, and energy. meiæs' socks weigh 55g per pair.

6.2.2 Impact assessment of the raw material used in meiæs socks

meiæs socks are made primarily of Indian organic cotton, which accounts for about 44g of the material, or 80% of the yarn, in each pair. It doesn't produce any dangerous compounds compared to conventional cotton. Regular cotton crops are grown on 2.4% of the world's arable

land but consume roughly 6% of the world's pesticides (Soil Association 2015). Since all the chemicals used in conventional cotton farming can cause significant health issues, harvesting organic cotton is much less hazardous to the farmer's health than traditional cotton production. In addition, organic cotton requires 62% less energy, 91% less water, and 46% less CO₂ to produce than conventional cotton. One kilogram of Indian organic cotton produces one kilogram of CO₂ and uses 5.8 MJ of electricity. Additionally, the soil quality is greater because there are no ongoing issues through the usage of chemicals. Consequently, it requires less water. On average, 1800 liters of "green water" and 21.6 liters of "blue water" are needed to produce one kilogram of organic cotton. Blue water is ground or surface water, while green water is rainwater. (Soil Association 2015)

Based on those numbers, one pair of meiæs socks will take around 1800l of green water and 21.6l of blue water. In addition, one pair emits 0.04kg CO₂ and 0.255MJ electricity.

The second yarn used in meiæs socks is polyamide with 17%. Also known as nylon, it is more delicate than silk but more tear-resistant than cotton. As the water footprint of this material is much smaller than organic cotton, there is no difference between blue water and green water in most studies. According to Munasinghe, Druckman, and Dissanayake (2021), 1kg of polyamide needs 200l of water, 8kg of CO₂, and 1.3MJ electricity. Calculated for one pair of meiæs socks (55g), this makes 8.8l of water, 0.35kg of CO₂, and 0.05MJ.

Due to its high CO₂ emissions, elastane is not the most environmentally friendly fabric used in the fashion industry. However, meiæs use it in their socks since it makes them more robust with its special fibers and ensures longevity. This is crucial if they are used as sports socks because they are more. Based on the analysis of van der Velden, Patel, and Vogtländer (2013), one kg of elastane needs 150l of water, 16kg of CO₂, and 6.2MJ electricity. Calculated per pair of meiæs socks (55g), this material adds 6.6l of water, 0.704kg CO₂, and 0.27MJ electricity.

Overall, the raw material of a pair of meiæs socks added up the last data to 675l of green water, 23l of blue water, 1.09kg CO₂, and 0.58MJ electricity. All the data can be found in the following table.

Table 14: Impact assessment overview - one pair of meiæs ocean socks

Material		per pair of socks (55g)	
Organic cotton (80%)	per kg	green water	blue water
Water (l)	15000	660	7.92
CO ₂ (kg)	0.978	0.043	
Electricity (MJ)	5.8	0.2552	
Polyamide (17%)	per kg	per pair of socks (55g)	
Water (l)	200	8.8	
CO ₂ (kg)	8	0.352	
Electricity (MJ)	1.3	0.0572	
Elastane (3%)	per kg	per pair of socks (55g)	
Water (l)	150	6.6	
CO ₂ (kg)	16	0.704	
Electricity (MJ)	6.2	0.2728	
Total, per pair of meiaes socks		green water	blue water
Water (l)		675.4	23.32
CO ₂ (kg)		1.099	
Electricity (MJ)		0.585	

The socks were made in the northern region of Portugal, and the local post delivered them to Lisbon. All modes of transportation have been minimized to maintain a little environmental impact. In Lisbon, all deliveries have been made on foot or by bicycle. meiæs.com is a sustainably programmed website. For instance, the website uses sustainable energy and doesn't contain videos or elaborate animations. meiæs.com is cleaner than 78% of the websites

worldwide, and each time a visitor accesses this website, just 0.21 g of CO₂ is emitted, according to the Website Carbon Calculator (2022). If the pages receive about 100 views per month, that would be the equivalent of 337 cups of tea's worth of water being boiled.

6.2.2.1 Comparison with other socks

It is hard to compare the outcome of the assessment to other socks. It was almost impossible to find an assessment of other companies. Only 17% of brands are transparent about their annual carbon footprint at raw material level, and 93% of brands do not pay their workers a living wage (Radonic 2022). Organic basics published their environmental footprint for every product online. Their organic cotton pair of socks produce 3.03 kg of CO₂ and contains 100% organic cotton (Organic Basics EU, n.d.). Also, Allbirds (n.d.) shows the carbon footprint of their socks on their website with 1.83kg CO₂. On average, one pair produces around 2kg of CO₂ based on their raw materials. On a life cycle analysis basis, it averages about 4kg of CO₂ (Picci 2021).

6.2.2.2 Certifications and labels

The utilized cotton has a Global Organic Standard (GOTS) Version 5.0 certification and is certified as organic by Control Union Certivtains B.V. of the Netherlands. Their 40 pages catalog complies with requirements and guarantees that the cotton is organic, making it more environmentally friendly than conventional cotton. In addition, the guidelines consider social factors like respect for workers' rights, the prohibition of child labor, and ethical business practices. Overall, it is the world's most popular and widely used standard for organic textiles. (Global Standard GmbH, n. d.)

Additionally, organic cotton meets the OEKO-TEX Standard 100. It is the most well-known fashion standard in the world and has undergone safety testing. It guarantees that every component of an object has been examined and is safe for human consumption. The company conducts several controlled and unregulated material tests, annually updating its catalog. There

are four levels to the label, with level one having the strictest criteria and limits and ensuring that the product is safe for babies. Since the organic yarn in meiæs is level 1, it is secure. A copy of the label is shown in appendix 23. (OEKO-TEX Service GmbH 2022)

meiæs socks do not have any labels besides organic cotton on the paper tag. It was tried to apply for both standards and the entire product. Nevertheless, the certification process takes longer and is also cost extensive; therefore, it has been decided to wait with the certification of the product.

6.2.2.3 Donation to the Hope Zones Foundation

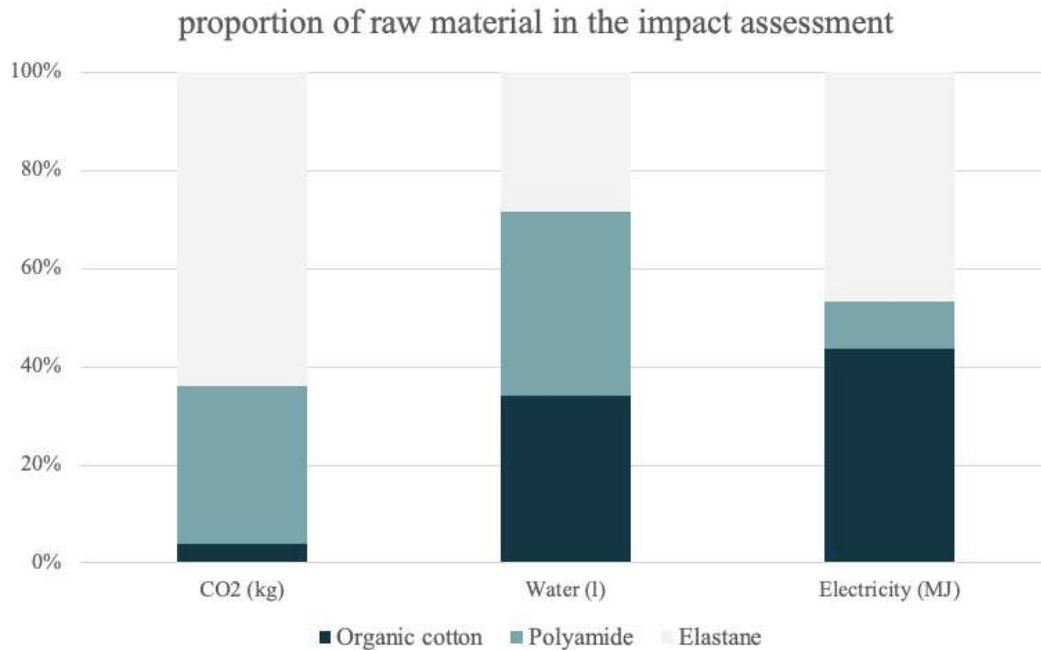
As previously mentioned, meiæs is donating 5% of its revenue to the Hope Zones Foundation. In the best case scenario, 129.90€ would have been donated with the first order of 200 socks. However, the aim was changed to a total donation of 64.95€ due to the revised delivery of just 100 pairs of socks. As outlined in the marketing and sales chapter 7, meiæs has had a total revenue of 969.54€ so far. Through the 5% donation model, this equates to 48.48€ of donation in total. However, due to the fact that not all socks were sold as single pairs, it was impossible to reach the key metric of 64.95€ as it was decided to donate a percentage of the total revenue rather than a fixed price per pair of socks sold.

6.2.3 Interpretation of the results and hypothesis

meiæs was able to better understand the sustainable impact of the socks, thanks to the assessment. The method and results of the assessments were discussed over the phone with Ioana Ruxandra Cotos, the sustainability manager for socks at PUMA, to determine what could be improved. First, it must be stated that the evaluation only provides information about the raw materials and does not provide a complete image of the socks. However, depending on the focus, it can be useful to see where the sock can become more durable. For instance, a better substitute for organic cotton must be utilized if it is desired to use less water per sock. If the

emphasis is on CO₂, a superior replacement for Elastane must be discovered, as in the following diagram can be seen.

Figure 27: Proportion of raw material in the impact assessment



All in all, using certified organic cotton leads to a more sustainable balance than ordinary cotton. Moreover, the certification ensures fair working conditions during production. The hypothesis *“meiæs socks are more sustainable than the average sock due to its lower CO₂ emissions under 2kg per pair of socks raw material. The brand can therefore be considered “impactful”* can be accepted as one pair of meiæs socks only emits 1.099kg of CO₂. Especially with the comparison to the socks of the organic basics, which claim to be sustainable, meiæs socks can be seen as more sustainable.

6.3 Transparency

meiæs is dedicated to being completely transparent with its clients about the environmental impact and pricing of their socks. The team displayed this information on the online shop as a result prominently. The layout is inspired by the invoices found in supermarkets and is displayed side-by-side with images next to the product pictures as shown below. meiæs believes that all product invoices should reflect the environmental impact so that consumers can make better choices. Customers can make better judgments as a result, and meiæs can be certain that its clients are aware of their purchase's environmental effects. In addition, the method and sources are described in the website's FAQ section to ensure buyers understand how the environmental footprint was determined.

Figure 28: Transparency of ecological footprint and cost structure on the website

MEIAES		MEIAES	
IMPACTFUL - LOCAL - TRANSPARENT		IMPACTFUL - LOCAL - TRANSPARENT	
DESIGNED & PRODUCED WITH LOVE IN PORTUGAL		DESIGNED & PRODUCED WITH LOVE IN PORTUGAL	
	EUR	EMISSIONS PER PAIR OF SOCKS	
PRODUCTION	5.66	RAW MATERIALS	
MARKETING	0.15	CO2 (KG)	1.09
LABEL	0.26	WATER (L)	23.3
LOGISTICS	0.65	ENERGY (JW)	0.58
OVERHEADS	0.35		
	↓		
END PRICE	12.99	ORGANIC COTTON VS COTTON	
	*****	CO2 (KG)	-46%
DONATION	0.65	WATER (L)	-91%
		ENERGY (JW)	-62%
		TOXIC CHEMICALS	0%
*****		*****	
RIGHT OF RETURN WITHIN 14 DAYS		RIGHT OF RETURN WITHIN 14 DAYS	
UPON PRESENTATION OF THIS RECEIPT		UPON PRESENTATION OF THIS RECEIPT	
*****		*****	
THANK YOU FOR YOUR PURCHASE		THANK YOU FOR YOUR PURCHASE	
JOIN THE MOVEMENT		JOIN THE MOVEMENT	
@MEIAES SOCKS		@MEIAES SOCKS	
HEY.MEIAES@GMAIL.COM		HEY.MEIAES@GMAIL.COM	

6.4 Learnings from the impact assessment

Three key lessons can be drawn from this section. First, while quality and affordability are more important, sustainability is still crucial for the client. However, if the quality and price are the same or even a little bit higher, the client would pick the more environmentally friendly choice. The second lesson is the main issue with the (un)sustainability of the fashion business. According to the section, organic cotton is a superior substitute for regular cotton, but since

nylon and elastane still consume a lot of resources, better alternatives must be found. Third, the challenge of transparency, as the whole fashion industry faces, needs further research. Finding sustainability information in the raw data lawyer is doable, but for the rest, it is difficult. If an LCA had been performed, numerous assumptions would have had to be made. The evaluation might not have been neutral and accurate as a result. If other companies show their environmental product impact, it's crucial to review the data and methodology they used, and a third and objective party will conduct the assessment.

Part III: Group part

7 Limitations

The founders are aware that the way the hypotheses were accepted or rejected is not highly scientific. Using only customer feedback from a customer base that might be biased due to its proximity to the team can lead to wrong conclusions. Nevertheless, it was decided to use this feedback as suitable means, as the team's focus rather laid on founding a company. Besides that, the sample used for any quantitative and qualitative research was relatively small, and the time the research was conducted was rather short. This is because this work project had a deadline, and the start of sales could only take place on 4th December 2022 due to unexpected hurdles, as mentioned. To fully comprehend customers, more research needs to be conducted over a more extended period of time.

Furthermore, the team is aware that socks are by no means a problem solver, especially when not containing any algae that could cause health benefits to the wearer. Subsequently, producing socks from organic cotton is not an innovation. However, as repeated during the Master of Impact Entrepreneurship and Innovation at Nova SBE, one does not need to reinvent the wheel but to see an opportunity and take that.

The founding team sees an opportunity in changing the fashion industry from within while offering consumers more impactful solutions for their day-to-day purchasing decisions. Moreover, the plan to produce socks from an algae-based fabric is still being pursued, as outlined at the end of this chapter.

All in all, the founders want to emphasize that the purpose of this work project is to educate about meiaes' business model, its history, as well as all steps that are needed to found a company, and not to conduct scientific market research, as this has been done in prior semesters at Nova SBE.

8 Reflection on the entrepreneurial journey – key learnings

meiæs was the first entrepreneurial project that each founding team member conducted. Ultimately, the project and, thus, the business is considered a success by the team. The reasons, therefore, are the positive feedback from paying customers, the overwhelming amount of impressions on social media (more than 6193 impressions of the LinkedIn posts and a reach of 3549 accounts on just Instagram for one of the posts), and the learnings each founder had made. Although there have been several obstacles along the way, the founding team was able to overcome these challenges and adapt to changing situations quickly and efficiently. In the following table 22, each founding member's top three key learnings are displayed.

Table 15: Key learnings of each founding member

Eva-Marie Steinbömer
(1) All legal aspects of founding a company take time and effort. A proper set-up is needed to ensure that a company is not infringing any rights or operating illegally, which takes time as it depends on public offices.
(2) Although there are tough times along the journey, actually making sales feels great and rewards the hard work. Motivation can come and go; what is needed is persistence.
(3) Making contacts and forming relationships is a complicated endeavor, as values and interests need to align. Even if that might fit, getting to work together and agreeing on common goals is the next challenge. Therefore, every party should know exactly what it can give and what it wants to take out of the partnership.
Nils Johannsen
(1) Choosing the right partners, especially suppliers, is the most crucial decision for a start-up that outsources the production of products – the start-up needs to make sure to choose suppliers wisely and with due diligence.
(2) Things take time, and unexpected incidents can and will happen – the company should plan wisely and schedule for unforeseen events.
(3) The founders should have fun along the way. Founding a start-up is a marathon, not a sprint. Enjoying the process, learning new skills, and finding fun people to cooperate with makes the life of an entrepreneur far easier.

Marita Schmeller
(1) Founding a business is not easy. It requires a lot of hard work, resilience, motivation, and especially a good-functioning team to keep moving forward and overcome obstacles that occur along the way.
(2) Losing the first batch of the produced socks was a considerable setback. The key learning from this incident is always to have a Plan B and "never put one's eggs into one basket".
(2) LinkedIn is a great tool for Founder's marketing. With one single post, the team could reach an unexpectedly wide range of people and even realize sales from that.
Georg Reckhaus
(1) The team is essential to founding a successful start-up. Everyone in meiaes was motivated to give 200% for the project, which motivated everyone to go the extra mile and made many things possible and easier.
(2) Good communication is the second crucial element for a smooth process. Not only good internal communication makes work more straightforward, but also external, as partners need to know clearly what is expected and what should be delivered.
(3) Making a sustainable product is more demanding than expected. meiaes started with the idea of sustainable socks and tried everything to make SeaCell socks, only to find out that it did not work out in the end. The final product can be considered sustainable, but different materials could make it even more sustainable. But these materials come with a price and are hard to get. So sometimes, a middle way is needed to move forward.

9 Conclusion and the future of meiaes

The founders are determined to keep the business alive and consider pivoting from algae socks to organic cotton socks as an essential step that prepares them for what is ahead. Once the company has gotten traction and is an established name in the sector, a shift in how the fashion industry operates can be achieved.

After finishing the work project and the master studies at Nova SBE, the team will once more use the PDCA framework to evaluate and determine the future of meiaes as a brand.

The team will apply the learnings generated throughout their entrepreneurial journey. It will pay special attention to (1) fixed contracts with suppliers that include alternatives in case

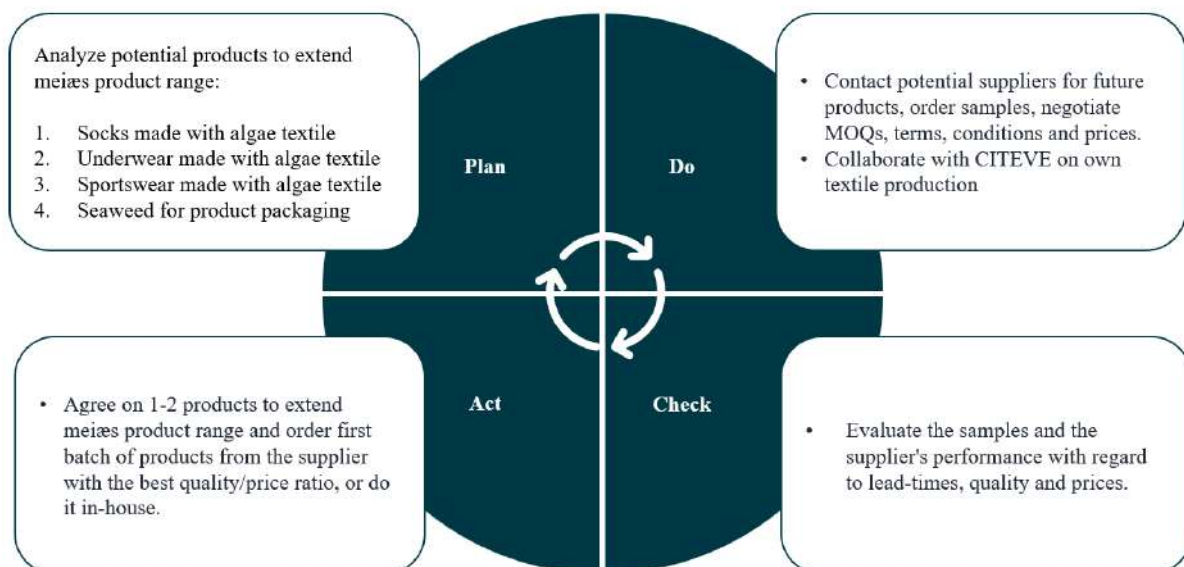
something unexpected happens, (2) regular team events to keep the spirit high, and (3) scientific research that guides their decisions.

As mentioned in the partnerships and company acceleration part, the team is working on producing the next batch of socks with a fabric containing algae. The search for suitable suppliers, also in the form of universities or research organizations, has started, and first contacts and partnerships were established. Going this path might enable meiaes to prove the health benefits of the fabric and continue with complete in-house production.

Another path that is being conducted at the same time is the search for a supplier or producer using SeaCell. As the founding team learned during the last year, having a backup plan available is crucial. As a result, the search for a suitable partner producing with SeaCell will continue.

After selling out the first batch of algae socks, the product range may be extended by additional products, for example, underwear or sportswear.

Figure 29: PDCA framework - meiaes potential future product offerings



10 References

Allbirds. n.d. “Trino® Sprinters - Crew - Summertime White.” Accessed December 14, 2022.

<https://www.allbirds.com/products/trino-sprinters-crew?price-tiers=msrp,tier-1>.

Battiliana, Julie, Matthew Lee, John Walker, and Cheryl Dorsey. 2012. “In Search of the Hybrid Ideal.” *Stanford Social Innovation Review* 10 (3): 50–55.

<https://doi.org/10.7916/d8wd497m>.

Blacksocks. 2022. “Socken-Wahrheiten Der Europäer.” Accessed December 14, 2022.

<https://www.blacksocks.com/de/sockenumfrage>.

Blue Bio Alliance. 2022. “About Us.” Accessed December 14, 2022.

<https://www.bluebioalliance.pt/about-us/>.

Bretous, Martina. 2022. “6 Short-Form Video Trends Marketers Should Watch in 2022 [New Data].” July 18, 2022. <https://blog.hubspot.com/marketing/short-form-video-trends>.

Bundeszentrale für politische Bildung. 2020. “Bevölkerung Nach Altersgruppen Und Geschlecht.” Bpb.De. January 12, 2020. <https://www.bpb.de/kurz-knapp/zahlen-und-fakten/soziale-situation-in-deutschland/61538/bevoelkerung-nach-altersgruppen-und-geschlecht/>.

Cambridge Dictionary. 2022a. “Credibility Definition: 1. the Fact That Someone Can Be Believed or Trusted: 2. the Fact That Someone Can Be Believed Or.... Learn More.” In . <https://dictionary.cambridge.org/dictionary/english/credibility>.

———. 2022b. “Growth Definition: 1. The Growth of a Person, Animal, or Plant Is Its Process of Increasing in Size: 2. an Increase.... Learn More.” In . <https://dictionary.cambridge.org/dictionary/english/growth>.

Chandon, Pierre. 2010. "Is Food Marketing Making Us Fat? A Multi-Disciplinary Review."

Foundations and Trends® in Marketing 5 (3): 113–96.

<https://doi.org/10.1561/17000000016>.

Clean Clothes Campaign. 2022. "FashionChecker: Wages and Transparency in the Garment Industry." Accessed December 14, 2022. <https://fashionchecker.org/>.

Deloitte. 2022. "Sustainability & Consumer Behaviour 2022." Accessed December 14, 2022.

<https://www2.deloitte.com/uk/en/pages/consumer-business/articles/sustainable-consumer.html>.

Deutsches Statistisches Bundesamt (Destatis). 2022. "Wichtige Bevölkerungsindikatoren Zu Den EU-Staaten." Accessed December 14, 2022.

https://www.destatis.de/error_path/400.html?al_req_id=Y5MVFrE0TLr-6VUf3whcMAAAA84.

Dopazi. 2022. "Dopazi." Accessed December 14, 2022. <https://www.dopazi.com/>.

European Environment Agency. 2022. "Microplastics from Textiles: Towards a Circular Economy for Textiles in Europe." Accessed December 14, 2022.

<https://www.eea.europa.eu/publications/microplastics-from-textiles-towards-a>.

European Parliament. 2022. "The Impact of Textile Production and Waste on the

Environment (Infographic) | News | European Parliament." April 26, 2022.

<https://www.europarl.europa.eu/news/en/headlines/society/20201208STO93327/the-impact-of-textile-production-and-waste-on-the-environment-infographic>.

Farra, Emily. 2020. "What Is the Right Price for Fashion? Three Designers Share Their Thoughts." Vogue. June 29, 2020. <https://www.vogue.com/article/what-is-the-right-price-for-fashion>.

Flourishing Enterprise Co-Lab. 2022. "Flourishing Business Canvas." Accessed December 14, 2022. <https://flourishingbusiness.org/flourishing-business-canvas/>.

Für Gründer. n.d. "Branding: Definition Und Bedeutung Für Das Marketing." Für Gründer - Selbstständig Machen? Businessplan, Fördermittel, Beratung. Accessed December 14, 2022. <https://www.fuer-gruender.de/wissen/unternehmen-fuehren/marketing/branding/>.

Gerber, Derek, and Max Serrato. 2021. "What Is a Marketing Channel?" Directive. Accessed December 14, 2022. <https://directiveconsulting.com/resources/glossary/marketing-channel/>.

Global Standard GmbH. n.d. "Home - GOTS." Accessed December 14, 2022. <https://global-standard.org/>.

GRACE Communications Foundation. 2022. "What's Your Water Footprint: Water Footprint Calculator Home Page." Water Footprint Calculator. Accessed December 14, 2022. <https://www.watercalculator.org/>.

Griffin, Tren. 2017. "12 Things About Product-Market Fit." Andreessen Horowitz. Accessed December 14, 2022. <https://a16z.com/2017/02/18/12-things-about-product-market-fit-2/>.

Han, Heejin, and Sang Wuk Ahn. 2020. "Youth Mobilization to Stop Global Climate Change: Narratives and Impact." *Sustainability* 12 (10): 4127.

<https://doi.org/10.3390/su12104127>.

Industry Research BIZ. 2022. "Global Fast Fashion Market." Accessed December 14, 2022.

<https://www.industryresearch.biz/global-fast-fashion-market-21051213>.

Just One Ocean. 2022. "The Fashion Industry's Impact on the Ocean." Accessed December 14, 2022. <https://justoneocean.org/portfolio/the-fashion-industrys-impact-on-the-ocean>.

Kappel, Mike. 2020. "6 Powerful Ways To Build (And Maintain) Your Business's Credibility." *Forbes*. February 5, 2020.

<https://www.forbes.com/sites/mikekappel/2020/02/05/6-ways-build-business-credibility/?sh=ba753106f1c8>.

Karaer, Özgen, Tim Kraft, and Pınar Yalçın. 2019. "Supplier Development in a Multi-Tier Supply Chain." *IIE Transactions* 52 (4): 464–77.

<https://doi.org/10.1080/24725854.2019.1659523>.

Lean Enterprise Institute. 2022. "Plan, Do, Check, Act (PDCA) — A Resource Guide."

Accessed December 14, 2022. <https://www.lean.org/lexicon-terms/pdca/>.

Market Data Forecast. 2022. "Europe Socks Market Analysis - By Product (Casual, Athletic), By Application (Men, Women), By Distribution Channel (Hypermarket & Supermarket, Convenience Store, Online) and Region - Analysis, Size, Growth, Investment and Forecast (2022 to 2027)." Accessed December 14, 2022.

<https://www.marketdataforecast.com/market-reports/europe-socks-market>.

Maurya, Ash. 2022. *Running Lean: Iterate from Plan A to a Plan That Works*. 3rd ed.

O'Reilly Media.

meiaes. 2022. "Meiaes." Accessed December 14, 2022. <https://meiaes.com/>.

Merwe, Carla van der. 2020. "An Exploratory Study on Consumers Perceptions of Green Branding in the Cosmetics Industry." *Vega School*.

https://iiespace.iie.ac.za/bitstream/handle/11622/720/van%20der%20Merwe_Final%20Research%20Report.pdf?sequence=1.

Mohr, Jakki, and Robert Spekman. 1994. "Characteristics of Partnership Success: Partnership Attributes, Communication Behavior, and Conflict Resolution Techniques." *Strategic Management Journal* 15 (2): 135–52. <https://doi.org/10.1002/smj.4250150205>.

Munasinghe, Prabod, Angela Druckman, and D.G.K. Dissanayake. 2021. "A Systematic Review of the Life Cycle Inventory of Clothing." *Journal of Cleaner Production* 320 (October): 128852. <https://doi.org/10.1016/j.jclepro.2021.128852>.

Newberry, Christina. 2022. "How to Use Instagram for Business: A Practical Step-by-Step Guide." Social Media Marketing & Management Dashboard. Accessed December 14, 2022. <https://blog.hootsuite.com/how-to-use-instagram-for-business/>.

Niinimäki, Kirsi, Greg Peters, Helena Dahlbo, Patsy Perry, Timo Rissanen, and Alison Gwilt. 2020. "The Environmental Price of Fast Fashion." *Nature Reviews Earth & Environment* 1 (4): 189–200. <https://doi.org/10.1038/s43017-020-0039-9>.

Nolan, Paul. 2022. "Advantages and Disadvantages of E-Commerce Businesses." The Balance. Accessed December 14, 2022. <https://www.thebalancemoney.com/ecommerce-pros-and-cons-1141609>.

OEKO-TEX Service GmbH. 2022. “OEKO-TEX® - Tailor-Made Solutions for the Textile and Leather Industry.” OEKO-TEX®. Accessed December 14, 2022.

<https://www.oeko-tex.com/en/>.

Olsen, Dan. 2015. *The Lean Product Playbook*. John Wiley & Sons.

Organic Basics EU. n.d. “Organic Cotton Socks 2-Pack.” Accessed December 14, 2022.

<https://organicbasics.com/products/womens-organic-cotton-socks-2-pack-new-black>.

Osterwalder, Alexander, Yves Pigneur, and Christopher L. Tucci. 2005. “Clarifying Business Models: Origins, Present, and Future of the Concept.” *Communications of the Association for Information Systems* 16. <https://doi.org/10.17705/1cais.01601>.

Patron Socks. 2022. “Patron Socks.” Accessed December 14, 2022. <https://patronsocks.com/>.

Picci, Elena. 2021. “How Much Can You Reduce Your Carbon Emissions by Switching to Sustainable Basics?” Medium. Accessed December 14, 2022. <https://medium.com/re-think-by-renoon/how-much-can-you-reduce-your-carbon-emissions-by-switching-to-sustainable-basics-5ec15d94c201>.

Priante, Anna, Michel L. Ehrenhard, Tijs van den Broek, Ariana Need, and Djoerd Hiemstra. 2021. “‘Mo’ Together or Alone? Investigating the Role of Fundraisers’ Networks in Online Peer-to-Peer Fundraising.” *Nonprofit and Voluntary Sector Quarterly* 51 (5): 986–1009. <https://doi.org/10.1177/08997640211057456>.

Product Plan. 2020. “Product-Market Fit.” Accessed December 14, 2022.

<https://www.productplan.com/glossary/product-market-fit/>.

Radonic, Dunja. 2022. "28 Eye-Opening Sustainable Fashion Statistics for 2022."

FashionDiscounts. July 11, 2022. <https://fashiondiscounts.uk/sustainable-fashion-statistics/>.

Reiling, John. 2022. "Supporting Channels in the Business Model Canvas." The Strategic

Project Manager. November 23, 2022. <https://bethestrategiccpm.com/supporting-channels-in-the-business-model-canvas/>.

Research and Markets. 2021. "Outlook on the Socks Global Market to 2026 - Players Include

Nike, Puma and Adidas Among Others." Accessed December 14, 2022.

https://www.researchandmarkets.com/reports/5240662/global-socks-market-by-type-athleticsocks?utm_source=CI&utm_medium=PressRelease&utm_code=rjwf7g&utm_campaign=1499165+-+Outlook+on+the+Socks+Global+Market+to+2026+-+Players+Include+Nike%2c+Puma+and+Adidas+Among+Others&utm_exec=jamu273prd.

Retail Touch Points. 2022. "83% of Millennials Engage in Values-Based Shopping." Retail

TouchPoints. Accessed December 14, 2022.

<https://www.retailtouchpoints.com/resources/83-of-millennials-engage-in-values-based-shopping>.

Ross, Charlie Bradley. 2022. "Focus on Fibres: Sustainable Seaweed Fabric... SeaCellTM."

The Sustainable Fashion Collective Accessed December 14, 2022. <https://www.the-sustainable-fashion-collective.com/2017/05/11/new-sustainable-seaweed-fabric-seacell>.

Ścieszka, Sylwia, and Elżbieta Klewicka. 2018. "Algae in Food: A General Review." *Critical Reviews in Food Science and Nutrition* 59 (21): 3538–47.

<https://doi.org/10.1080/10408398.2018.1496319>.

Seager, Steve. n.d. "Paid, Owned and Earned Media Framework."

<https://www.steveseager.com/paid-owned-and-earned-media-framework-for-marketers-business-leaders/>.

Snocks. 2022. "Willkommen Bei Snocks." Accessed December 14, 2022. <https://snocks.com/>.

Sock Up Your Life. 2022. "Sock Up Your Life." Accessed December 14, 2022.

<https://sockupyourlife.de/>.

Soil Association. 2015. "Cool Cotton." Accessed December 14, 2022.

<https://www.soilassociation.org/media/11662/coolcotton.pdf>.

Statista. 2011. "Kaufhäufigkeit von Socken/Strümpfen, Frauen." Accessed December 14, 2022. <https://de.statista.com/statistik/daten/studie/178083/umfrage/kaufhaeufigkeit-von-socken-frauen/>.

———. 2022a. "Estimated Emissions of Greenhouse Gases by the Apparel Industry 2019-2030." Accessed December 14, 2022.

<https://www.statista.com/statistics/1305696/apparel-industry-co2e-emissions/>.

———. 2022b. "Sustainable Clothing Sales Share Worldwide 2013-2026." Accessed December 14, 2022. <https://www.statista.com/forecasts/1307848/worldwide-sales-of-sustainable-clothing-items>.

———. 2022c. “Carbon Footprint of Leading European Apparel Brands 2021.” June 15, 2022. <https://www.statista.com/statistics/1102998/carbon-footprint-of-european-fashion-brands/>.

Statistik Austria. 2021. “Bevölkerung Nach Alter/Geschlecht.” Accessed December 14, 2022. <https://statistik.at/statistiken/bevoelkerung-und-soziales/bevoelkerung/bevoelkerungsstand/bevoelkerung-nach-alter/geschlecht>.

Stevens, Courtenay. 2022. “How to Choose the Right Supplier for Your Business.” Business.Org. Accessed December 14, 2022. <https://www.business.org/finance/inventory-management/how-to-choose-the-right-supplier-for-your-business/>.

Taelman, Sue Ellen, Jennifer Champenois, Maeve D. Edwards, Steven De Meester, and Jo Dewulf. 2015. “Comparative Environmental Life Cycle Assessment of Two Seaweed Cultivation Systems in North West Europe with a Focus on Quantifying Sea Surface Occupation.” *Algal Research* 11 (September): 173–83. <https://doi.org/10.1016/j.algal.2015.06.018>.

Taylor, Mark. 2022. “Direct to Consumer Strategy D2C : An Experts Guide.” Retail Solutions | Retail Consultants. Accessed December 14, 2022. <https://www.retailsolutions.io/direct-to-consumer-strategy-d2c-an-experts-guide/>.

Taylor, Tristen. 2022. “How to Determine Product Market Fit in Your Industry.” Accessed December 14, 2022. <https://blog.hubspot.com/sales/product-market-fit>.

Todorov, Georgi. 2022. “How to Promote Your Blog.” Learn Digital Marketing. Accessed December 14, 2022. <https://thrivemyway.com/ecommerce-stats/>.

United Nations. 2019. “UN Launches Drive to Highlight Environmental Cost of Staying Fashionable.” UN News. Accessed December 14, 2022.

<https://news.un.org/en/story/2019/03/1035161>.

Velden, Natascha M. van der, Martin K. Patel, and Joost G. Vogtländer. 2013. “LCA Benchmarking Study on Textiles Made of Cotton, Polyester, Nylon, Acryl, or Elastane.” *The International Journal of Life Cycle Assessment* 19 (2): 331–56.

<https://doi.org/10.1007/s11367-013-0626-9>.

Vieira, Kelly Carvalho, Valderí De Castro Alcantara, José Willer do Prado, Cintia Loos Pinto, and Daniel Carvalho de Rezende. 2015. “How Does Packaging Influence Consumer Behavior? A Multidisciplinary Bibliometric Study.” *International Business Research* 8 (5). <https://doi.org/10.5539/ibr.v8n5p66>.

Von Jungfeld. 2022. “Von Jungfeld.” Accessed December 14, 2022. <https://jungfeld.com/>.

Wagner, Lina. 2021. “Sportsocken Markt 2021 Schlüsselspieler | neue Studie| FALKE, Nike, Adidas, Snews, Asics.” Hashtap. Accessed December 14, 2022. https://www.hashtap.com/@lina.wagner/sportsocken-markt-2021-schl%C3%BCsselspieler-neue-studie-falke-nike-adidas-snews-asics-DjpZmKOD__M0.

Website Carbon Calculator. 2022. “Website Carbon Calculator v3 | How Is Your Website Impacting the Planet?” Accessed December 14, 2022.

<https://www.websitecarbon.com>.

Weeme, Peter ter. 2018. “The Power of Collaborating with Partners.” *Meaning and Purpose*. Accessed December 14, 2022. <https://purpose-drivenmarketing.com/power-of-collaborating/>.

White, Christine. 2022. "What's a Competitive Analysis & How Do You Conduct One?"

Accessed December 14, 2022. <https://blog.hubspot.com/marketing/competitive-analysis-kit>.

World Bank. 2019. "How Much Do Our Wardrobes Cost to the Environment?" Accessed

December 14, 2022. <https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente>.

Woschnick, Vicki. 2018. "Top 10 Most Effective Marketing Strategies." Weidert Group, Inc.

Woschnick. <https://www.weidert.com/blog/most-effective-marketing-strategies>.

11 Appendix

Appendix 1: Customer survey questions and answers

Hi there! 🙋

As part of our master's thesis at NOVA School of Business & Economics and for our start-up meiaes, we are conducting a study on the purchasing behavior of socks and the perception of sustainable fashion brands and products. 🧦

Thank you for taking 5 minutes to complete this survey. In order to be able to carry out a valid evaluation, it is important to answer the questions as honestly and spontaneously as possible. All the information you provide will be always treated strictly confidential. The data provided from this research will be solely used for scientific research purposes.

🔥 If you finish the survey, you can participate with your email in a raffle to win one pair of our socks. 🔥

In case of any further questions concerning this survey, please feel free to contact us at any time.

Once again, thank you so much for your time!

Follow us to stay updated https://www.instagram.com/meiaes_socks/ 🌈

Marita Schmeller and the meiaes-team

50561@novasbe.pt

*What do you identify as?

- ☐ Female
- ☐ Male
- ☐ Non-binary / third gender
- ☐ Prefer not to say

*How old are you?

- ☐ under 18
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65-74
- ☐ 75-84
- ☐ 85 and older

*What is your current occupation?

- ☐ Employed
- ☐ Unemployed
- ☐ Senior citizen
- ☐ Student
- ☐ Self-employed
- ☐ Other

*What is your average monthly net income?

- ☐ Less than 500€
- ☐ 500€ - 1500€
- ☐ 1500€ - 2500€
- ☐ 2500€ - 3500€
- ☐ 3500€ - 4500€
- ☐ 4500€ - 5500€
- ☐ 5500€ - 6500€
- ☐ 6500€ - 7500€
- ☐ 7500€ - 8500€

In your day-to-day purchasing behavior: how important do you consider sustainability to be?

- ☐ Not at all important
- ☐ Slightly important
- ☐ Moderately important
- ☐ Very important
- ☐ Extremely important

What enables you to live more sustainably in your everyday life? How do you try to act more sustainably? (Please rank from 1 = most important to 7 = least important)

☐	Support businesses that donate a percentage of the revenue to different sustainability projects (CSR business model)	::
☐	Support businesses that specifically care about ethical production	::
☐	Support businesses that specifically care about local production	::
☐	Support businesses that specifically care about environmentally friendly production	::
☐	Consume products that are recyclable or are made from recycled materials	::
☐	Consume fewer products in general	::
☐	Donate directly and regularly to NGOs or projects with a specific purpose	::

When purchasing new socks: on average, how many pairs of socks do you buy at once?

- ☐ 1 pair
- ☐ 2 pairs
- ☐ 3 pairs
- ☐ 4 pairs
- ☐ 5 pairs and more

When purchasing new socks: where do you usually buy socks?

- ☐ Online
- ☐ Local stores

When purchasing new socks: how important are the following dimensions to you? (Please rank from 1 = most important to 8 = least important)

☐	Price	::
☐	Promotions/Discounts	::
☐	Ease of purchase	::
☐	Sustainability aspects	::
☐	Recommendations from influencers, family, friends	::
☐	Advertising campaigns	::
☐	Design of product	::
☐	Prior satisfaction with the brand's products	::

Which of these sock brands do you consider to be sustainable and eco-friendly?
(multiple answers allowed)

- ☐ Nike
- ☐ Adidas
- ☐ Puma
- ☐ Stance
- ☐ Snocks
- ☐ Falke
- ☐ Happy Socks
- ☐ H&M
- ☐ None of the above

When purchasing new socks: What sustainable attributes do you consider as important? (Please rank from 1 = most important to 6 = least important)

☒	Transparent production	⋮
☒	Ethical production	⋮
☒	Environmentally friendly production	⋮
☒	Local production	⋮
☒	Sustainably sourced and produced materials	⋮
☒	Recyclable packaging	⋮

Would you purchase sustainable and eco-friendly socks, even if they were slightly more expensive than other socks that are not considered sustainable?

- ☐ Yes
- ☐ No

What kind of sock style do you prefer buying? (multiple answers allowed)

- ☐ Tennis socks (long socks)
- ☐ Sneaker socks (ankle socks)

What kind of sock color do you usually prefer buying? (multiple answers allowed)

- ☐ White
- ☐ Black
- ☐ Blue
- ☐ Patterned

When purchasing socks from your favorite brand: do you prefer them to be with visible brand logo or without?

- ☐ With visible brand logo
- ☐ Without visible brand logo

If you were to buy these socks, what would be your main purchase reason considering the following information:

- Produced locally and under fair conditions in Portugal
- The brand is donating 5% of its revenues to ocean-related projects that save and preserve the ocean
- Composed of 80% organic combed cotton, 17% Polyamide, 3% Elastane



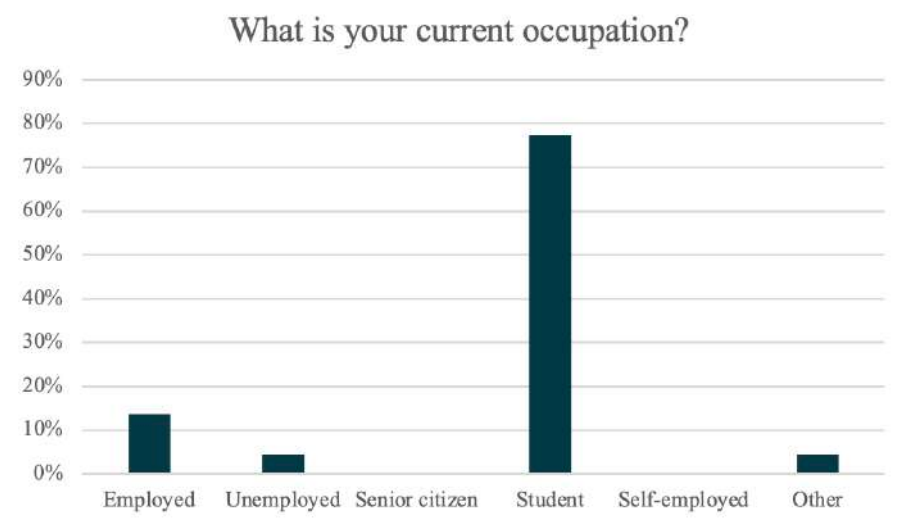
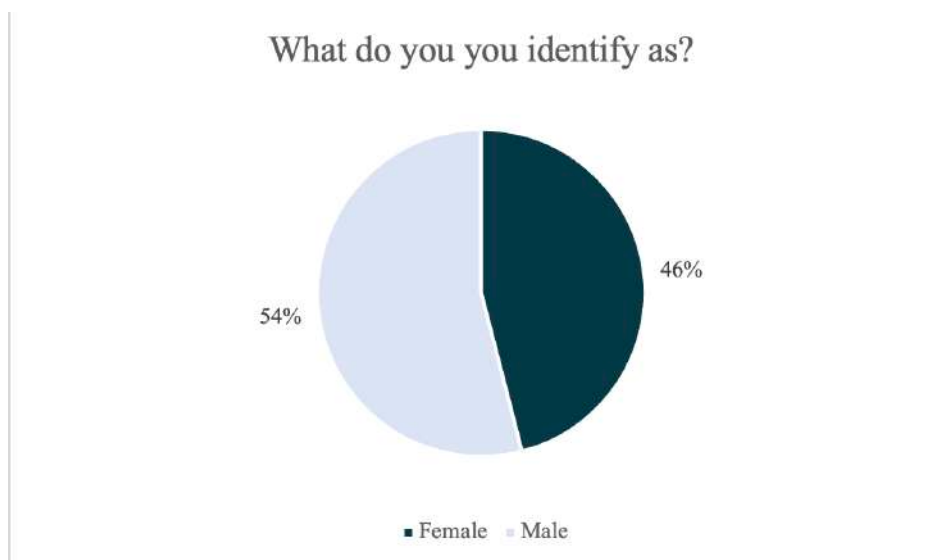
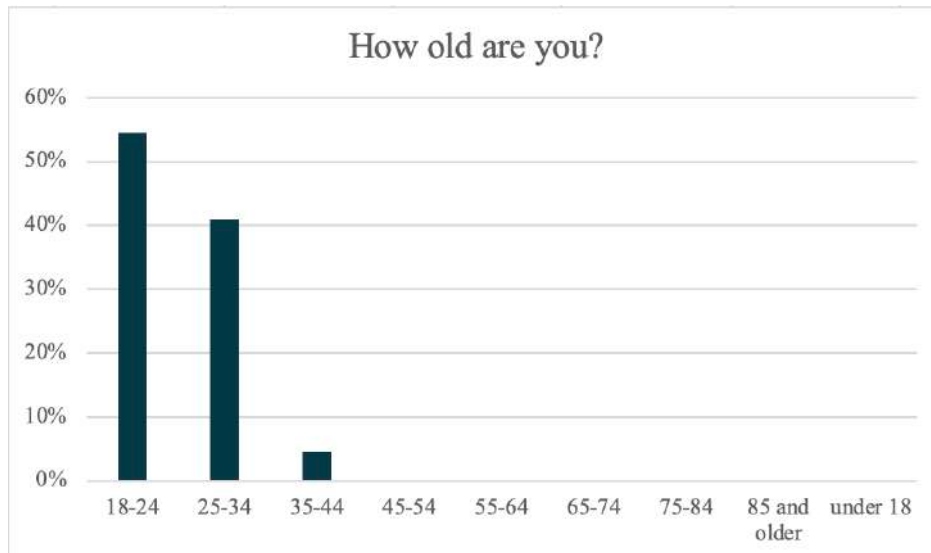
Thank you for your participation.

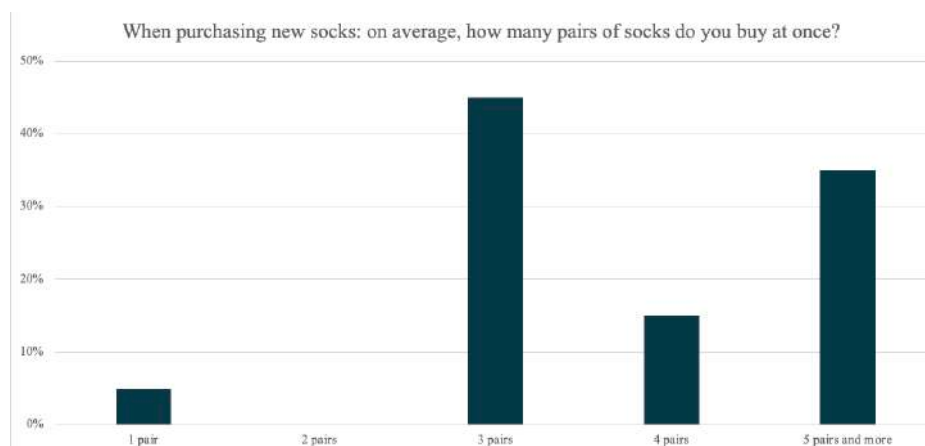
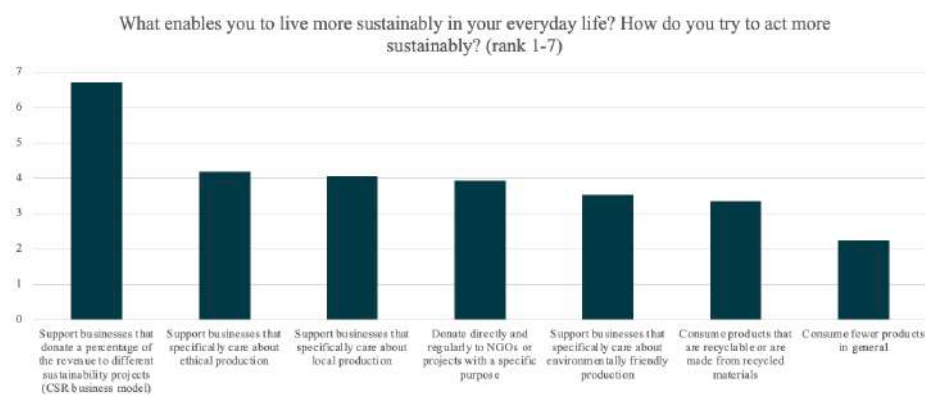
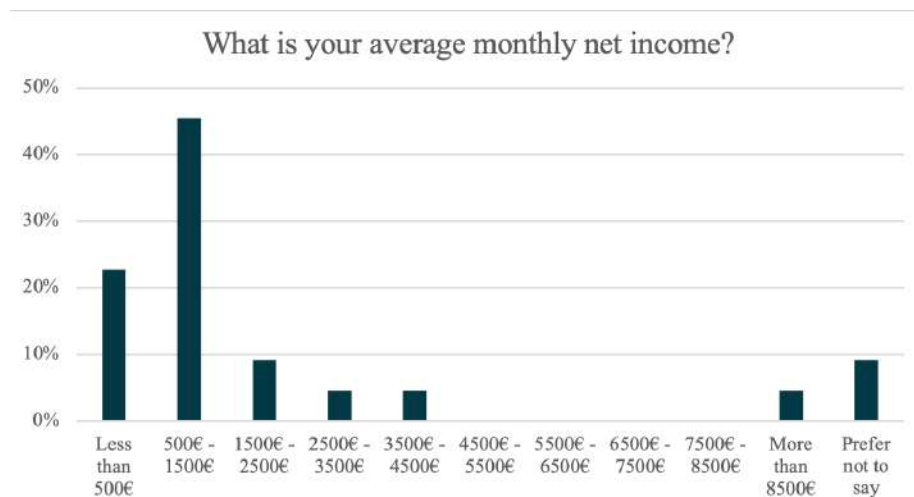
Follow us to stay updated https://www.instagram.com/meiaes_socks/ 🚀

- ☐ I don't want to participate in the raffle

You can leave your e-mail address here if you want to participate in the raffle to win one pair of our socks.



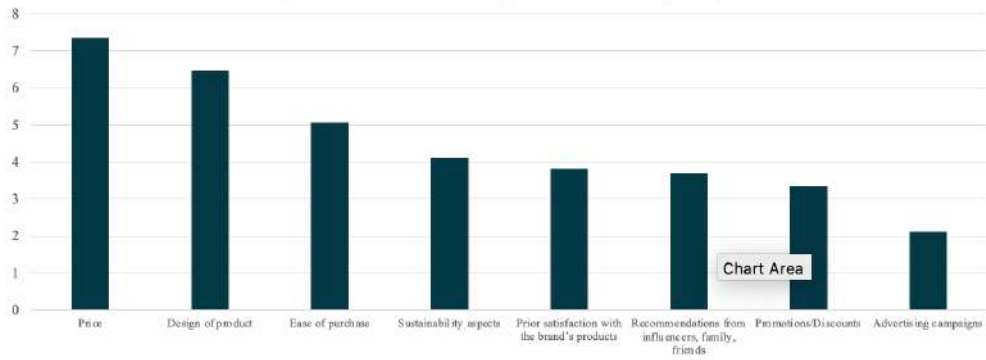




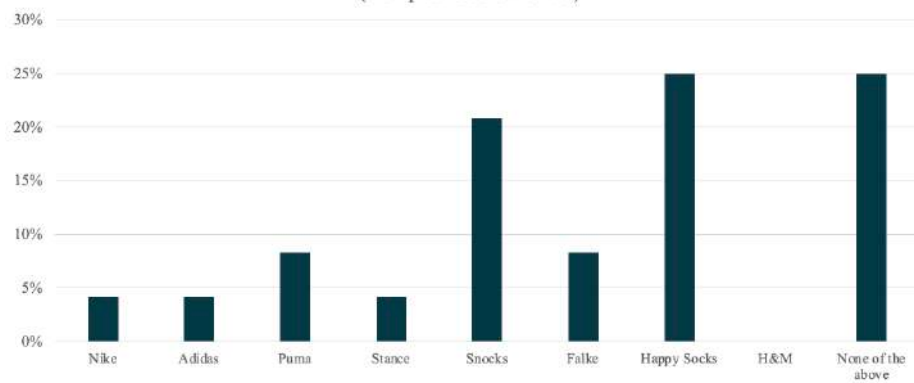
When purchasing new socks: where do you usually buy socks?

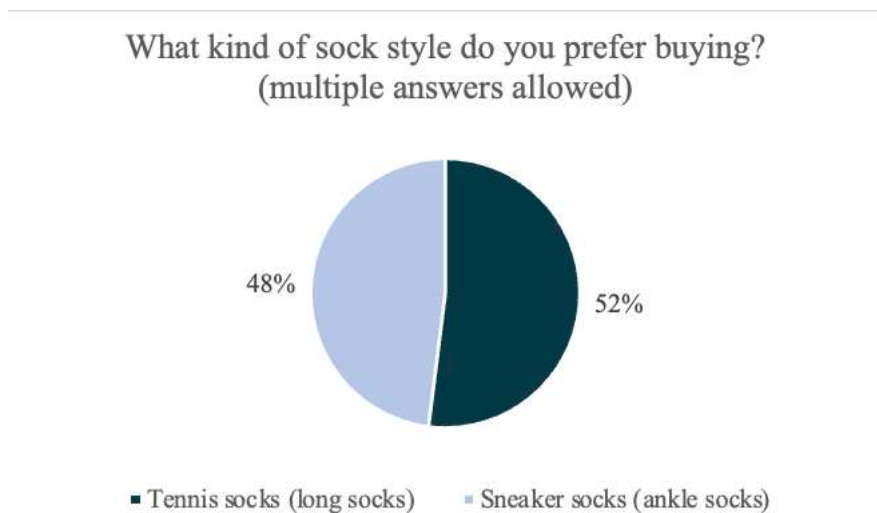
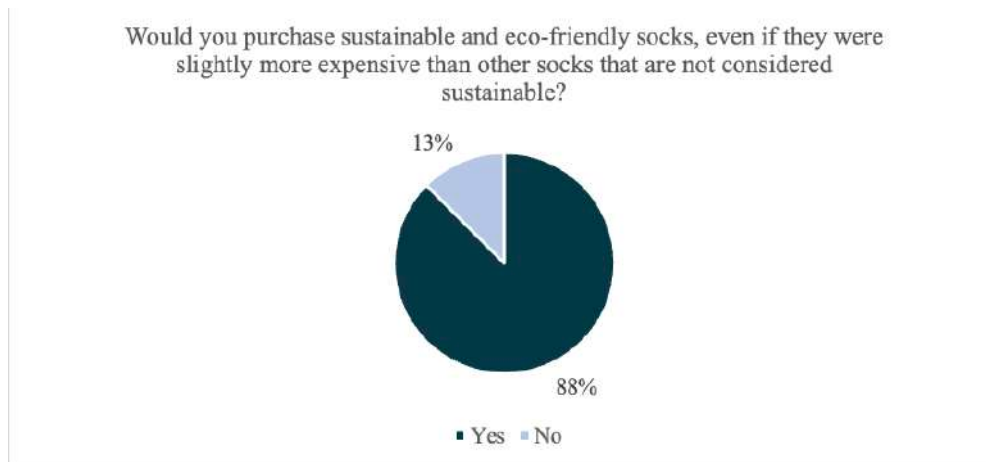
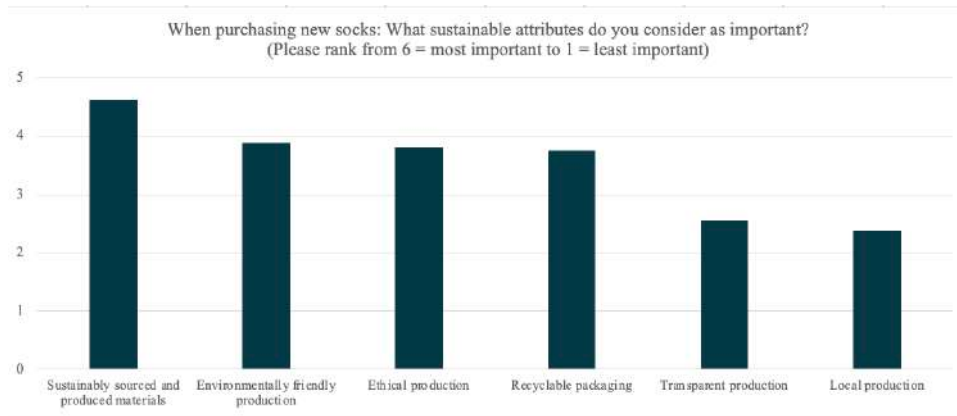


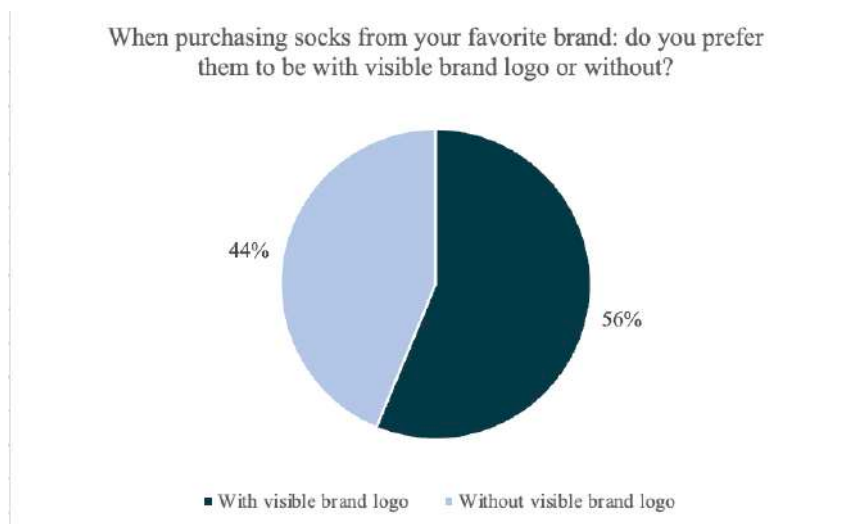
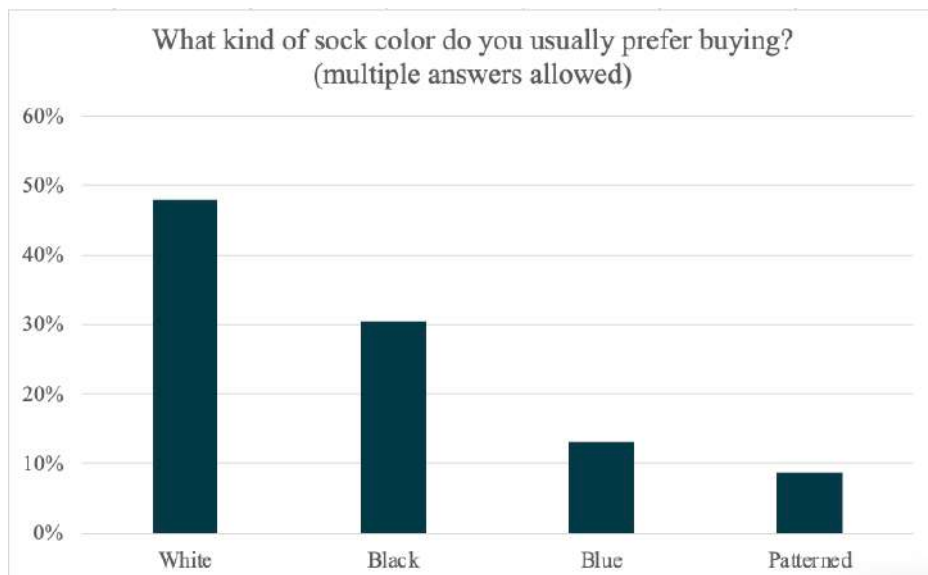
When purchasing new socks: how important are the following dimensions to you?
(Please rank from 8 = most important to 1= least important)



Which of these socks brands do you consider to be sustainable and eco-friendly?
(multiple answers allowed)







If you were to buy these socks, what would be your main purchase reason?

Count	Answer
1	Because the designs is nice
1	Looks good as a gift
1	My friend would wear them for sports
1	Like the fact that they are donating
1	I like the donation
1	Seems more sustainable than normal socks
1	They look good
1	I just need socks
1	Look comfy
1	Nice waves
1	None
1	I like buying stuff that is sustainable
1	I only buy sustainable clothing
1	I like the donation part especially because it helps ocean projects as there are not that many
1	Design
1	Color
1	Donation
1	My brother's bday
1	My boyfriend is a surfer and cares about the ocean
1	Because of the attractive patterns
1	nice-looking present
1	My friend would put them on while exercising
1	I like the donation part
1	Donations
1	Seems more environmentally friendly than regular socks
1	They seem decent
1	Need socks
1	Look comfortable
1	Nice waves
1	I prefer to purchase sustainable goods
1	I only purchase eco-friendly apparel
1	I like that fact they support the ocean
1	Style
1	Color

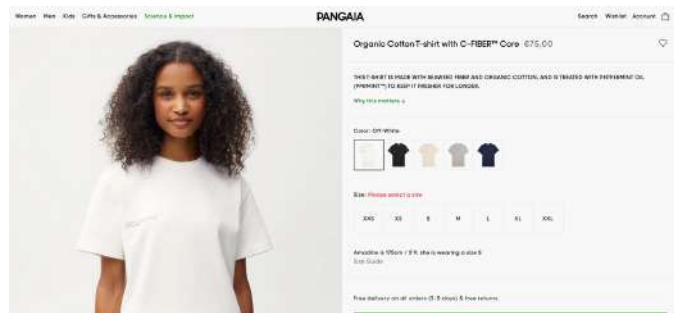
Count	Answer
1	Christmas gifts
1	Donation ocean
1	Design
1	Organic cotton
1	Local production in Portugal
1	Design
1	Waves and Donation for the ocean
1	I would not buy them
1	...
1	No idea I guess design
1	Design, Cotton
1	Good cause
1	For biking
1	Nice for Skating
1	Material composition (organic cotton)
1	I like the donation-based business model
1	Material (organic)
1	Waves
1	Cool name
1	?
1	Don't like them, design is too mainstream
1	I need to see and touch the "real" product first
1	Donation
1	Good gift idea for people that surf/swim
1	Combination of local production & material
1	Colors and design
1	Sustainable socks
1	Fresh design
1	Colors
1	Design of the logo and name
1	Look cosy
1	Fit my style
1	Donation to ocean projects
96	No answer

Appendix 2: List of algae snack tested

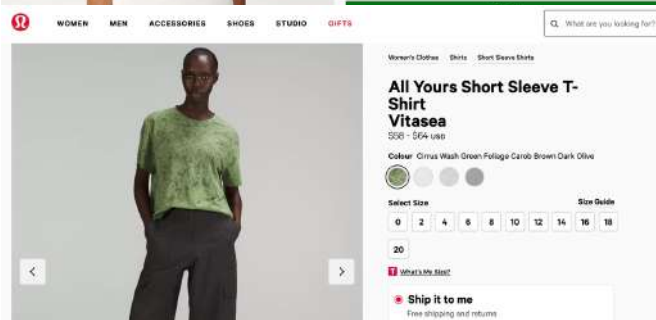
[illegible]

Appendix 3: Clothing made from SeaCell of the brands: Pangaia, Lululemon, Tommy Hilfiger, Speidel, Deap

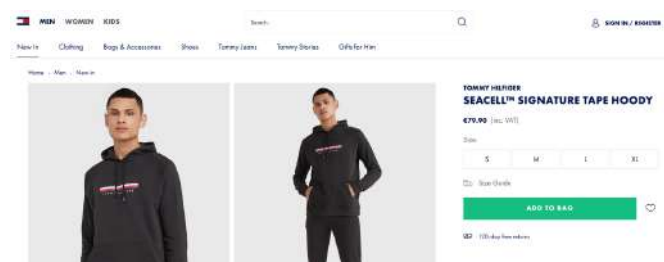
Pangaia: For its eco-friendly t-shirts, Pangaia mixes premium algae fabric (20%) with GOTS-certified organic cotton (80%).



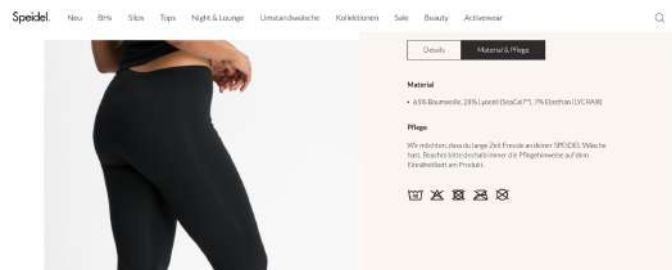
Lululemon: The sports clothing brand uses SeaCell for its “Vitasea” range of yoga clothing.



Tommy Hilfiger: The brand also keeps adding clothing pieces made with SeaCell to their product line.



Speidel: The German brand uses SeaCell in their night-, lounge- and underwear.



Deap: The French brand uses SeaCell in its socks and shirts.



Appendix 4: Supplier list contacted during outreach

Name	Location	Website	Status	Price per Pair	Lead Times	Minimum Order	Seacell Yes/No
Trex Socks	Bulgaria	www.trexsocks.com	N/A	N/A	N/A	N/A	No
Spartasocks	Lithuania	https://spartasocks.com/	in contact	1,6 Eur/pair	sample	1000	can order it
Steven	Poland	https://steven.pl/kontakt	in contact	N/A	N/A	no MOQ	Yes
JJW	Poland	https://jjw.pl/en/contact.html	Called 19.9., waiting for feedback	N/A	N/A	1000 of one kind	Yes
jopedois	Portugal	https://www.jopedois.com/	in contact	N/A	N/A	N/A	No
Torf	Portugal	https://www.torf.pt/	phoned on 19.9.	N/A	N/A	N/A	No
socksactive	Portugal	https://socksactive.com/pt/	contacted again on 19.9.	N/A	N/A	N/A	No
peugasmagon	Portugal	http://peugasmagon.pt/	contacted again on 19.9.	N/A	N/A	N/A	No
Nuri	Portugal	https://www.meiasnuri.com.pt/en/	in contact	N/A	60 Days	N/A	No
meiamania	Portugal	https://www.meiamania.com/	phoned on 19.9. will answer soon	N/A	N/A	N/A	No
Gomarte	Portugal	https://www.gomarte.com/	phoned on 19.9. will answer soon	N/A	N/A	N/A	No
fariadacosta	Portugal	https://www.fariadacosta.com/	in contact	N/A	N/A	N/A	Yes
fabricadaspeugas	Portugal	https://fabricadaspeugas.com/	contacted again on 19.9.	N/A	N/A	N/A	No
Dara	Portugal	https://dara.pt/	phoned on 19.9. will answer soon	N/A	N/A	N/A	No
afisocks	Portugal	https://www.afisocks.com/	phoned on 19.9. will answer soon	N/A	N/A	N/A	No
Manuel Fernando Azevedo	Portugal	https://www.manuelazevedo.pt/dg	wait for Feedback	budget of around 1000€ needed	45-60 days	2000 per style	No
ajgoncalves	Portugal	http://www.ajgoncalves.pt/	phoned on 19.9. will answer soon	N/A	N/A	N/A	No
mciasuspensa	Portugal	http://mciasuspensa.com/en/	phoned on 19.9.	N/A	N/A	N/A	No
indmei	Portugal	http://www.indsocks.com/	contacted again on 19.9.	N/A	N/A	N/A	No
The Captain	Portugal, Porto	www.thecaptainsocks.com	in contact	longe socks will be:	N/A	N/A	No
Ares Istanbul	Turkey	http://ares-istanbul.com/	Reminder email sent 19/09	1,70 € / pair sneaker	Awaiting reply	500	Awaiting reply
Sancar	Portugal	www.sancarsocks.com	Closed - lost	N/A	N/A	N/A	No
lopecscarvalho	Portugal	https://www.lopecscarvalho.pt/	Closed - lost	N/A	N/A	N/A	No
sancarsocks	Portugal	https://sancarsocks.com/index.php?lingua=pt	Closed - not qualified	N/A	N/A	5000	Yes
Pyratex	Spain	https://www.pyratex.com/	Closed - not qualified	~10€ without packaging	N/A	800 per style	Yes
Strumpfdirks	Germany	https://www.strumpfdirks.de/	Closed - not qualified	9.10 €	6 Weeks	5000	No

Appendix 5: Lean Business Model Canvas – *meiæs*

Problem	
1) People need new socks regularly (due to wear and tear).	
2) People desire to have an impact and need an easy way to do so.	
3) There is no sustainable socks brand that produces locally in Portugal while donating revenues to ocean-related projects.	
4) The fashion industry is responsible for 2.1 billion tonnes of CO2 emissions each year.	
5) Only 17% of brands are transparent about their annual carbon footprint at raw material level.	
6) 93% of brands don't pay their workers a living wage.	

Solution	
Ethically, locally, and transparently produced socks made from 80% organic cotton. 5% of total revenues are donated to ocean-related charity projects that the peer group cares about. Fair wages for producers. Short transport ways to reduce CO2 emissions to a minimum.	
Key Metrics	
1) CO2 footprint	
2) Amount of revenue donated	
3) Marketing traffic	
4) Reducing overstock by supply & demand match	
5) Generated revenue	
6) CAC	

Unique Value Proposition	
For young, fashionable and conscious minded customers, who want to have a positive impact on the environment and especially care about the ocean, meiæs is an impactful fashion brand producing socks made locally and transparently from organic cotton. that is donating a part of their revenues to ocean preservation projects.	
Unlike other fashion resellers producing socks made from unsustainable fabrics, our solution supports their customers in creating a positive impact during ordinary purchase decisions and is an ethical clothing choice.	

Unfair Advantage	
1) Nova SBE network & study program	
2) Experience in corporate venture building, venture capital, start-ups, entrepreneurship	
3) Close advisors from the fashion industry	
4) Access to funding from FFF	
Channels	
1) Shopify shop	
2) Social Media (Instagram, TikTok)	
3) LinkedIn	
4) Local selling points (Nova SBE shop, local markets, etc.)	

Customer Segments	
1) Customers that are interested in buying more sustainable and fashionable clothing	
2) Young & fashionable customers, that actively search for impactful solutions in their everyday life, customers knowing about pressing issues of the ocean and planet earth	
3) Present givers (e.g. for Christmas to friends and family)	
4) Active people & athletes (surfers, joggers, golfers).	
5) "Lifestyle" customers	

Cost Structure	
1) Raw Material – Organic Combed Cotton, Polyamide, Elastane	5) Marketing
2) Fabricants (Knitters, Yarn producers etc.)	6) Employees
3) Freight, Shipping, Procurement	7) IT Infrastructure
4) Shopify shop	8) Other overheads

Revenue Streams	
1) D2C	
2) B2B sales to partners	
3) B2B2C sales through partners	

Appendix 6: Deloitte survey: adoption of sustainable lifestyle (2022) What prevents consumers from living a more sustainable lifestyle?



(Deloitte 2022)

Appendix 7: Elaboration on key metrics

(1) Marketing traffic

This metric is more of a whole category than a single metric, as marketing includes many different activities. However, to summarize this category a limitation to these sub-items has been drawn: (1.1) Instagram followers and (1.2) people reached. The goal is to reach at least 100 Instagram followers by the time the start of sales has been passed (04th December 2022). On average, it is aimed to achieve 30 likes on meiæs' posts. These numbers may seem low, but so far no additional financial resources were put into promoting meiæs' social media presence. However, this will change with the start of sales, as it is planned to promote one post financially. meiæs trusts in its ability to gradually build up a loyal follower base and community, so it can constantly adapt and improve its social media presence.

Regarding the second metric named, people/accounts reached, it is aimed for an average of 1000 people/accounts. This number is based on the experience of an Instagram influencer from the founders' network. For privacy reasons the name is not mentioned here. The influencer is promoting some posts financially. The person suggested that a good benchmark for the number

of accounts reached is 1000. The analysis of the named metrics can be found in the individual part “Marketing & Sales”.

(2) Profit and profit margin

For any for-profit company, revenue and ultimately profit is the most important metric as it ensures survival and financial sustainability. The goal here is very clear: to sell all 100 pairs of socks that were delivered. This means in the optimal case to reach a profit of (ideal scenario: each customer buys the socks in a 1-pack and not in a bundle, all 100 pairs are sold) 665,00€ (please see chapter “pricing strategy”). The profit margin indicates how much percentage of each sale is profit. It is used for comparability within the industry and also a good indicator of liquidity. At a price of 12.99€ per pair of socks sold, a profit margin of 51% is achieved. This is not an industry standard margin, but still allows to donate significant portions of meiaes revenues. An industry standard margin would be over 100%, which is out of scope for meiaes, as the price would become too high for the customers (Farra 2020). The evaluation of the profit can be found in the individual part “Marketing & Sales”.

(3) Customer acquisition cost (CAC)

This figure is used to measure how much money meiaes as a company spent on a won customer. The goal is to keep it as low as possible, which is why it is aimed for a value close to zero. Realistically, the CAC will be around 20ct per customer, planning with 150 customers and a marketing spend of 30,00€ (spent on the promotion of an Instagram post). The analysis of meiaes’ customer acquisition cost can be found in the individual part “Marketing & Sales”.

(4) CO₂ footprint

This is a figure that is particularly close to the founders’ hearts, as it indicates the impact the product has on the environment and ultimately the climate. The goal is to keep this figure as low as possible, and above all to have a significantly lower carbon footprint compared to

conventional socks. The industry standard for a pair of socks is around 4kg CO₂ (Picci 2021). meiaes strives for a value of 2kg CO₂ per pair of socks. By keeping the production as local as possible as well as using different raw materials this can be realistic. The analysis of the actual carbon footprint can be found in the individual part “Impact Assessment”.

(5) Sum donated to a non-profit organization

This sum decides how strongly an ocean protection project can be supported or not. meiaes has set itself the goal to donate 5% of total revenues to such a project. In the optimal case mentioned above, meiaes would donate 64,95€ for the first batch of 100 pairs of socks.

The analysis of the total sum donated to non-profit organizations can be found in the individual part “Impact Assessment”.

(6) Match of supply and demand

As a sustainably operating company, the meiaes team knows that it is highly important to use natural resources sparingly. This means that any form of overstock and/or overproduction is ultimately harmful to the planet. Therefore, meiaes strives to sell-out all pairs of socks, so that no overstock is being created. On the other hand, it was decided to not produce too little and not be able to serve some customers. Based on the pre-sale list that was distributed for SeaCell socks in the semester before the summer break 2022, where 137 people signed up to buy 211 pairs of socks, it was concluded that 200 pairs would be a good number of socks to start with in the first batch. This key metrics cannot be evaluated because the team was only able to get 100 pairs of socks, hence they would not know, if 200 pairs would be a better fit or not.

Appendix 8: Pre-Sale List for SeaCell socks (May 2022)

	A	B	C	D	E	F	G	H	I
	Zustartzeit	First name	Surname	Socks size	Which style do you prefer?	How many pairs of (long) tennis socks would you like to buy?	How many pairs of (short) sneaker socks would you like to buy?	Contact details (email)	Comments, questions, suggestions?
2	5.7.2022 14:01:33			42-45+	I like both :-)	2	2		Blue socks
3	5.7.2022 14:06:03			42-45+	I like both :-)	1	1		You guys rock!
4	5.7.2022 14:07:27			42-45+	Short sneaker socks	0	2		Maybe some larger sizes, silicone in the heel
5	5.7.2022 14:08:17			42-45+	Long tennis socks	1	0		Well, see for us must be of
6	5.7.2022 14:17:54			42-45+	Long tennis socks	2	0		Ready to have my life changed
7	5.7.2022 14:22:45			36-39	Long tennis socks	1			
8	5.7.2022 14:23:42			42-45+	Long tennis socks	1	0		Plz give me please (45+) - the 8, green
9	5.7.2022 14:30:18			42-45+	Long tennis socks	2			
10	5.7.2022 15:03:09			36-39	I like both :-)	1	1		Hi
11	5.7.2022 15:13:00			36-39	I like both :-)	1	1		The long socks are for my brother. Therefore the size is 43 and not 36.
12	5.7.2022 15:15:15			42-45+	Short sneaker socks	1	0		Hi
13	5.7.2022 15:18:28			36-39	I like both :-)	1	0		Hi
14	5.7.2022 16:02:58			36-39	Long tennis socks	2	0		
15	5.7.2022 16:14:19			42-45+	I like both :-)	1	0		I would prefer primarily, white socks. However I would also be interested in other single color socks like orange, black, navy blue or grey.
16	5.7.2022 16:37:47			36-42	Short sneaker socks		0		I'm already looking forward to the socks 😊
17	5.7.2022 17:12:18			36-42	I like both :-)	0	2		Love it!
18	5.7.2022 22:01:24			42-45+	Long tennis socks	4	0		Hi
19	5.8.2022 9:04:19			42-45+	I like both :-)	1	0		Hi
20	5.8.2022 10:45:48			36-42	I like both :-)	1	2		Hi
21	5.9.2022 9:40:23			42-45+	I like both :-)	2	2		Hi
22	5.9.2022 10:04:09			42-45+	Long tennis socks	1	0		Hi
23	5.9.2022 16:46:02			42-45+	Long tennis socks	4	0		Hi
24	5.9.2022 16:45:11			36-42	Short sneaker socks		2		Hi
25	5.9.2022 16:52:29			36-42	I like both :-)	3	2		Hi
26	5.9.2022 16:53:30			42-45+	I like both :-)	1	0		Wir sind gut <3
27	5.9.2022 19:12:02			36-42	I like both :-)	1	0		Wäre Schöner mit der gestreiften
28	5.9.2022 19:12:42			42-45+	Short sneaker socks	0	2		Hi
29	5.10.2022 10:13:49			36-42	Short sneaker socks	0	2		Hi
30	5.10.2022 11:22:15			42-45+	Short sneaker socks	0	4		Hi
31	5.10.2022 11:57:21			36-39	Short sneaker socks	0	1		Hi
32	5.10.2022 12:03:25			36-42	Short sneaker socks		4		Hi
33	5.10.2022 12:33:14			36-42	I like both :-)	2	2		Hi
34	5.10.2022 12:34:02			36-39	I like both :-)	2	2		Hi
35	5.10.2022 12:34:38			36-39	I like both :-)	2	2		Hi
36	5.10.2022 12:56:23			36-42	I like both :-)	1	0		Hi
37	5.10.2022 16:02:17			36-39	I like both :-)	2	2		Hi
38	5.10.2022 16:02:38			42-45+	I like both :-)	2	2		Hi
39	5.10.2022 16:03:01			36-42	Long tennis socks	4			Hi
40	5.10.2022 16:03:22			42-45+	Long tennis socks	4			Hi
41	5.10.2022 16:03:50			36-42	Long tennis socks	3			Hi
42	5.10.2022 16:06:01			42-45+	I like both :-)	2	2		Hi
43	5.10.2022 16:06:26			36-39	Short sneaker socks	0	2		Hi
44	5.10.2022 16:06:28			36-39	I like both :-)	2	2		Hi
45	5.10.2022 16:07:01			42-45+	Long tennis socks	2	0		Hi
46	5.10.2022 16:08:21			42-45+	I like both :-)	1	1		Hi
47	5.10.2022 16:22:09			36-42	Short sneaker socks	0	1		Hi
48	5.10.2022 16:26:39			36-42	Short sneaker socks	0	1		Hi
49	5.10.2022 16:26:59			42-45+	Long tennis socks	1	0		Hi
50	5.10.2022 22:14:16			36-42	I like both :-)	4	4		Hi
51	5.10.2022 22:17:01			42-45+	I like both :-)	2	2		Hi
52	5.10.2022 22:38:00			42-45+	Long tennis socks	3			Hi
53	5.10.2022 22:39:32			42-45+	I like both :-)	2	2		Hi
54	5.10.2022 22:39:35			42-45+	Long tennis socks	2	0		Hi
55	5.11.2022 11:24:24			36-42	Short sneaker socks	6-10+			Hi
56	5.12.2022 10:07:31			36-42	Short sneaker socks		1		Hi
57	5.12.2022 13:20:31			36-42	I like both :-)	1	2		Hi
58	5.12.2022 16:21:10			36-39	I like both :-)	1	1		Hi
59	5.30.2022 13:21:45			42-45+	I like both :-)	1			Hi
60	5.30.2022 21:03:19			36-42	Short sneaker socks		4		Hi
61	5.22.2022 13:45:10			36-42	I like both :-)	1	1		Hi

Appendix 9: Elaboration on meiaes' competitor analysis

As the first main competitor, the German start-up **“Dopazi”** was identified. Dopazi was founded in Warendorf and its business model is based on selling products to end consumers, using its website as a D2C channel while donating an amount of the generated revenue to ocean-related projects that aim at stopping to catch sharks in order to make profit from it. The offered product range consists of bags, sports shirts, and socks, and markets its products around the topics of running, lifestyle, sports, and cycling. The offered tennis, sports, and casual socks have different styles and designs in white, black, and various colors. They are designed and produced with organic cotton and high quality in Germany and the price range is between 17 and 19€ (Dopazi 2022).

“Patron Socks” is another German start-up based in Cologne that offers sustainable socks that are partly made from recycled Polyamide. The business model is based on selling socks directly to consumers using their website as a channel (D2C) as well as partnering with the Italian clothing brand **“Cinque”** using the B2B2C channel. According to the online shop, Patron Socks donates 3% of its revenues. The used Polyamide consists of recycled plastic from plastic bottles, that would otherwise end up in the ocean. Therefore, Patron Sock's mission is to clean the ocean by recycling ocean plastic. Next to the ocean topic, their marketing strategy revolves around a casual lifestyle, a business lifestyle, the city of

Cologne, and skating. The offered socks have different designs and styles like tennis, casual, business, sneaker, and ankle sock designs. They are produced in China and the price range is between 7,95€ for ankle socks and 14€ for tennis socks (Patron Socks 2022).

The third competitor is the German start-up “**Sock Up Your Life**” which was founded in Neuhaus am Inn. Its business model is based on selling casual and business socks to end consumers using its website as a D2C channel. Sock Up Your Life’s mission is to operate as transparently and locally as possible and use organic cotton from Greece and produce the socks in Germany. The offered product range consists of casual and business socks in bright colors and patterns and the price for one pair is 14,50€. The marketing strategy revolved around nature and transparent insights into the production of socks (Sock Up Your Life 2022).

“**Von Jungfeld**” is another German competitor that offers socks within their product range. The company is based in Mannheim and uses its website as a channel to reach end consumers (D2C) to sell its products. The offered product range consists of socks, t-shirts, and underwear for men. Its mission is to revolutionize the socks market for men by offering colorful and stylish socks with different designs while only using organic cotton for the products. The production site is located in Europe and the price range of ankle socks starts at 7,95€ up to 11,95€ for casual business socks. The marketing strategy evolves around their products that are styled in various ways including themes like Valentine’s Day and Christmas (Von Jungfeld 2022).

Finally, the last identified competitor is “**Snocks**”. Snocks is a German start-up that sells socks, underwear, and loungewear, partly made from organic cotton. Their unique selling proposition is a six-month guarantee that replaces any socks that have e.g. a hole within this time frame after the purchase. The business model is to sell their products directly to customers using their website (D2C) as well as selling products on Amazon using Fulfilment by Amazon (FBA) as a B2B2C channel. The marketing strategy is rather focused on the founding experience of Snocks as they reached popularity through the founding and growth story rather than their products themselves. The socks are sold in large packs starting from 29,99€ for a pack of four tennis socks (Snocks 2022).

Appendix 10: Personal introductions of each founding member

Nils Johannsen

Growing up in Hamburg, Germany, close to the Elbe River as well as the Baltic Ocean and the North sea, Nils spent almost every summer holiday as a child at the beach. He always felt connected to the ocean. Before starting his masters at Nova SBE, he focused on early-stage VC investments in maritime, logistics, supply chain management and the wider blue economy (two years of experience) which sparked his passion for venture capital as well as for start-ups, innovation and digital transformation. Having lived, worked and studied in four different countries, he gained valuable experience in multi-national and diverse work environments. Working in a high-growth and fast-paced environment such as a startup has sharpened his skills to get things done in a quick and efficient manner. Nils has an entrepreneurial mindset and is passionate about impacting how we cooperate to build a brighter future for all of us. His top skills are a problem-solving mindset, effective communication, networking, and strategic business planning. Nils has contacts in the VC and start-up ecosystem that can support meiaes with future funding opportunities and getting traction in the market.

Georg Reckhaus

Always looking for an adventure in nature, he decided to spend his bachelor exchange semester in Thailand and leave his origin in the countryside of Switzerland. He became aware of the consequences of the unsustainable lifestyle in European countries. After finishing his bachelor of business Administration at the University of St.Gallen, and internships in the marketing and retail sector, he decided to do his master's in Sustainability at Maastricht. There changed his lifestyle as he became vegan and tried to live sustainably in every aspect of life. After writing his master's thesis about algae as a meat alternative, he found his passion for algae and the ocean. His drive to learn something and to build his start-up led him to his second master's in Impact Entrepreneurship. His connection to nature and the ocean led him often go surfing and motivated him to have a positive impact on meiaes.

His top skills include interdisciplinary thinking to solve problems in an innovative way, decision-making to bring a project to the next step, adaptability for everything what is coming, sustainable mindset to ensure the impact of every project.

Marita Schmeller

Since Marita was a young girl, she has always dreamed of owning a small sales business. In the free time of her teenage years, she took any opportunity of selling second-hand items at flea markets or online second-hand stores. Professionally, she has also gained valuable sales experience while working as a salesperson in a biking store during her bachelor's and as a salesperson in her current working student position in a successful German climate tech start-up. The start-up meiaes now offers the perfect opportunity for her to apply those developed sales skills. Having lived in Germany, Finland, England, and the US during her double degree bachelor's in European Business studies, and currently living in Portugal pursuing her master's in Impact Entrepreneurship and Innovation at Nova SBE, Marita has also gained great experience in handling multi-national and always changing working and living environments. Her top skills are: sales skills that can be directly applied for word of mouth sales and within other used sales channels, prioritizing tasks and organizing the team in order to keep the team's vision, mission and goals on track, and communication as well as presentation skills that can be used for communicating with customers or external partners to build a brand reputation.

Eva-Marie Steinbömer

Growing up in a founder-family Eva understood early on what entrepreneurship means and always wanted to start a company or lead a larger team. This led her to complete a bachelor's degree in business administration at the Ludwigs-Maximilians-University in Munich. During this time she was involved in a start-up club enabling her to build a large and reliable network, through which she had the opportunity to gain insights into various start-ups. In addition, she

was able to learn what leadership means and what is important in dealing with a team by leading several project groups. Through a stay abroad in South America, she was able to experience the other side of the world and promised herself to only found a company if it has a positive impact on society and nature. Her top skills include: great communication skills needed when working in a team and with external partners, analytical thinking used when analyzing and evaluating events, and building long-term relationships required for nurturing and developing the brands' identity and network.

Appendix 11: Call with Lisa-Marie Weidling, founder of "Story of Mine"



Appendix 12: calculation of market size

European socks market: 10.3 Billion USD (note: calculated with a 1:1 exchange rate) in 2021 (Market Data Forecast 2022)

Inhabitants Europe: 446,8 million people (Destatis 2022)

Inhabitants Germany + Austria (Worldbank 2022): 83,2 + 9 million people (92,2 million)

→ 20,64%

→ 20,64% of 10,3 Billion € = 2,126 Billion € → **TAM**

Austria target group (20– 49 years old) → around 4,5 million people (Statistik Austria 2022)

Germany target group (20 – 49 years old) → 30,87 million people (Bundeszentrale für politische Bildung 2020)

→ 35,37 million people

88% sustainability (conducted primary research in form of an online survey)

→ 31,13 million people

$\frac{31,13}{446,8}$

→ 6,97%

6,97% of 10.3 billion = 717,9 million € → **SAM**

25% of 717,9 million € = 179 million € → **SOM**

1% of 179 million € = 1,8 million € → **market share**

<i>Reels</i>	Post nr.	2	9 (6€ ad)	11 (4€ ad)
		13.11.22	05.12.22	08.12.22
<i>Overview</i>	People reached	326	840	333
	Reel interactions	20	-	-
<i>Reach</i>		326	840	333
	Plays	351	4773	953
<i>Reel interactions</i>		n.a.	36	19
<i>Ad</i>	Website visits	n.a.	32	4
	Impressions	n.a.	3986	615
	Ad plays	n.a.	3826	578
	Profile visits	n.a.	7	2

Appendix 15: Screenshot from LinkedIn post



meiaes
37 followers
5d • 🌐

WE ARE LIVE 🎥

meiaes "ocean socks" are made from organic combed cotton, designed and produced with love, under fair and ethical conditions in Porto, Portugal.

We care about the ocean - that is why we have partnered up with Hope Zones Foundation (<https://www.hopezones.org/>) and will donate 5% of total revenues to support ocean- and coastal preservation projects in Portugal.

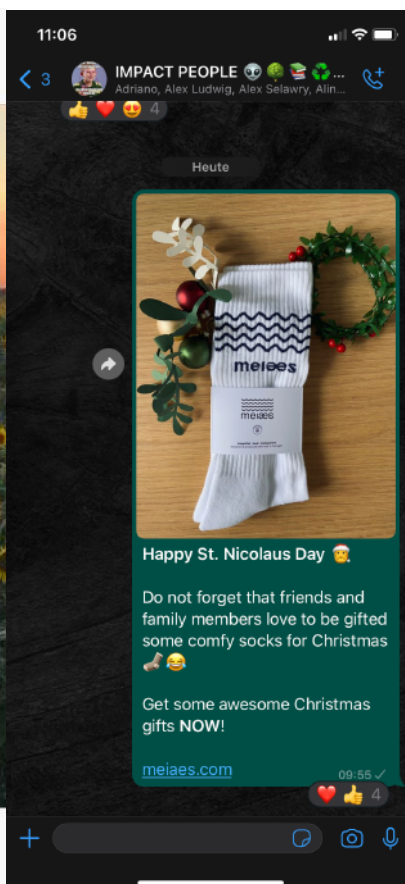
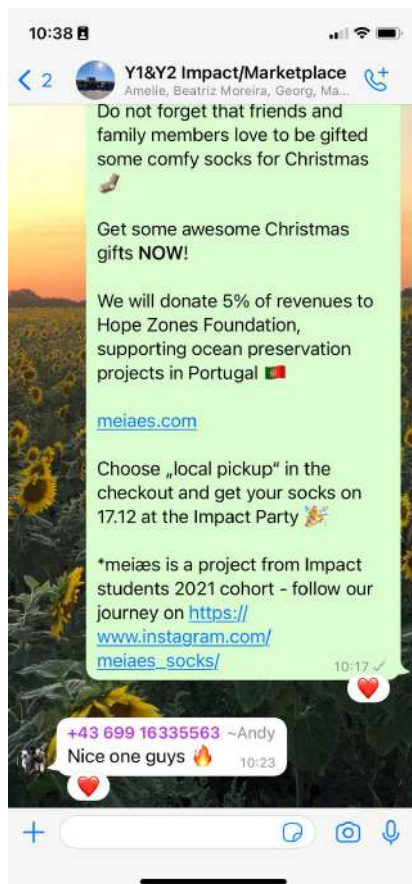
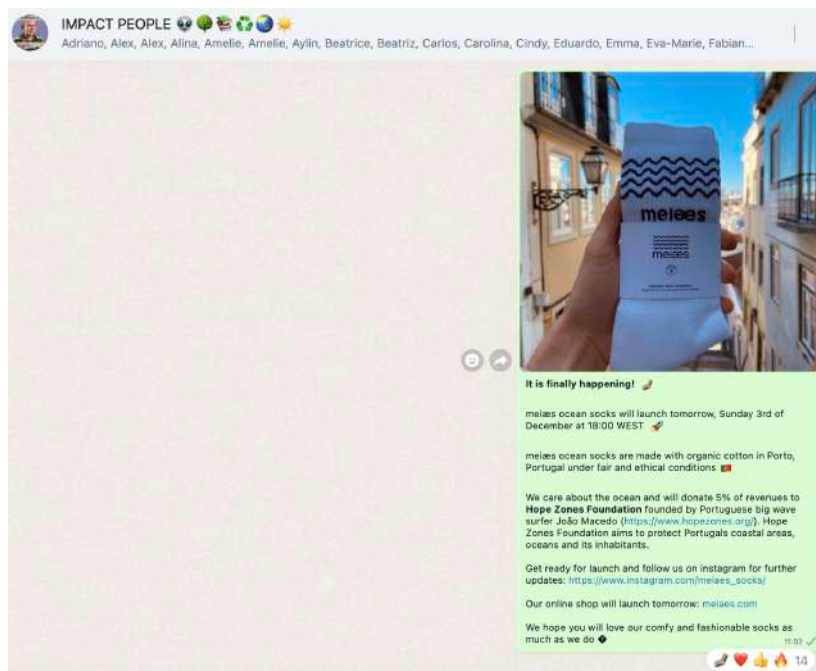
Being fully transparent about our production costs and our carbon footprint is what makes **meiaes** unique.

Get your meiaes ocean socks now on <https://meiaes.com/>

[#socks](#) [#startup](#) [#sustainablefashion](#)

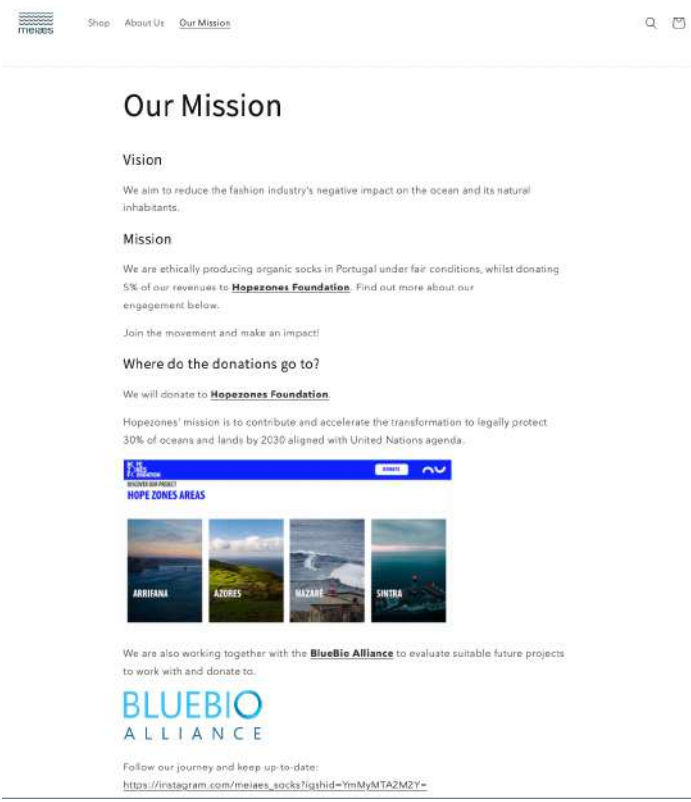


Appendix 16: Using personal network as a communication tool



Appendix 17: meiaes.com e-commerce shop – overview

<u>Shop</u>	 Shop About Us Our Mission  Products Filter: Availability Price Sort by: Alphabetically, A-Z 3 products  meiaes ocean socks - 1 pair €12,99 EUR  meiaes ocean socks - 3 pairs €35,99 EUR  Sold out meiaes ocean socks - 7 pairs €79,99 EUR
<u>About Us</u>	 Shop About Us Our Mission  and be reminded of it day by day. Coming from Lisbon, Portugal, we deeply care about the ocean and its current state, therefore we are donating 5% of our revenues to ocean preservation projects in Portugal. We are Marita, Eva, Nils & Georg from Germany and Switzerland, currently studying for a master's degree in sunny Lisbon. Join the movement! Marita "Whilst spending time at beaches I noticed how much rubbish there is - this needs to change." Nils "I'm a certified shipping clerk and know about the importance of the ocean for trade and transport - let's preserve it." Eva "We are overfishing the seas, and tons of animals are dying due to the human impact on the ocean - how is this the world we live in?" Georg "Going surfing a lot made me feel the power of the ocean - I want to protect that."  We are meiaes - Nils, Marita, Eva and Georg. We care about the ocean and you should do, too. Join our movement!

<u>Mission</u>	
Support Pages	<u>Frequently Asked Questions (FAQs)</u>, <u>Shipping and Returns</u>, <u>Imprint</u>, <u>General Terms and Conditions</u>, <u>Right of Withdrawal</u>, <u>Payment Options</u>.

Appendix 18: Events as a sales channel (here: “Feira da Ladra” flea market (Graca, Lisbon))



Appendix 19: Shopify sales insights

Sessions

[View report](#)**417****↑ 119%**

Visitors

365

↑ 99%

Total sales

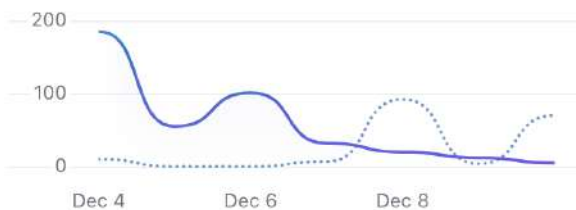
€945.56**↑ 5,469%**

Online Store

€945.56

↑ 5,469%

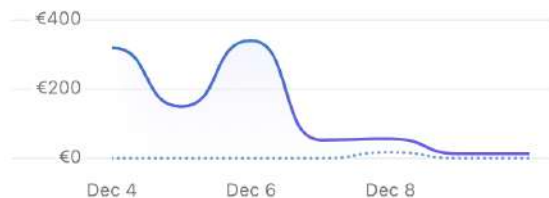
SESSIONS OVER TIME



— Dec 4–Dec 10, 2022

... Nov 27–Dec 3, 2022

SALES OVER TIME



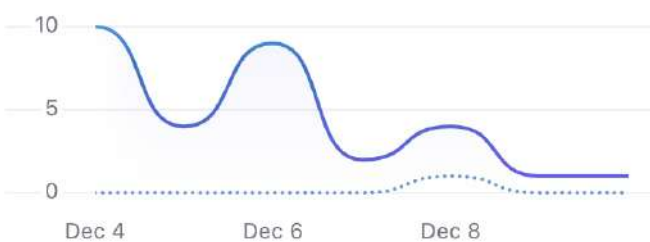
— Dec 4–Dec 10, 2022

... Nov 27–Dec 3, 2022

Total orders

31**↑ 3,000%**

ORDERS OVER TIME



— Dec 4–Dec 10, 2022

... Nov 27–Dec 3, 2022

Sessions by social source

[View report](#)

Instagram	65	↑ 3,150%
LinkedIn	35	-
Facebook	3	-

Sales by traffic source

Direct	€863.63	↑ 4,986%
Social	€81.93	-

Average order value

€30.50

↑ 80%

ORDER VALUE OVER TIME



Sessions by traffic source

[View report](#)

Direct	308	↑ 65%
Social	103	↑ 5,050%
Search	6	↑ 500%

Sales by social source

Instagram	€68.94	-
LinkedIn	€12.99	-

Appendix 20: Shopify online shop sales

shopify Search

NJ Nils Johannsen

Home Orders Drafts Abandoned checkouts Products Customers Analytics Marketing Discounts Sales channels Online Store Point of Sale Facebook & Instagram TikTok Apps Settings

Orders Export Create order

7 days 30 ↑ 2,900% 39 ↑ 3,800% 0 0% 29 ↑ 2,800% 1 day ↑ 4,700%

All Unfulfilled Unpaid Open Closed

Filter orders Filter Columns Sort

Order	Date	Customer	Channel	Total	Payment status	Fulfillment status	Items
#1032	Today at 1:13 pm	Julian Christiansen	Online Store	€12.99	Paid	Fulfilled	1 item
#1031	Yesterday at 11:58 am	Georg Reckhaus	Online Store	€12.99	Paid	Fulfilled	1 item
#1030	Thursday at 05:58 pm	Aylin Sara Tasdemir	Online Store	€16.98	Paid	Fulfilled	1 item
#1029	Thursday at 05:18 pm	Nicolas Olbeter	Online Store	€12.99	Paid	Fulfilled	1 item
#1028	Thursday at 11:40 am	Marita Schmeller	Online Store	€12.99	Paid	Fulfilled	1 item
#1027	Thursday at 10:32 am	Saskia Fehling	Online Store	€12.99	Paid	Fulfilled	1 item
#1026	Wednesday at 03:46 pm	Lilly Schmidt	Online Store	€39.98	Paid	Fulfilled	1 item
#1025	Wednesday at 10:21 am	Miles Meckley	Online Store	€12.99	Paid	Fulfilled	1 item
#1024	Tuesday at 09:31 pm	Tomé Salgueiro	Online Store	€16.98	Paid	Fulfilled	1 item

Appendix 21: Founders Agreement signed by the team

FOUNDER'S AGREEMENT

1. Company name: meiaes

2. Brand logo:



3. Shares: 25% each founder (4 x 25% = 100%)

If a founder decides to leave the company before 6 months have passed after signing this agreement, the individual founder's shares shall be transferred to the remaining founders, equally distributed.

4. Commitments:

- Time (approximately 10h/week for each founder)
- Equal time invested per person

5. Roles:

- Business Development and Product (Nils)
- Partnerships and Company Growth (Eva)
- Sales and Marketing (Marita)
- Sustainability (Georg)

6. Non-competing / Other provisions: The founders have agreed not to replicate the ideas and projects developed during the course, at least for the next 1 year.

7. IP/NDA: The brand has not been registered yet. However, the founders agree not to disclose the ideas for the expansion of the brand to any other person.

It shall be agreed that the company meiaes can be herewith legally be referred to as meiaes GbR. Gesellschaft bürgerlichen Rechts or GbR is one of many legal forms in Germany. GbR means a partnership in which at least two founders join together to pursue a business purpose.

8. Motivation: We want to scale and expand meiaes as a fashion brand, starting with the production of white, athletic tennis socks.

9. Business Expansion Plan:

- Produce the first batch of 200x pairs of organic socks.
- Potential production of the second batch of socks with SeaCell yarn.
- Explore innovation opportunities (product line expansion).
- Identify and develop the right sales and marketing strategy for business expansion.

10. Decision process: Majority via voting. Each founder's vote is equal to the value of 1. in case of an equal vote, Marita Schmeller has the power to decide.

11. Revenue split: The % received on the sale of each pair of socks is 25% for each co-founder.

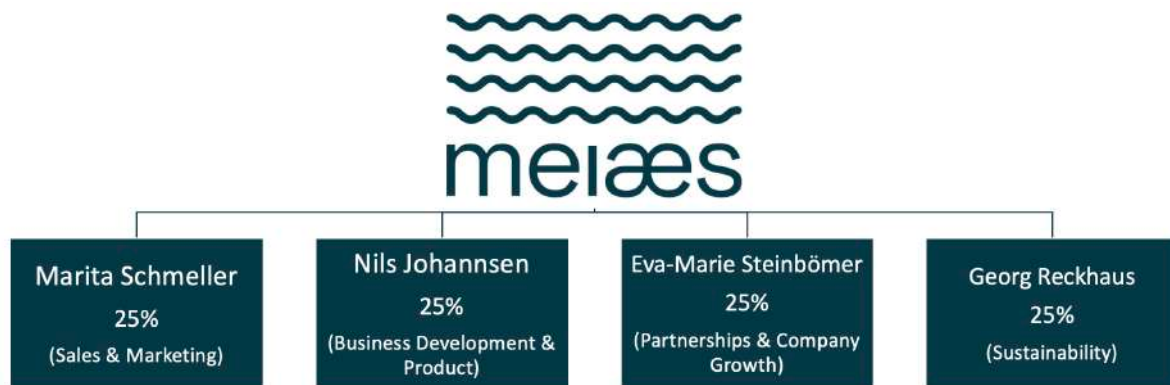
12. Profit split: The profit goes to the company meiaes. Any profit will be split equally among the founders.

13. Investments: Each co-founder equally contributes to the expenses related to the company. All costs are equally shared (25% for each co-founder).

14. How are we going to work:

- When do we meet? Team meetings on Thursdays and Fridays each week, each co-founder to contribute equally.
- How and where do we meet? Hybrid (physical co-working sessions and virtual sessions via MS Teams)
- How do we celebrate? Successes will be celebrated on rooftops with a great view of Lisbon, dinner and drinks.

Appendix 22: Equity shares and departments of respective founder



Appendix 23: Certifications and labels

CITEVE
CENTRO TECNOLÓGICO DAS INDÚSTRIAS TÊXTEIS
E DO VESTUÁRIO DE PORTUGAL
RUA FERNANDO MESQUITA, 2785
4760-034 VILA NOVA DE FAMALICÃO, PORTUGAL

OEKO-TEX®
INSPIRING CONFIDENCE

CERTIFICATE

A empresa

Trifitrofa - Comércio de Fios e Tecidos, Lda.
Rua Teófilo Braga, nº.115 - Apartado 230
4786 - 909 Trofa, PORTUGAL

De acordo a norma STANDARD 100 by OEKO-TEX® e baseado no nosso relatório nº 16067/2020 tem autorização, por meio deste certificado, a usar a marca STANDARD 100 by OEKO-TEX®



para os seguintes artigos

Fios crus, mesclas, brancos e tingidos em Algodão Orgânico – GMO não detetável.
(Matérias primas base já pré-certificadas STANDARD 100).

O resultado da análise do processo de acordo com a norma STANDARD 100 by OEKO-TEX®, anexo 4, **produtos da classe I**, comprova que foram cumpridos os requisitos relativos à ecologia humana da norma STANDARD 100 by OEKO-TEX® definidos no anexo 4 para produtos para bebé.

Os artigos certificados cumprem os requisitos do Anexo XVII do REACH (incluindo o uso de corantes azoicos, níquel libertado, etc.), os requisitos Americanos no que diz respeito ao teor em chumbo total nos artigos para criança (CPSIA, com exceção dos acessórios em vidro) e os da norma chinesa GB 18401:2010 (os requisitos de etiquetagem não foram verificados).

O beneficiário do certificado está comprometido, através da assinatura da declaração de conformidade de acordo com a norma ISO 17050-1, a usar a marca STANDARD 100 by OEKO-TEX® somente em produtos que estão em conformidade com as amostras analisadas. A conformidade é verificada em auditorias.

O certificado 9865CIT é válido até 30.09.2021

V. N. de Famalicão, 23.09.2020


O Director dos Laboratórios
Maria Antónia Lopes





Control Union Certifications B.V.
Meeuwenlaan 4-6, 8011 BZ, Zwolle, Netherlands
+31 38 426 0100
www.controlunion.com

SCOPE CERTIFICATE

Scope Certificate Number: CU820904GOTS-2021-00036628

Control Union Certifications declares that

Trifitrofa - Comercio de Fios e Tecidos, Lda.

License Number: 820904
Rua Teofilo Braga 115
4785-203 Trofa
Portugal

has been inspected and assessed in accordance with the
Global Organic Textile Standard (GOTS)
- Version 5.0 -

and that products of the categories as mentioned below (and further specified in the annex) comply with this standard:

Product categories: Dyed yarns, Undyed yarns

Processing steps / activities carried out under responsibility of the above-mentioned company (by the operations as detailed in the annex) for certified products

Storing, Trading

This certificate is valid from:

2021-06-21

This certificate is valid until:

2022-06-20

Place and date of issue:



2021-04-19, Zwolle

Name of authorised person:

On behalf of the Managing Director
Isabel Campos | Certifier

Stamp of the issuing body



Standard's Logo



This Scope Certificate provides no proof that any goods delivered by its holder are GOTS certified. Proof of GOTS certification of goods delivered is provided by a valid Transaction Certificate (TC) covering them.
Accredited by: Dutch Accreditation Council (RVA), Accreditation No: C 412



This electronically issued document is the valid original version.

Control Union Certifications B.V.

POST • Meeuwenlaan 4-6 • 8011 BZ • Zwolle • Netherlands

T • +31 38 426 0100 • F • +31 38 423 7040 • certifications@controlunion.com

Appendix 24: Partnership call with Joao Macedo (big wave surfer, Hope Zones Foundation)



Appendix 25: Impression of a pitch from BlueBio Value Ideation Challenge

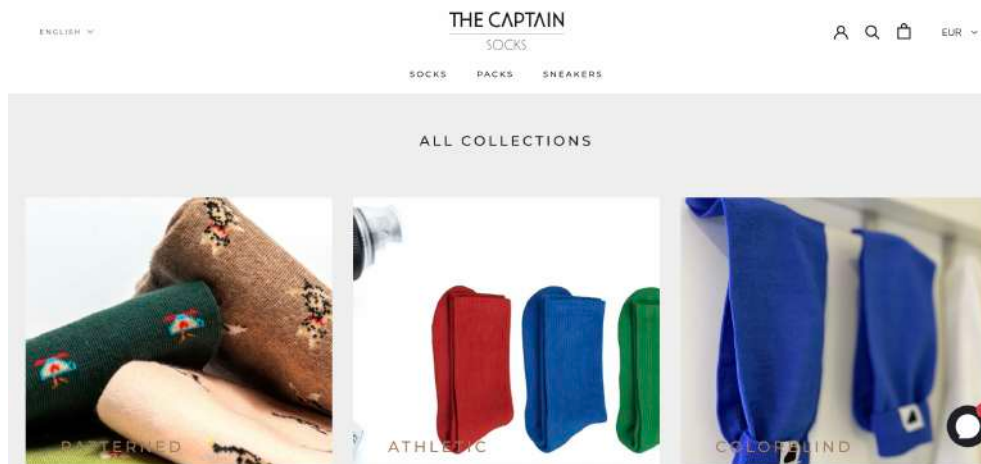


Appendix 26: List of interviews

Interview partner	Company	Date
Lisa-Marie Weidling	CEO at Story of Mine	22.08.2022
Ioana Ruxandra Cotos	Sustainability Manager at stichd - PUMA SE Group	23.11.2022
Joao Macedo	Big wave surfer, Founder of Hope Zones Foundation	06.12.2022
Ana Goncalves	CITEVE - Tecnologia Textil	13.12.2022

Elizabeth Costa	BlueBio Alliance	26.11.2022
-----------------	------------------	------------

Appendix 27: Website of The Captain Socks from Porto (thecaptainsocks.com 2022)



Appendix 28: The moment meiæs socks finally arrived (26th November 2022)



Appendix 29: meiæs paper tags



Appendix 30: Theory of change – implementation for meiaes' customers

The Theory of Change framework was used to analyse which inputs and activities are needed to observe a desired outcome. A theory of change uses a causal analysis based on available data to explain how a specific intervention, or activities, are likely to result in a specific development change. The theory of change framework supported meiaes in declaring the right inputs, activities, outputs and outcomes that spark the desired change in consumer behaviour to achieve an actual impact.

