

LABELED BY.

From vision to business, powered by LABELED BY.



INNOVATION SPACE PROJECT REPORT

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Figure 1. Clutch (MVP)

Executive summary

Due to this course together with the team we managed to scale down, literally. From the vision of revolutionising the fashion industry with digital manufacturing techniques, we scaled down towards a concept; the smart garment factory. Through validation we noticed that there is a need for this smart garment factory, however it is not viable within two years. This means that we had two options to continue with: 1. Find investors for the smart garment factory 2. Create a business for tomorrow.

During this course realised that the best change for success was to bundle our strengths and create a viable business for 'tomorrow', resulting in a clutch - powered by LABELEDDBY.

Investors summary

Established in 2018, LABELEDDBY. is an emerging fashion brand with an unique point of view and an added value. Bridging the gap between fashion and technology, its design is characterized by the unique combination of sustainable materials, pure craftsmanship and innovative manufacturing. Did you ever stop to think about where your clothes actually does come from? We know you care about where your fashion items come from!

Therefore our LABELEDDBY. powered clutches are designed and made with love in the Netherlands, manufactured on demand and ethically. By doing so we are disrupting the fashion industry by moving production process from children labor countries to a local and fair dutch production. We are proud to say that a part of the profit of each clutch will be invested in educating children in Bangladesh on technology and state to the art manufacturing methods, so we can all contribute to revolutionising the fashion industry!

LABELEDDBY. From vision to business

PRODUCE LOCALLY, EDUCATE GLOBALLY

We are using our social media channels such as Instagram and Facebook to attract potential customers and get public interested or trending in what we have to offer. In summary, more than 800 thousand people reached both online and offline in an attempt to make a personal or business inquiry. This made us exposed to news press, 3D printing machine manufacturers, fashion design establishments, fashion shows and more. As mentioned, our vision for the future is setting up a smart factory with fair, local, and personalized production. But how do we get there? With our clutches branch whose prototype and minimal viable product have been already implemented. In order to validate our product we have defined total achievable market of 7 million USD in the Netherlands and within that serviceable obtainable market for our clutches being 0.2 million USD. Not only that, but we had gotten in touch with some of our potential customers and influencers who have been eager to become our ambassadors such as Victoria Koblenko - a Dutch actress, and Sandy Oard - an American TED speaker on sustainability who will ease our plan of scaling the business overseas. All this endeavours will create our cost for our business and hence we defined our cost structure which contains: labor, logistics, materials, marketing, research & development, machinery. To balance this cost and still obtain some profit in the run, our clutches will sell an average of 80 USD per piece which multiplied with target market results in a total of 17.4 million USD. But why would customers choose us and what sets us apart from the rest of competitors? Well, we decided to focus on the niche of both sustainability and personalization whereas our competitors such as Modjewel and 0711 Tbilisi are focusing on only one or another and having a much higher price than what we offer. Finally, how will we be able to realize all of this? Thanks to our multidisciplinary and creative team which include both engineering and design profiles, we are confident that the future of fashion starts with us, now, in Netherlands with clutches powered by LABELEDDBY. and leading to the EU's first smart garment factory in 2023. being an ultimate vision of ours.

Main learnings of the team

First main learning would have to do with pivoting and iterative change of our project, hence transitioning to a favourable outcome which is scalable enough to start earning money tomorrow if needed. Connected to that was

our team's willingness and motivation to change directions even in spite of feeling seemingly going in circles or being non-productive. Therefore, asking for help each other or asking our coaches about where to find new leads is not a sign of weakness but a indicator of spiraling forward and learning on our previous attempts. All of this resembles the lecture about growth and static mind combined with our own readings of the book *Mindset: The New Psychology of Success* by Carol S. Dweck.

Second finding has to do with redefining what fashion stands for and how business can be expanded beyond what most people think of when thinking about fashion. This is exactly what brought our team closer to the value propositions customers really care about such as sense of safety, belonging or caring. This led us to investigate a lot of CEO's that took fashionable overcoating something that originally has a different purpose. One such example is a Dutch product Secrid, a pop-up credit card holder founded by René & Marianne.

This meant abandoning the great vision of LABELEDDBY. And focusing on the smallest matryoshka doll and bringing our added value through a simple, elegant and compact product.

Third finding was about the drawbacks during this project either internally within our team or externally by some outside forces, and how to deal with this situations by viewing them as a learning points. A lot of it included acknowledging we are indeed having certain problem and using visualization methods in order to communicate this concerns to each other. This idea had been drawn from the story about Jim Carrey and his paper in the wallet which was a constant reminder for him that if he is able to see it and believe it, it is a lot easier to achieve it. Of course, this does not mean that passively thinking about something by itself will solve all our problems but we needed to make ourselves go outside and out of the loop by changing the environment, listening to some music, drawing our current business process on paper in form of graphs or simply talking to people who are in no way connected with this course or University for that matter. Turning our weaknesses into strengths was a major insight obtained from this point.

INTRODUCTION

The fashion industry is evolving drastically.

Ethical conduct for garment production is becoming increasingly more important. Along with the rising costs of labor and transportation, the fashion industry is forced to search for alternatives in manufacturing, distribution, and transparency. Next to that, consumers are demanding more and have higher expectations concerning price, quality, "newness" and a personal touch than ever before. Therefore, the pressure on the production processes is high and brings a lot of new challenges. Fashion brands are looking outside the current industry for inspiration on how to infuse innovation into their entire ecosystem.

This is the reason why we founded LABELEDDBY. The aim of LABELEDDBY. is to enable personalized and cost-efficient garment production, which is both sustainable and responsive to the fast-shifting demands of the consumer. Keeping ethical considerations in mind, we are able to supply consumers with a product that has full transparency and prevents unsafe and unethical working conditions from around the world. We are able to minimize overhead costs, the carbon footprint from massive scale international shipping, and stimulate local economies with products.

By making use of emerging technologies that have the power to automate the entire production line, we can cut labor costs which enable profitable local production anywhere in Europe. From user input to delivery, LABELEDDBY. is able to be a one-stop shop that solves many challenges the market (and world) are facing, with the usage of high-tech digital manufacturing techniques, customer interaction, and optimize processes.

This report was created to provide a concise overview of the current malfunctions of the fashion industry, and addressing the factors shaping and driving fashion today and in the years to come by creating a sustainable solution for this problem. Team LABELEDDBY. will propose a part of the solution that relies on extensive qualitative and quantitative analyses, drawing on industry and proprietary sources, including statistics and studies from Statista, executive interviews conducted by McKinsey, and the

McKinsey Global Fashion Index, which tracks industry sales, operating profit and economic profit. The report is capturing our journey starting from the global problem which we tackle by creating a solution that converges to the niche product which is feasible to implement and makes a viable business model. All of the business model canvas blocks will be defined and extrapolating from that we will also try and introduce an ultimate vision and goal of LABELEDDBY. focusing on mass customization and automation. However, end product created through the Innovation Space Project being the clutches will be the focal point of this report.

Approach

Approaching a new product/service/business development will encompass things that we have learned throughout the course while developing our clutch. For a new product, the first step will be to do initial brainstorming to characterize which items would be appropriate for Labeledby to sell (i.e., small accessories do not provide enough revenue to justify creation, with the risk that comes to our branding and image, while creating a direct alternative to a \$4k Prada handbag does not carry proper desirability or feasibility currently). Alternative products could be backpacks, mid-segment clothing, or even clothing for movies (think space sci-fi). Once a selection of a few appropriate items is made, product desirability must be established. This will be done by predicting (or analyzing similar) personas, using marketing data to refine the product, conduct A/B testing and draw some conclusion on if there is a desire. Simultaneously, we want our future products to have a component of "functionality", such that, we are able to solve the customer pain for a select group of individuals. For example, perhaps the elderly need a particular type of umbrella functionality that is currently not available, due to issues with grip strength, arthritis or difficulties with regular usage. A fashionable, yet practical, umbrella could be designed and created using our sustainable technologies, materials, and methods that solves their pain.

For a service (or business) development, Labeledby could move in the direction of creating smart factories that match our company goal. However, first, there must be a societal desire to replace the status quo with sustainable, localized, Industry 4.0-type technologies. While we fully believe this is the direction of the future, catching the timing with regards to technological feasibility is crucial. Beginning too early risks another company with more influence and capital to disrupt our marketing strategy.

Use of tools

For persona development, Facebook Business and Instagram for Business will allow us to gain initial information regarding our target persona and product desirability. Developing of Industry 4.0 machines will primarily take place with AutoCAD Factory Process Tools and in Fusion 360.

Reflection on development process and new business development

It was discovered that the development process is highly stochastic, even with the best attempted to employ tool and models from entrepreneurial books and knowledge. Perhaps the most important aspect gain can be said as “an idea that you think is perfect might not be something that people actually want.” Basically, our personal biases only might only reflect the individual/team, and it is our responsibility to validate if these ideas actually have any value (at the moment).

Furthermore, progress and workload are not linear processes. Even if the team is constantly working, sometimes it is best to take a step back and think about what is going on, otherwise time is wasted on exploring options. These options could have been pruned by waiting a bit longer or thinking more critically. Not all progress and effort are equal.

It is crucial for Labeledby to begin moving in the directions of a new product, as soon as possible. This will keep our company relevant and provide new learning and business opportunities to guide us in the direction of our end goal. Similarly, it might be that Labeledby becomes a service company, that oversees the creation and implementation of the ideas we have. While Labeledby itself focuses on localization, it would be beneficial for all companies globally to hold this view as well. Therefore, as a consulting service, Labeledby can develop these practices (from small batch product development up to smart factories and beyond) for other companies including start-ups and mature companies.

Analysis on desirability, feasibility and viability

Concerning the market desirability and validation, we have engaged in a series of discussion and conversation with potential customers and influencer. This had gave us an initial overview of what we can expect and helped us form our first prototype.

By reiterating the same process with a prototype to show we started to get more focused and detailed feedbacks which will in the future be of value when putting our minimum viable product in motion being the first 30 - 50 clutches ready to be sold to our personas that have been verified along the way. Market desirability was fueled by the market validation where we targeted corporate women in their 40's who have a taste in high end fashion assortments. Moreover, market value of our business had been validated by doing a market subsets analysis.

Total Available Market (TAM) is the total market demand for a product or service. This accounts for the total amount of women in the Netherlands within the age of 16-80 years, which are 7.25 million women.

Serviceable Available Market (SAM) is the segment of the TAM targeted by our products and services. This could be covered by 10% of the TAM, which have a income above 50K; 0,725 million women.

Serviceable Obtainable Market (SOM) is the portion of SAM that we can capture. We estimate that 30% of this group of women buys sustainable items. So that comes to a target market of 0,22 Million women in the Netherlands!

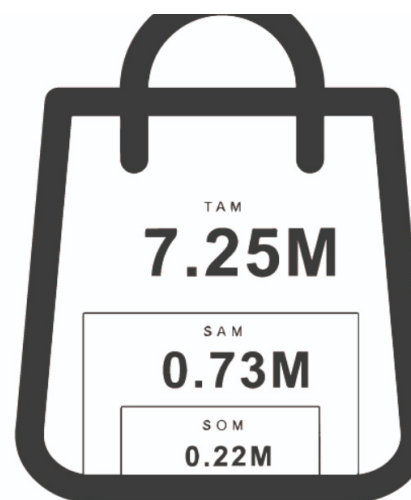


Figure 2.

For **technical feasibility** we have come a long way from the initial idea of a body scanning system machine to the design of the top notch clutches. In a sense, it had transformed to a definitely more feasible endeavour as the clutches all come in one standardized size, technologies such as 3D printing and laser cutting have been reduced to a detail design (such as closures or patterns) and the feasibility has been shifted to a choice of material from which clutches can be made to whilst still keeping the high-end feel to them. This however, still leaves an open question where and how we can find someone who is knowledgeable in such things as the industrial design department doesn't often use very expensive materials. However, our first prototype has proven that technical feasibility has been validated and there are no obstacles overcoming the gap between prototype and the minimum viable product. As the business will continue scaling up and potentially shifting towards other fashion accessories and products, ultimately to a smart factory, technical feasibility will be the segment that will require investing ever so more time and money.

Business viability required a constant improvement of our business model canvas and later on, lean model canvas. Problem, solution and unique value proposition were staying the same in their core but just being rescaled. This means that clutches represent the solution to the problem of the fashion industry but made possible to tackle now that it has been reduced to the small scale. Customer segment is targeting trendsetters and people who care about the influence of a fashion industry machinery on the environment but who are also able to afford such product because even sustainability has its own price and cost accordingly. Channels used and marketing will mainly be pushed online as our target customer segment is an active user of social networks such as instagram, twitter, facebook. Fashion shows will still stay a vital part of the LAELEDDBY. still as those events are the platform that help us put clutches in a bigger context and help spread the word of mouth. Marketing, however won't make a large part of our costs structure as the focus will be more to spend on the materials, consultancy and production of clutches as it is a specific symptom of making a high-end product. Parallel can be found with similar high-end products such as Rolex watches which is an exclusive item and is not sold online in some webshop but shopping for it and picking a right watch is an experience for itself, and we would want to create similar feeling by spending more for the quality of the item.

Stakeholder journey has been a bumpy road as we changed our idea a lot until we settled for clutches. Main stakeholders in our value map have to be ambassadors and influencers such as Victoria or Sandy that will help us scale the business locally or globally. Truthfully, we are still searching for an ideal partners that will help us mediate the process of production and logistics as to have the best quality material and smooth selling channels. Companies like Circular Mud Jeans and Suit Supply who are also our indirect competitors for another customer segment and with a different fashion product can actually be quite helpful as they might share valuable information on how to create and deliver high quality, personalized and sustainable fashion items.

Regarding the **competitor analysis**, we have positioned ourselves in the niche of high sustainability and personalization which was an end result of our thoughtful process and a **Blue Ocean strategy**. Some of our competitors are: Modjewel (focus on personalization), Ruig Rokvanerwerven (focus on sustainability), 0711 Tbilisi and Cultgaia (focus on digital manufacturing). At the very beginning our clutches could be showcased in the shop in shops such as Dense Kraan or Boula, and afterwards ordered in person through our internet channels.

MARKET ADVANTAGE

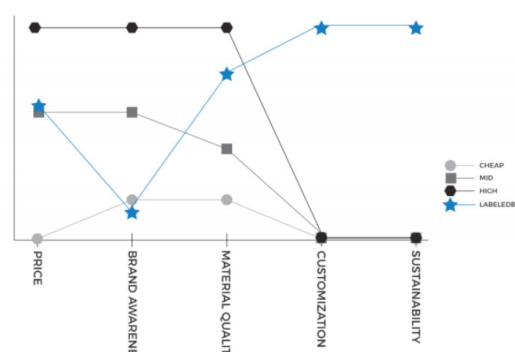


Figure 3. Blue Ocean Strategy: the advantages of the clutch towards other competitors in the field

COMPETITOR ANALYSES



Figure 4. Competitor analysis

Final problem

To summarize our problem, we as LABELEDBY. started with tackling the high amount of returns in fashion industry combined with child labor exploitation which amounts to a non-sustainable and non-fair system. To elaborate more on that: there is a high demand for fast changing fashion collections for a small price. Therefore, the pressure on the production processes is high and the balance between people, planet and profit is not easy to find. LABELEDBY. approaches fast fashion from a different angle. We want to enable personalized and cost-efficient garment production, which is both sustainable and responsive to the fast-shifting demands of the consumer. And most important, free from exploitation and child labor.

As we continued to diverge and converge, ultimately creating a clutch powered by LABELEDBY. we had to do the same with the problem statement which transformed into overcoming ethical problems and non-sustainable production process. This were the two main problem to which we wanted to become unique amongst other products solving them efficiently. This problems have been identified by asking simple question such as: "Do you know where your clothes come from?", "How much are durability, quality and design important in a high-end fashion items?" etc. After showcasing our clutch prototype it became even more clear that for our personas these problems are the main one that had to be solved.

Solution

Clutch powered by LABELEDBY. is a high-end fashion accessory that was produced with high quality materials in a fully ethical and sustainable production process using innovative technologies like 3D printing and laser cutting . This apparently small clutch is solving some big fashion problems and is targeted to corporate but bold women who can make an impact with such clear statement just by carrying in through their everyday life.

1. Too much waste being generated as cost of getting returned clothes back in stores is way more than simply discarding them. And tremendous loss in billions arising just from these returns.
2. Rising labor and transportation costs.
3. More personalized and chic fashion.

Due to this course together with the team we managed to scale down the broad vision, literally. The idea is to start producing clutches; small women bags.

These clutches will be produced on demand, based on personal additions. Through the use of digital manufacturing the lead time is short because of the digital controlled technology.

Prototype

The first created prototype was tested with women within the TU/e. Due to this validation we noticed that the story that comes with the prototype is very important if people want to spend money on it or not. Therefore we created our value proposition of a sustainable and personalized clutch. Produce locally, educate globally.

The clutch was also showed to Victoria Koblenko. She really liked the story of sustainability and taking care of the world. Therefore she would like to become our ambassador.

With Victoria as ambassador, we chose as target group mid-high segment; women that earn above 50K per year.

Next to that the validation showed that the materials of the clutch should be of high quality.

In order to be able to create the first clutch, we did a lot of material explorations to test the attachment of different filaments in combination with different textiles.

Interdisciplinarity

Interdisciplinarity was a part of a LABELEDDBY. team from the very beginning as our educational background roles had varied from industrial design to embedded systems and data science. Moreover, our different nationalities and cultural background had brought diversity to the table as well. This made our process structured in parts where we needed to define the segmentation of a business into logical steps evolving from a clutches powered by LABELEDDBY. to a grand vision of smart factories and personalized garments. However, interdisciplinarity proved of great value when deciding on three important factors being market desirability, technical feasibility and business viability as this holy trinity required knowledge of talking to our potential customers, reading articles on current successful sustainable clutches that used some kind of 3d printing detail embedded in them, and reiterating our business model canvas over and over again. As to the final design, it indeed tested ability of the whole team to be as flexible as possible because creativity was needed to realize our prototype and minimum viable product, acquire some new potential ambassadors and get attracting potential customers using social media, targeting our personas during fashion show events and even preparing laser cutted storyboard elements when presenting our journey at the Innovation Space Project class market setting.

Conclusion

In conclusion, after having our prototype ready we have proven that we can get in the business tomorrow by selling our first batch of clutches which could include between 30 to 50 pieces to be sold for a price of around of 80 USD per piece in order to cover various costs and still make a profit. This could be one of the possible paths to push this story forward and indeed it had proven to be a feasible one. However, a great care and detail should be taken care of for this first batch of clutches and experts in high quality materials should be consulted to take care of that part of process. This could mean contacting some prominent danish designers, getting in touch with italian fashion community, organizing even more fashion shows on the side to uncover some talent that is currently being educated for fashion designers in the Netherlands etc. Involving our ambassadors to get traction should follow naturally after which a smart and intense online marketing campaign could set the business in a full fledge motion. This could also be the point in which it would be needed strongly to consider expanding the LABELEDDBY. team as from that point onward everything should be focusing on scaling the business locally. Moreover, this greatly assumes getting the financial picture in order and hiring someone who will be in charge of cash flow screening and cost projection because the current team is not proficient in that area. Additional upgrades should be reconsidered for production process and clutches design. All of this would lead in expanding the business to other area as well, finally fueling to the big visio sustainable and fair fashion implemented by setting up local smart factories.

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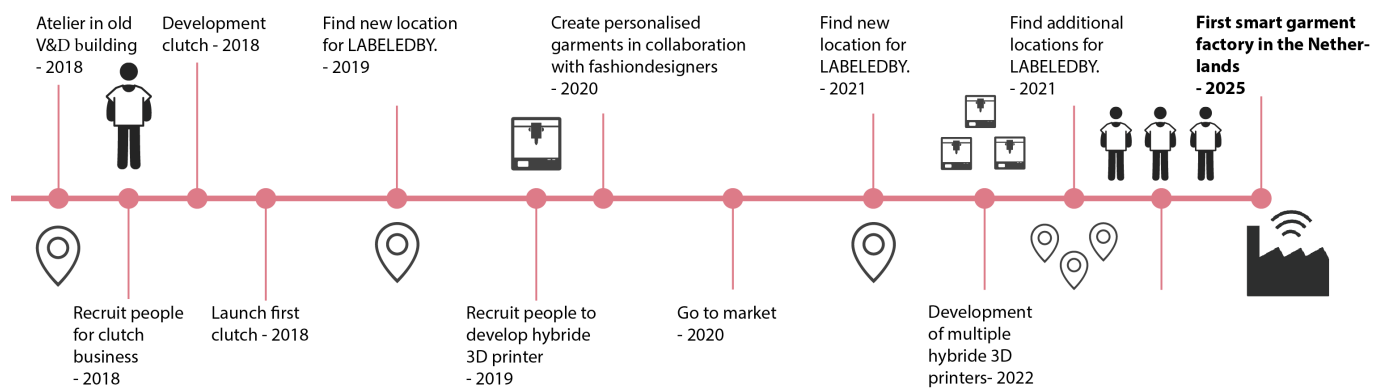


Figure 5. Roadmap towards a smart garment factory.

