# Creating a go-to-market strategy for the circular start-up Caffe Inc.

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## Creating a go-to-market strategy for the circular start-up Caffe Inc.

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## **Executive summary**

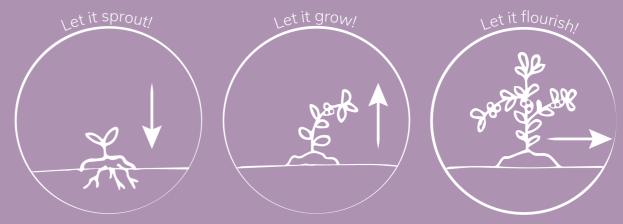
This thesis explored the company of Caffe Inc., their offerings and doings and the context that they work in. Caffe Inc. is currently taking the first steps in creating value from spent coffee grounds. They wish to grow as a company and to build the largest biorefinery for processing spent coffee grounds into colourants and oil. With the biorefinery they want to stimulate the circular economy and show to everyone what the possibilities for repurposing are, and to prove that waste does not have to exist. The need for the circular economy is high, due to our current linear economy valuable resources end up on the landfill, the climate is changing and resources are getting exhausted. In addition, the consumer awareness on sustainability is growing and they are pressuring companies into becoming more sustainable and transparent. Additionally, companies also start to care more about the impact they make. The products of Caffe Inc. can be a solution to these companies, providing a circular and sustainable alternative.

The products that Caffe Inc. create offer many possible applications. The oil can be used for personal care products and the colourants to dye clothes. However, Caffe Inc. still needed to establish in market(s) their products are of value and how they should position themselves and their products there. To provide a relevant advice and strategy to Caffe Inc. the following research question was established: How and where should Caffe Inc. position their products in the market?

The answer to the research question is found through extensive market and context research, an analysis of the company, the product and the competitors, interviews with circular start-ups and a consumer questionnaire. The final solution is presented as a go-to-market strategy covering the steps that need to be followed when entering the target markets. It explains which markets to enter and how to successfully enter them.

The research found that the clients buy the coffee oil because it is a circular alternative to their regular materials, and there are not any other circular and local alternatives on the Dutch market. However, the interviews revealed that circularity is not something to position your products on, the added value is of most importance. This is also confirmed by the consumer questionnaire, Consumers buy products based on quality and price. They are open to the idea of buying products created from spent coffee grounds. The target consumer, who would buy the products created from spent coffee grounds cares about sustainability but more than that, it wants the product to be of good quality and to be fun. They believe all products created from spent coffee grounds deserve an equal chance as long as their quality is equal to that of its alternative. If Caffe Inc. explands their business to other European countries, Germany offers the most opportunities for Caffe Inc.

With this information the go-to-market strategy is created. The go-to-market strategy can be divided into three horizons. The goal of the first horizon, let it sprout!, is to build the biorefinery and sell the oil in bulk on the Dutch market and achieve a proof of concept. The goal of the second horizon, let it grow!, is to expand the product portfolio by introducing a consumer good and expand to foreign markets. The goal of the third horizon, let it flourish!, is to add the knowledge programs to the product portfolio, build biorefineries in foreign countries and start the giving back program.



For Caffe Inc. it was established that they should first focus on taking roots in the Dutch market. In this horizon of 4 years, from now to 2025, they can build the biorefinery, start selling the oil in bulk to personal care manufacturers, brand owners and producers, create an extensive list of clients and aim to have proof of concept. For the potential clients the oil will be positioned as a sustainable, innovative and trustworthy alternative which delivers the opportunity to show that businesses care about people and the environment and gives companies the opportunity to be an inspiration to others. Together with their clients Caffe Inc. can improved the oil. Caffe Inc. can reach their goal of having the largest biorefinery for used coffee by 2025.

After this has been achieved and Caffe Inc. has proved that their concept works they can move to the second part. The goal of the second horizon is to expand the product portfolio by introducing a consumer good and expand to foreign markets. A consumer good is created to stimulate the circular economy and tell Caffe Inc.'s story directly to the consumer, along with stressing the need of a circular economy. The consumers prefer an 'everyday product', so they can more easily transition to adding circular products to their everyday life. The consumer good will be positioned as: For the 'bit-by-bit more sustainable' consumer, Caffe Inc. offers consumer goods that are convenient and sustainable alternatives to their everyday products, that deliver whatever it needs to do and more and gives consumers the power to participate in a world where every resource is used to its fullest potential.

As Caffe Inc. is now fully rooted in the Dutch market, foreign markets can be explored. Germany is seen as most promising because of its close proximity, the high oil import, the ease of doing business, the transition to the circular economy and because a lot of cosmetic manufacturers can be found there.

In the third horizon, which starts in 2030, Caffe Inc. will focus on sharing their wins. They can implement knowledge programs to educate institutions, scholars and companies on the circular economy. Additionally, workshops or special advice sessions can be done to give companies or institutions a more personalised advice on how they can become more green and circular. The knowledge programs will be positioned as knowledge programs that are useful, deliver practical knowledge on becoming more sustainable and circular and gives businesses the knowledge to transition to a world where every resource is used to its fullest potential. They will also focus on implementing a giving back programs, and sharing the turnover with the people higher in the supply chain.

## Acknowledgments

Dear reader.

In front of you is the final deliverable of my graduation of the Strategic Product Design master at the Delft University of Technology. It concludes my studies after seven year at the faculty of Industrial Design Engineering. I am proud to present you my graduation thesis. I want to use this section to express my gratitude to the people that accompanied me in this, sometimes stressful but above all, enjoyable journey.

First of all I want to thank Caffe Inc., Josephine and Evaluna, thanky you for providing me with this exciting opportunity. Thank you for trusting me, for brainstorming with me and letting me experience the start-up environment. I truly hope this thesis provides you with some interesting insights.

Secondly, many thanks go out to my supervisory team. Thanks for the weekly meetings. Thanks Erik-Jan, for always pushing me to take an extra step and encouring me to believe in the process. Thanks to Renske, for answering all of the questions I had, for thinking with me and for providing me with the confidence I needed.

I want to thank all participants of the questionnaire and the interviews. Thanks to the 144 respondents that provided me with so many insights, the input is highly appreciated. Thanks to the interviewees that so kindly answered all of my questions and shared their stories with me.

And last but not least, I want to thank everyone who made this graduation a little easier. Thanks to my friends and family, who where always there when I needed it. Thanks for the much needed cups of coffee, the words of encouragement, for proofreading things and providing feedback, for your patience, for all the little breaks and endless walks, the Saturday UB mornings and all the moments of laughter that have lightened this journey.

So grab a cup of coffee and I hope you enjoy reading!

Tiffany Clein

## Reading guide

To guide the reader through the report a few design principles are used.

This thesis is divided into four parts, each guided by its own colour. Each part starts with a two-pager which includes an introduction where the content of this part is described.

Each chapter also starts with a short introduction after which the topic and conducted research is elaborated upon.

The rest of the reading elements are explained below.

## **Titles**

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## Paragraph titel

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Figure x: Title (Source)

Section titles appear in the part colour on top of the page in bold.

Subtitles indicate subsections. They are a smaller fonttype to the titles and appear in the same colour as the part.

Paragraph titles are in bold font, they also appear in the same colour as the part.

Body text is written in a light, black-coloured font.

If text or words need to be stress they will either be in bold or underlined

Introductions and quotes appear in a light italic font.

Each part can be recognised by its own colour, which is reflected in the titles, figures and line at the bottom.

Figures are explained under the figures.

Some parts are left out because of confidential information.

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## Introduction

This thesis begins where your cup of coffee ends. When brewing your daily cup of coffee, you are only using 1% of the coffee for your cup. The other 99% gets thrown away but is not any less useful. Caffe Inc. found a way to effectively use the other 99% of coffee. With the coffee waste, or rather spent coffee grounds, they produce colourants and oil and with the little residue that is left, other products can be created. This graduation project will be executed for Caffe Inc., a small start-up that is working hard to become the largest biorefinery and processor of spent coffee grounds by 2025.

Caffe Inc. has been working hard for the last two years. The complete technological process is known and the first machinery has been bought. Multiple markets have been scanned, several seemed worthy of trying, but not one clear market has been indicated where luck would be found easily. The products that Caffe Inc. create offer many possible applications. The oil can be used for personal care products and the colourants to dye clothes. The first partnerships for developing these kind of products are being established and funds for scaling the start-up are coming in. Yet there is little knowledge on how to move from here. The aim of this thesis is to explore what next steps Caffe Inc.'s should take. It will explore in which markets Caffe Inc. and their products can be of value and how they should be positioned there. This is collected in the following research question:

## How and where should Caffe Inc. position their products in the market?

This thesis explores the answer to the research question in four parts. First, there will be elaborated upon the problem and the research question, whereafter the approach taken will be explained in more detail. Secondly, research is done. The company, its product, its competitors and the context that Caffe Inc. works in are explored. Research is done on circular start-ups and the perception of consumers on products created from spent coffee grounds. Thirdly, a go-to-market strategy is created for Caffe Inc., where the valuable markets will be introduced along with how the products should be positioned there. Finally, the project is finalised with a conclusion and reflection on the results.

## Glossary & abbreviations

B2B – Business to business: When a product is being sold to other businesses.

**B2C** – Business to consumer: When a product is being sold to consumers.

**Circular Economy:** The new economy that aims to close all product loops.

ESG - Environmental, Social and Governmental: Mostly used by investors instead of sustainability.

**Go-to-market strategy:** The strategy created in this thesis is a go-to-market strategy, a plan on how a company should take its products to the market.

**Spent Coffee Grounds** – (SCG): The coffee that is left after the cup of coffee has been made, coffee waste.

**Sustainability:** meeting the needs of the present without compromising the ability of future generations to meet their own needs.

**MVP** - Minimum viable product: The baseline product that can be put on the market to see how the market reacts and innovate from there.



## **PART ONE - Introduction**

Part one introduces the project. First, it provides information on the main stakeholder and the context the project is executed in. Secondly, the problem is introduced whereafter the research questions and solution space are defined. This part ends by explaining the project and methods used.

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- 2.2 The approach

## 1. Project introduction

This chapter provides information on the context that the project is executed in. It provides information on the circular economy and biobased economy as this is the space in which Caffe Inc. creates. The information is valuable for understanding the project and the context.

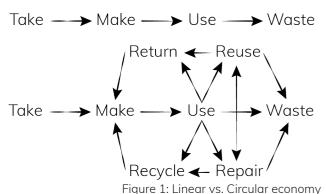
## 1.1 Caffe Inc.

Caffe Inc. wants to stimulate the circular economy and show that waste does not have to exist there. They want to start with a waste stream of a product that most of us cannot imagine living without: coffee. Koffie en Thee Nederland (2018) estimates that around 300 million kilograms of spent coffee grounds is created on a yearly basis. However, a material that would be incinerated however can be used by Caffe Inc. to create oil and colourants. With the little residue that is left after processing the oil and colourants products are made.

## 1.2 Circular economy

Caffe Inc. wants to stimulate the circular economy by repurposing the spent coffee grounds that would otherwise be handled as waste.

The circular economy is based on the principles of 'designing out pollution, keeping products and materials in use and regenerating natural systems' (Ellen MacArthur foundation, 2020). It is the opposite of the 'business as usual'; the linear economy we are currently in, where we take, make and dispose products and materials easily. Figure 1 shows the product flow in a linear economy and in the circular economy.



A reason to challenge the linear economy is resource depletion. The main reason for resource depletion is the ease whereof one discards products at the end of their lifecycle. The use of resources; fossil fuels, ores, minerals and biomass rose 12-fold in the 20th century and it is expected to have been doubled by 2050 (Circle Economy, 2019). A shift with the current trend of resource use must be made, or else all resources will end on the landfill. The resources on this planet are finite and how one currently uses resources is posing a serious threat to the environment and society we life in. The circular economy shifts trend by creating a closed-loop production system, in which waste is eliminated, value is kept in the chain and resource exhaustion is reduced (Buren, 2019).

Literature often makes the distinction in gradations of circular strategies. Often the 4R-framework is used to explain the circular strategies: Reduce, Reuse, Recycle and Recover. However, there are more strategies that can contribute to the circular economy, therefore an extra 6R's were added. A hierarchy is added to establish the priorities of waste management and thus circularity. Figure 2 features the 10R strategies of the circular economy.

Caffe Inc. works in R7, Repurpose, they use discarded coffee waste to create a new product with a different function.

Research performed by TNO (2013) shows that the advantages of implementing a circular economy could earn the Netherlands €7.3 billion a year and create around 54.000 new jobs. Research by the Ellen MacArthur foundation (2012) shows that by implementing a circular economy the CO2 emissions of the European Union can be halved by 2030. However, Circle Economy (2018) states that currently only 9.1% of the global material use

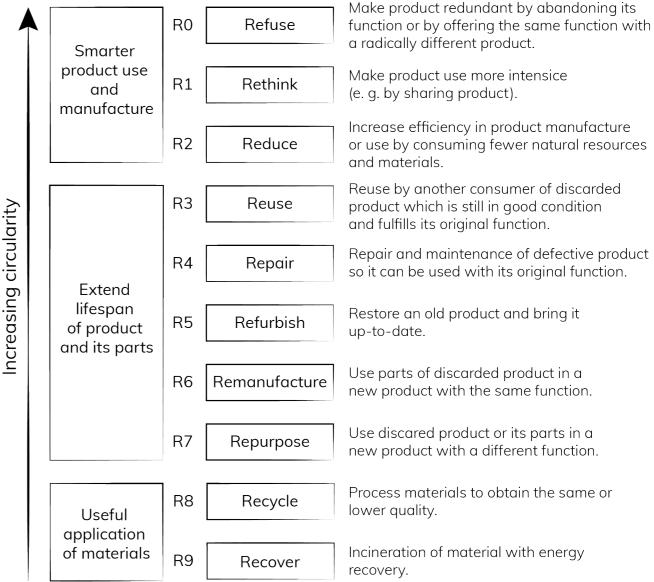


Figure 2: 10R's of the circular economy as adapted from Potting et al. (2017), original from Cramer (2014).

is being 'cycled': reused, recycled or composted, leaving an enormous opportunity for a circular economy. The Netherlands recycles 73% of all effectively managed waste, however downcycling is more common than upcycling (Potting et al., 2017).

## 1.3 Biobased economy

An essential part of the circular economy is the biobased economy. The biobased economy focusses on the transition of an economy based on fossil fuels to an economy build from biomass. The main reasons to use biomass as alternative to fossil fuels is of the carbon content being similar to fossil fuels, in addition to that the supply of biomass can not be exhausted and has almost no CO2 output. Biomass can be derived from agriculture, waste streams from forestry, agriculture and/or the food industry ('Biobased voor...', 2019).

Biorefineries sustainably process biomass into a wide variety of biobased products that can range from food, chemicals, materials, to fuels, power and heat. A biorefinery approach is also used in the process of creating oil and colourants from the spent coffee grounds (Mata, et al., 2018).

## 1.4 Definition of sustainability

Another important definition that is almost always linked to a circular economy is sustainability.

Sustainability has many different interpretations. For this thesis sustainability is defined as by the United Nations (UN) (1987): 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.' One way to achieve this is by implementing a circular economy, which is goal 12 of the sustainable development goals implemented by the UN. The sustainable development goals are 17 different goals, each one focusing on a different aspect to achieve a balance between the 'triple bottom line': people, planet and profit. Van Boeijen et al. (2014) use this to create the definition for sustainable design: 'Doing sustainable design means creating synergy between human wellbeing, planetary health and economic prosperity.'

## 1.5 Key insights

This chapter explained the context in which Caffe Inc. works and aims to build a biorefinery. This information will help to understand the challenging space that Caffe Inc. works in and urges the need for a circular economy that Caffe Inc. wants to be a part of

Caffe Inc. aims to effectively repurpose spent coffee grounds into oil and colourants. They use discarded coffee waste to create a new product with a different function, circular strategy R7: Repurposing.

The circular economy is based on the principle of designing out pollution, keeping products and materials in use and regenerating natural systems. The circular economy does this by creating a closed-loop production system, in which waste is eliminated, value is kept in the chain and resource exhaustion is reduced. The resources on this planet are finite and how we are currently using resources is posing a serious threat to the environment and society we life in, a shift in current trends must be made.

## 2. The project approach

This chapter focusses on describing how this project is approached and executed. First, the problem to be solved and the research question are introduced. Afterwards, the approach taken to solve the problem and the methodology used are explained.

## 2.1 The problem

Caffe Inc. aims to become the largest biorefinery and processor of spent coffee grounds. Just as other start-ups, Caffe Inc. has the ability to react fast to their environment and work agile. Conducting the right steps and utilising all opportunities coming their way to the fullest potential, makes that growth can generally be reachable in a short time.

Each year, around 9,1 billion kilograms of coffee is consumed worldwide. Only 1% of the coffee ends up in the cups of coffee. The other 99% of coffee is excess, ready to be discarded: a little over 9 billion kilograms of spent coffee grounds worldwide. This steady and large supply of spent coffee grounds makes the need for development of processing the spent coffee grounds highly desirable. Besides that, the importance of creating a circular economy can not be stressed enough.

Caffe Inc. is taking the first steps in creating something useful out of these spent coffee grounds, however there is still a lot to be done. To grow as a company and to become the largest biorefinery Caffe Inc. needs to establish in which market(s) their products are of value and how they should position themselves and their productss there. Therefore, the main research question is established as:

How and where should Caffe Inc. position their products in the market?

The aim of this thesis is to find out in which markets Caffe Inc. and their products are of value and how they should be positioned there. The final solution is a go-to-market strategy for the oil and colourants based on extensive market and context research and in line with Caffe Inc.'s synergies and interests.

The go-to-market strategy is formed as a roadmap covering the steps that need to be followed when entering the target markets. It explains which markets to enter and how to successfully enter them.

To help support the main research question, several sub-research questions are established. The sub-research questions are:

RQ 1: What does a go-to-market strategy consist of?

RQ 2: What is the context Caffe Inc. is working in?

RQ 3: What does Caffe Inc have to offer?

RQ 4: What is the influence of circularity in start-ups?

RQ 5: What is the perception of consumers on product of coffee waste?

RQ 6: Can Caffe Inc. venture into other countries?

## 2.2 The project approach

Figure 3 features an overview of the project approach. The project approach is divided into four parts and follows different phases of diverging and converging information, as shown in the coloured blocks.

During this project multiple design, research activities, methods and tools were used. At the start of each chapter the methods or activities used are explained in further detail.

The first part: Introduction, consists of the project approach and background information. It starts with the project approach, after which background information is provided that will help to understand the project context. In this part the project approach converges into the problem and research questions, it then diverges again as the project context is explained. To establish the background information literature review is conducted, no other methods or tools are used in this part.

In the second part: Research, information is gathered through qualitative research to achieve a comprehensive overview on the potential design directions. This part consists of a literature review, which dives deeper into literature on start-ups, market entry strategies and coffee. Secondly, the company, competitors, context are analysed. Lastly, research is done on the consumer, circular start-ups and potential markets. This part ends with an intermediate conclusion where the key insights on the analysis and research can be found as well as the answers to the sub research questions. With this information the design direction for the solution can be established.

Methods and tools used in this part are: literature review, desk research, brainstorm techniques, trend research, consumer questionnaire, persona, semistructured interviews, creative session, SWOT Analysis.

In the third part: <u>Strategy</u>, the strategy is created. Here the projects diverges again as the positions, ideas and possible solutions for the roadmap are developed and then converges again into the final deliverable: the go-to-market strategy.

Methods used in this part: search areas, creative session, brainstorm techniques and roadmapping.

The fourth part: <u>Einalisation</u>, concludes the project with a conclusion, discussion and reflection on the project.

The process is less linear as it appears, parts, research and analysis overlap and iterations are made throughout the entire project.

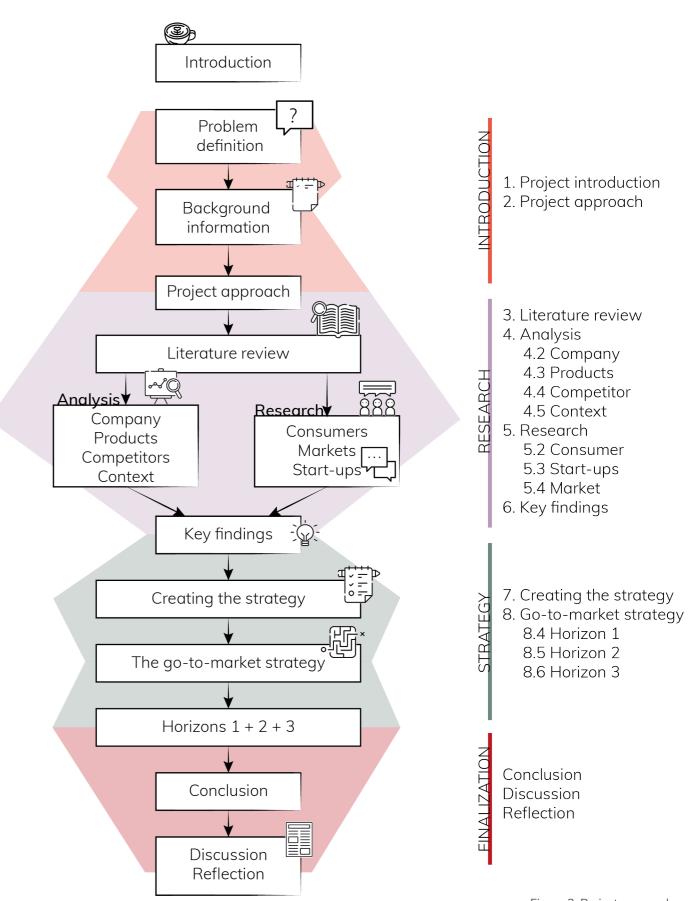


Figure 3: Project approach



## PART TWO - Research

The second part exist of research and analysis done. The research objectives and approach are given at the beginning of each chapter, followed by the results. In the end, the results from the different chapters are used to create key insights and a conclusion.

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- 6.3 SWOT Analysis
- 6.4 Search areas

## 3. Literature review

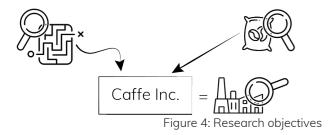
This chapter introduces the knowledge required to execute the project. Through the means of a literature review topics as coffee, market entry strategies and the workings of start-ups are explored.

Caffe Inc. works with coffee waste, thus coffee, its supply chain and the market are investigated. Furthermore, the principles and consequences of being a start-up are explored. In addition to that, a look is taken at the different market entry strategies, the go-to-market strategy and what the go-to-market strategy consist of.

## 3.1 Research objectives and approach

A broad and diverging approach has been adopted in this chapter to acquire theoretical knowledge. Several sub research questions are explored in this chapter to better understand the scope of the main research question. Additionally, knowledge gaps in literature are searched, which might be researched afterwards.

To gain more knowledge on the context that Caffe Inc. is working in, the coffee market and innovation in the coffee market are examined. (RQ 2). As Caffe Inc. is a start-up, the workings of start-ups as opposed to 'business as usual' is also discussed (RQ 4). A look is taken at what compromises a go-to-market strategy (RQ 1), therefore multiple market entry strategies are examined. The elements used in the go-to-market strategy are discussed.



To achieve a comprehensive overview of knowledge, information is collected from different sources. This includes academic and popular literature, lectures, books, additional sources include websites and experts.

The information gathered in this chapter is used in the execution of the project. With this knowledge several research questions can be answered, as presented in chapter 6. Knowledge on the market entry strategies

and elements of the go-to-market strategy is used to compose the go-to-market strategy. The knowledge on start-ups is needed to understand the resources and the steps that Caffe Inc. can take.

## 3.2 Coffee

Worldwide coffee belongs to one of the most popular beverages and second largest commodity to be traded after petroleum (Murthy & Naidu, 2012). The popularity of coffee is increasing and the amount of coffee consumed is growing at a steady pace. In 2015, the worldwide consumption reached approximately 9.1 billion kilograms (ICO, 2016).

An average Dutch person drinks three cups of coffee a day. On a yearly basis, this adds up to 150 litres of coffee and around 7.1 kilograms of coffee used per person. SUEZ (2016) estimates that Dutch coffee drinkers generate approximately 120 million kilograms of spent coffee grounds each year. Nonetheless, innovation in the supply chain of coffee is focussed at the beginning. It is mainly about making the coffee growing business more sustainable and increasing awareness about 'good and fair coffee' with the consumer. In this current market for sustainable coffee, fair trade is the benchmark (Ingenbeek & Reinders, 2013). Less innovation is occurring at the end of life of your cup of coffee, after the coffee has been brewed. Only recently research is done on the possibilities and opportunities of coffee waste.

Figure 5 shows the full coffee supply chain, from production to repurposing, the purple countries indicate the countries where coffee grows. Innovation is mainly focused on the first two columns, production and processing. Caffe Inc. plays a role in the last column, repurposing.

Worldwide a total of at least 9 million tonnes of spent coffee grounds is generated after the production of instant coffee and the brewing of coffee (Getachew and Chun, 2017). Spent coffee grounds have many opportunities for valorisation. Spent coffee grounds contain large amounts of organic compounds as: fatty acids, amino acids, cellulose, polyphenols, minerals and polysaccharides. Specifics compounds as oil, flavour, terpenes and alcohol can be extracted from the spent coffee grounds (Campos-Vega et al., 2015).

At this moment spent coffee grounds are used for composting, gardening, bio-energy production and mushroom growth. Research is done for the application of biodiesel production, sugar, carbon production and compost (Campos-Vega et al., 2015).

In the Netherlands, several parties are working on the valorisation of spent coffee grounds. Among others, Rotterzwam and Haagse Zwam grow oyster mushrooms on the spent coffee grounds. Coffeebased works on producing bioplastics from spent coffee grounds. However, most of the spent coffee grounds, are incinerated or digested at waste treatment plants. Energy in the form of heat (incineration) of biogas (digestion) is recovered.

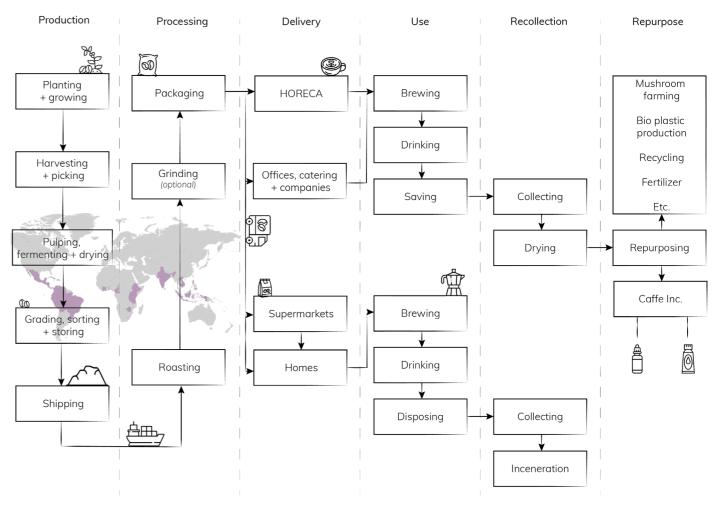


Figure 5: Coffee supply chain.

## 3.3 Start-ups

Start-ups are not just new founded companies, startups are companies that are associated with the ability to achieve rapid growth. Start-ups can achieve rapid growth by creating a new idea, interaction or technology that solves a problem or that can be sold to many people (Graham, 2012). Eric Ries (2011) adds that for start-ups there will always be an element of uncertainty: 'A human institution designed to deliver a new product or service under conditions of extreme uncertainty.' The uncertainty of the innovation of a start-up lies mostly within bringing a new product or service on the market and not-knowing how consumers will react. The product that start-ups put on the market can even be a minimum viable product, with a need to be further developed into a integrated product, which is preferably done together with the consumer. This makes that start-ups are known for their 'let's-just-do-it-and-we-will-see-if-it-works' -mentality, start-ups are generally not afraid to take risks.

The possibility to achieve rapid growth, a radical innovation and uncertainty is what makes Caffe Inc. a start-up and more than just another starting company. The growth of Caffe Inc. lies within the scalability of the biorefinery concept. Caffe Inc. has the possibility of expanding and establishing biorefineries all throughout the Netherlands, Europe and the world.

According to StartupDelta there are 2980 start- or scale-ups of six years or younger in the Netherlands. Circular start-ups only account for 5% of the entire start-up ecosystem, making Caffe Inc. one of the approximately 147 circular start-ups in the Netherlands (Bauwens et al., 2020). Scale-ups differ from start-ups in the challenges that they face. A start-up faces the challenge in the creation of a repeatable and scalable business model. For a scale-up the challenge lies within growing the business model successfully, while still maintaining operational controls.

Circular start-ups are start-ups pursuing circular business models, they are expected to play a leading role in the transition to a circular economy. According to Hockerts and Wüstenhagen (2010) smaller, less established businesses are more likely to pursue radical and transformative sustainable innovation

than larger incumbent businesses. Research done by Bauwens et al. (2020) on Dutch circular startups shows that circular start-ups develop circularity strategies higher in the waste management hierarchy and often find innovations that are overlooked by incumbent companies.

On one hand, the circular start-up faces the same challenges as a linear start-up, for example the access to external financing because there is not any proof of concept yet. On the other hand, circular start-ups also face the challenges specific to circular business models. For example, the financial risks or higher costs that circular business models bring and/ or the consumer resistance to circular innovations or paying a little extra for a sustainable alternative. Which is also due to current regulations which do not favour circular solutions, for example the high taxes on waste material sourcing and the depreciation of assets and materials over time. As literature on circular start-ups and their challenges is not as evolved yet, more research is done, see chapter 4, to find out how circular start-ups overcome these specific challenges.

## 3.4 Market entry strategy and go-tomarket strategy

A market entry strategy is created for Caffe Inc. in order to help successfully introduce their products into the market. Root (1994) describes a market entry strategy as a plan that: 'sets forth the objectives, goals, resources and policies that will guide a company's business operations over a future period long enough to achieve sustainable growth in the (worlds) market.' The market entry plan is created to establish and ensure a strong market position and usually has a time horizon of three to five years. Choices must be made on the target market and its consumers, the objectives and goals, the marketing plan and how to measure the performance in the market. The creation of a market entry plan and its process of decision making is iterative and continuous.

Abell and Hammond (1989) take market entry planning as a bigger concept: the planning of all aspects in the organisation's strategy in the marketplace. It is based on the assessment of market opportunities and capabilities of the company, as well as the cost analysis and the development to approach

the market. It also includes decisions regarding the mission, marketing, manufacturing, research and development, funds and other functional programs that need to be undertaken.

A part of the market entry strategy is the go-to-market strategy. Friedman (2002) introduces the go-to-market strategy as: 'a game plan for reaching and serving the right customers in the right market, through the right channels, with the right products and the right value proposition.'

## 3.5 Elements of a go-to-market strategy

For this thesis the go-to-market strategy exists of the target consumer and their needs, the positioning, the marketing mix or 4P's, the timing and the entry sequence. Caffe Inc. has the ambition to enter foreign markets, therefore a look is taken at modes of entry to foreign markets as well.



Figure 6: Elements of the go-to-market strategy.

## Target consumer

To create a valuable and feasible go-to-market strategy the target group needs to be found, along with their needs. Consequently, the company can think of how to satisfy these needs through the means of the marketing mix and positioning.

## Positioning

Porter (1996) claims that the positioning is at the centre of a strategy, additionally Root (1994) also thinks that a well-fitting positioning is the key to a successful market entry strategy. The positioning is about how a company distinguishes itself and its products from the competitors. This is typically done through a marketing plan. Root (1994) explains the positioning as the reason why customers should

buy a certain product rather than the competing offering. Winer & Dhar (2013) enlarge this to the value proposition: show customers what the most important job is that this product fulfills, following their pains and gains. Dunford (2019) explains the positioning as 'the act of deliberately defining how you are the best at something that a defined market cares a lot about.'

One way the positioning can be done is by contrarian branding (van der Vorst, 2017), it shows how brands can structure their characteristics in such a way to be above the competitors in the market. It makes use of three forms of contrarian branding: absolute polarity, bipolarity and tripolarity, all meant to camouflage the competitors.

For this thesis the choice is made to separate the value proposition, marketing plan and positioning.

The positioning, specific to this thesis, is created from several 'building blocks'. These building blocks are: the target audience, the product category, the product attribute, and the functional, emotional and self-expressive benefit. By combining these building blocks into a sentence, the complete positioning is created. Making the positioning look like: For (target audience) Caffe Inc. offers (product category) that is (product attribute) delivers (functional benefit) and gives people (emotional benefit) and (self-expressive benefit).

## The marketing mix

McCarthy (1960) provides a model existing of four factors to get a grasp on marketing: place, product, price and promotion. In short, the marketing mix is about:

### Place

Place is about how the product finds its way to the consumer. Is tells something on where the product is sold and how it reaches the sellers and consumers.

## Product

The product explains what is sold to the consumer. It shows what the product looks like, how it works, why a consumer buys it and shows the benefits for the consumers.

### Price

Price is about the pricing strategy applied to the product. The price can be based on the costs, competitors prices or true value of the product.

### Promotion

Promotion is about how the product, price and place are presented to the target group. It concludes on what values need to be advertised and how this is done.

### Timing

According Langerak et al. (2008) it is an almost impossible challenge to find the right time to enter the market. There are several studies on timing reveal that pioneers, those who put the product on the market first outsell the followers. However, other studies indicate that followers outsell pioneers. Followers might miss sales as the opportunity window has already passed. However, pioneers might miss sales because the opportunity window is not there yet. The risks of early versus late entry need to be assessed and balanced.

### Entry sequence

Entry sequence is about how new markets can be entered. Most often there are two options: the waterfall approach and the sprinkler strategy. With the waterfall approach a company first enters one market, makes that there home and then sequentially starts entering new markets. With the sprinkler strategy multiple markets are entered at the same time

There are several reasons on why to choose one over the other. According to Kalish et al. (1995) the waterfall approach is favourable when the markets experience slow growth, weak competitors or when the product has a long lifecycle. The sprinkler strategy is more favourable in markets with lots of competition.

### Mode of entry

The mode of entry specifies the selection of modes by which a firm chooses to enter foreign or international markets (Root, 1994). The types of entry modes are categorized as: non-equity based, covering export and contractual agreements, and equity based, such as joint ventures and wholly-owned subsidiaries.

The reason to choose one or the other is based on the resource commitment needed for that specific mode of entry, the risks involved and the level of control wanted.

Root (1994) establishes three rules to make decisions on how to enter foreign markets:

- The naive rule: one entry mode for all foreign markets.
- The pragmatic rule: a workable entry mode for all foreign markets.
- The third; strategy rule: a best-fitting entry mode for each foreign market.

In addition to the mode of entry, the target country market is of importance. The reason to choose for a specific target country is a sum of several factors, which are, but are not limited to:

- Market factors: size, competition, infrastructure,
- Production factors: quantity and costs of raw materials and labour, quality, etc.
- Environmental factors: political, economic and sociocultural factors.
- Home country factors: market, product and environmental factors of the home country.
- Internal factors: type of good and level of differentiation.
- Commitment factors: resources and network.

## 3.6 Key insights

This chapter aims to provide more knowledge on the elements needed for the execution of the project. Through the means of a literature reviews topics as coffee, market entry strategies and the workings of start-ups are explored. Several sub research questions are answered and the elements for the final go-to-market research are established.

In the Netherlands the coffee drinkers generate around 120 million kilograms. These spent coffee grounds have many opportunities for valorisation, however innovation in the supply chain of coffee is mainly happening at the beginning. At this moment spent coffee grounds are most often downcycled to create energy. Effectively repurposing spent coffee grounds offers opportunities for Caffe Inc.

The possibility to achieve rapid growth, the radical innovation and uncertainty is what makes Caffe Inc. a start-up. The growth of Caffe Inc. lies within the scalability of the biorefinery concept, the possibility of expanding and establishing biorefineries all throughout the Netherlands, Europe and the world.

Caffe Inc. is a circular start-up: a start-up pursuing a circular business model. Circular start-ups are to play a leading role in the transition to a circular economy. However, the literature is lacking on the specific challenges they face as circular start-ups. Therefore, more research must be done on the specific challenges that circular start-ups face and how to overcome them.

The go-to-market strategy can be described as: 'a game plan for reaching and serving the right customers in the right market, through the right channels, with the right products and the right value proposition.'

For this thesis the go-to-market strategy to be designed will exist of the elements: target consumer and their needs, the positioning, the marketing mix or 4P's, the timing and the entry sequence. As Caffe Inc. has the ambition to enter foreign markets as well, a look is taken at modes of entry to foreign markets.

## 4. Analysis

This chapter analyses several elements, the company and its products, the competitors and the context. The company workings are explored: how the company of Caffe Inc. is established, how their business- and network model looks like and what they would like to achieve in the future. The products of Caffe Inc.: the oil, colourants and residue are analysed, along with their possible applications. Furthermore, the competitors are analysed. Finally, the context that Caffe Inc. works in is explored by analysing current trends and the possible countries that Caffe Inc. might venture into.

## 4.1 Research objectives and approach

A broad and diverging approach is adopted in this chapter to acquire more knowledge on the workings and products of the company, the competitors and the (future) context that Caffe Inc. is working in. Several sub research questions will be explored in this chapter to better understand the scope of the main research question.

To gain more knowledge on the workings and products of Caffe Inc. the company will be analysed (RQ 3). There will be looked at how Caffe Inc. got started, the network model, the business model, the product offerings and the job to be done. Competitors and their products are analysed to get a grasp on how Caffe Inc. can differentiate themselves. Lastly, a context analysis will be done. In the context analysis trends will be uncovered that might offer opportunities for Caffe Inc. or might pose threats. Additionally, there will be looked at several countries and their doings (RQ2, RQ6) as Caffe Inc. wants to enter the European market.



Figure 7: Research objectives

To achieve a comprehensive overview of information, information will be collected from different sources. The company analysis is based on informal conversations with the company and by analysing internal documents and meetings. To achieve more information on what Caffe Inc. stands for, their vision and mission, a brainstorm is conducted with the company.

The details of the brainstorm can be found in appendix B. The job to be done, is found by conducting brainstorms and informal client interviews.

The competitor analysis is done by researching the possible competitor categories and looking through potential competitor websites.

The context will be analysed by trends and countries. Trend analysis is done by researching different trend reports from various sources.

The information found in the company analysis will be used to form the strengths and weaknesses of the SWOT analysis that can be found in chapter 6. The SWOT analysis combines the Strengths, Weaknesses, Opportunities and Threats of a company and the market. Creating a SWOT analysis helps to quickly evaluate the opportunities as well as possible areas to improve on and more. The SWOT analysis will also serve as input to create solution spaces.

## 4.2 Company analysis

## **4.2.1** The story

Caffe Inc. is a joint venture of two companies: Spaak Circular Solutions (Spaak) and Caffelnk. Spaak is an innovation development agency. Together with clients they develop concepts, products and industrial systems to engage in the circular economy. Caffelnk started as a company to create pigments from the coffee waste and make the printing industry more sustainable. Both companies want to show to the world that in a circular economy waste does not exist. They start with a waste stream that most of us can not imagine living without: coffee. Thus, they decided to collaborate, start a new venture and aim to build the first Dutch biorefinery for spent coffee grounds. As of this moment the Caffe Inc. team exists of two members and several supporting team members from the mother companies. Together they have wide range of capabilities, from chemistry to technology and project management.

The vision of Caffe Inc., or what they would like to achieve with the company is:

We want to give people the power to participate in the transition towards a world where every resource is used to its fullest potential.

The mission, which explains what the company is, does and how it does that, is:

(Our/The story begins where your cup of coffee ends.) Our mission is to become the largest biorefinery of used coffee. We are not merely recycling coffee, we create value. We make products that fit your conscious life style.

Through the means of a brainstorm, see appendix B, it came forward that for the future vison empowerment is important to the business. Caffe Inc. wants their consumers to become enablers of the circular economy themselves and prove them that sustainability does not have just a luxury. Caffe Inc. wants to provide sustainable alternatives to current polluting materials, show the potential health benefits of coffee, create products that make everyone feel special, make sure to use all the resources optimal and create more from what already is. Additionally, Caffe Inc. wants create value from waste and share the value further up in the supply chain.

## 4.2.2 The network model

Figure 8 shows the network model of Caffe Inc., which includes the input side, the output side and Caffe Inc..

On the input side the spent coffee grounds are collected, these are provided by three types of sources. The central sources consist of the factories where green coffee is roasted or instant coffee is produced. Useful waste of these factories can consist of discarded roasted beans, beans that are recovered during the cleaning of the machines or floor sweeps. All coffee acquired via these sources do not have to be dried, as they have not yet been used to make a cup of coffee. For the semi-central sources and decentral sources the spent coffee grounds need to be collected by a spent coffee grounds collector, at this moment there are only a few waste collectors that allow separate pick up of spent coffee grounds.

After the coffee is collected, which must be within two or three days, it is dried to ensure preservation. After drying the spent coffee grounds the oil and colourants are processed, the residue remains. The oil, colourant and residue can be sold to industries and producers to be made into products which are sold to consumers.

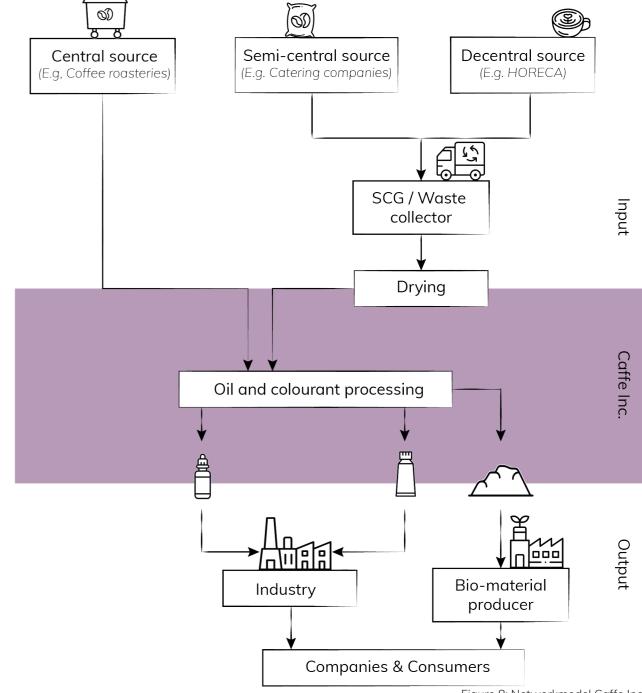


Figure 8: Networkmodel Caffe Inc.

## 4.2.3 The business model

A lot of literature is written on business models, however it still ambiguous of what creates good business model (Bocken et al., 2014). A business model is used to help understand how a firm does business. It can also be used for analysis, comparisons, performance assessment or communication and innovation purposes (Osterwalder and Pigneur, 2005). Less literature is available on the positioning of sustainability in business models, creating a lack on the possibilities to communicate sustainability in business models. Bocken et al. (2013) states that is because sustainability impacts the many building blocks of the business model, the value chain and the stakeholders. For this reason, Bocken et al. (2013) created eight archetypes, to effectively communicate the sustainability, as well as economic and social values, in business models.

The eight archetypes are shown in figure 9 and are used to explain Caffe Inc.'s business model. The archetypes that identify Caffe Inc. are:

Create value from waste: Eliminate waste by turning waste streams into useful and valuable input to other production.

**Developing scale up solutions:** Delivering sustainable solutions at large scale to maximise benefits for society and environment.

Using these archetypes the sustainable business model of Caffe Inc. can be build; making Caffe Inc.'s business model look like:

## Value proposition

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The value proposition says something about the product/service offering, the customer segments and relationships.

Caffe Inc. eliminates the idea of 'waste', by turning spent coffee grounds into useful and valuable input to other production. Caffe Inc. proactively works together with the stakeholders, the waste collectors to think with them on collecting and utilising spent coffee grounds. Caffe Inc. also wants to give back to the supply chain in the future, for example by providing fair wages to the coffee farmers to also ensure their long term health and wellbeing. The full story and production supply chain can be communicated to the customer. The solution that Caffe Inc. provides can be scaled to maximise benefits for society and the environment.

## Value creation and delivery

The value creation and delivery tells about the key activities, resources, channels, partners and technology.

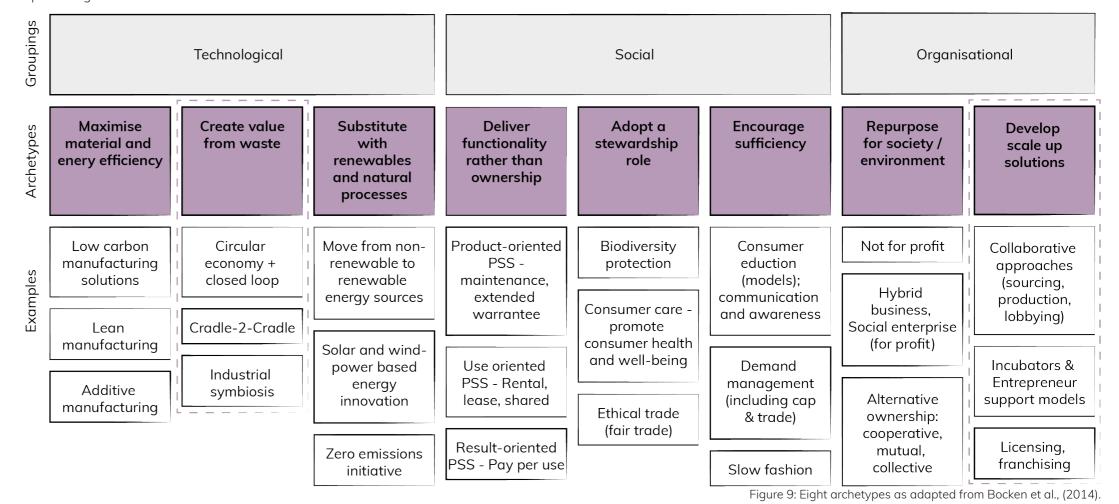
Caffe Inc. makes use of partnerships and activities to close the material loop and make use of the possibilities of spent coffee grounds. The partnerships that are established across several industries are to capture and transfer all spent coffee grounds, making sure to deliver to all stakeholders and consumers, while keeping in mind the environment and general wellbeing. Production process and suppliers are selected because of the environmental and social benefits. The sustainable and circular business model can achieve growth by employing the right channels and partnering with others. New, and potentially unusual, partners and business relations are acquired to grow the business.

## Value capture

The value capture is about the cost structure and revenue streams.

The economic and environmental costs are reduced by repurposing material and turning spent coffee grounds into value. This makes a positive contribution to society and environment through reduced footprint, waste and virgin material use. In the future, applying stewardship strategies can generate extra brand value and potential for premium pricing. By working closely together with stakeholders, Caffe Inc. generates not only long-term business benefits for the company but also well-being and health for stakeholders. Ensuring a variable or fixed fee is paid for growing the venture.

To conclude, Caffe Inc. is a start-up that creates value from waste and wants to develop a scale up solutions. At this moment they work together with central sources, semi-central sources and waste collectors to collect the spent coffee grounds. Their mission is to to become the largest biorefinery of used coffee. They are not merely recycling coffee, they create value, to make products that fit a conscious life style.



## 4.3 Product analysis

In the Netherlands 60% of all cups of coffee consumed, is consumed outside of homes, which offers opportunities for recycling (Koffie en thee Nederland, 2020). Suez (2016) estimates that in the Netherlands alone the total amount of spent coffee grounds that is being wasted equals 120 million kilograms, yearly.

Caffe Inc. expects to process around 20 million kilograms a year in their biorefinery. This amount of spent coffee creates around: 800 kilograms of oil, 1500 kilograms of colourants and 5800 kilograms of residue.

## 4.3.1 The products

### Coffee oil

The coffee oil naturally has a UV-filter, anti-ageing properties, moisturising properties, antimicrobial effects and is an anti-oxidant. Coffee oil is low in caffeine. Additionally, using coffee oil has a suggested lower risk of heart and vascular diseased, a decreased risk of liver cirrhosis and improves skin health (Ribeiro, 2013).

## Coffee colourants

The colourant is obtained after processing the oil and removing the residue. This colourant is renewable and biobased, has a low environmental impact and is safe to use for people and environment. The colourants will be sold as a powder, with the possibility of adding a recipe to create a dye from it. The applications for the coffee colourant ranges from dyeing textiles, cosmetics to personal care, to ink for packaging or stamps.

The results of the first colouring trials on textiles are shown in figure 10.



Figure 10: Textile colourings

The uses of the coffee oil can range from high-end application to low-end applications. A high-end application is preferred, however this might come with the hassle of certification and quality control. An example of high-end applications can be cosmetics and use for food or beverages. Low-end applications can be soaps or detergents. The quality of the product is very dependent on the input. The quality of coffee collected may differ from company to company, the collection and drying may also influence the output to some degree. How much this influences the quality of the oil is still researched.

### The residue

After the oil and the colourants are processed, the residue is left. The residue accounts for 60% of the initial spent coffee grounds, thinking of a way to use this biomaterial is therefore important. The residue holds the CO<sub>2</sub>, incinerating or digesting will release the CO<sub>2</sub> into the atmosphere. By creating new products of this residual stream, the CO<sub>2</sub> can be kept in the materials. The residual stream has

already proven to be useful in the creation of paper, textiles, bioplastics to create for furniture or coffee mugs, biofuels, biochar, or as fertile ground to grow mushrooms on.

As the scope of this thesis is limited, the residue stream will not be accounted for in this thesis.

## 4.3.2 The job to be done

The concept and the products of Caffe Inc. are new to the consumers and the markets. Caffe Inc. could potentially start their own market somewhere around the bases of sustainable, circular oils and colourants. However, it is easier to place the existing products in an already existing market. Placing them in an existing market gives the opportunity to consumers and clients to match it to existing products and explore the benefits from there (Hultink, 1997).

To explore which markets Caffe Inc. could serve with their products the 'Job to be done' framework of Clay Christensen is used. This framework (Christensen, 2007) looks at the product from a consumer point of view and then ask the question: 'What is the job that the consumer hires the product to do?' Instead of segmenting the markets according to the product categories, industries or customer demographics, the markets are organised by the needs that the products serve to the consumers. Another important benefit of dividing the market by 'jobs' is that it can make it easier to differentiate yourself from the competition that uses traditional ways of positioning.

As the customers of Caffe Inc. will probably be businesses, where it is all about money and getting premium prices, another question can be asked: 'How did you decide that you are paying an acceptable price for the product?'.

A brainstorm was conducted based on the 'Job to be done' framework, together with student colleagues present at the faculty. The goal of the brainstorm was to define the possible market definitions. First a small brainstorm has been done to find the multitude of applications for the coffee oil and colourants. Sheets with the questions: 'What are possible applications of high quality oil and colourants', as well as the question: 'Why/Who would use brown colourants' were passed around and filled in, to the best of their knowledge. The outcome of this brainstorm provided

the following insights to market definitions: Oils can be used for:

- Paints and finishings,
- cooking or food additives,
- medical purposes,
- cosmetics and
- personal care products,
- flavouring or fragrance in both personal care and food sector,
- lubricant and biofuels.

The colourants can be used in:

- cosmetics or personal care products,
- food colouring,
- dye or colourant, or as
- paints as resins and coating,
- ink for printing, stamping, pens.

Concluding, the products of Caffe Inc. offer potential to create many products and have some interesting properties. In the future, when the products of Caffe Inc. are placed on the market, consumers and businesses will find jobs for the products that have not been thought of before. An opportunity might be to explore and discover the value-added ways to use the products together with the consumers and businesses.

## 4.4 Competitor analysis

The competitors in the known markets that Caffe Inc. can serve are identified. Knowing who the competition is will help differentiating yourself from the competition and to establish your competitive advantage. Caffe Inc.'s competitors can be mapped on different levels of competition, as visualised in figure 11. The left side portrays the oil competitors and the right side the competitors for the colourants.

The first level of competition are the direct competitors, these kinds of companies compete with Caffe Inc. on the same product and properties. Over here, only Kaffe Bueno can be found. Kaffe Bueno also creates oil from spent coffee grounds.

The next level is the indirect competition, these companies are competing on serving the same

need. In this level the innovative oil or colourant producers can be found: producers of sustainable oils or colourants along with brands creating/growing their own oils in a sustainable way. Companies who create oils from waste, like PeelPioneers who create oil from orange peels and companies who create colourants from waste can also be found in this level. Additionally, companies who create value from spent coffee grounds, can be found here.

Following is the generic level of competition, this is competition that serves the same purpose, for example all synthetics oils and colourants. Companies who downcycle spent coffee grounds are also considered to be on this level, as they use spent coffee grounds for other purposes. This level of competition is most rigid, there are not that many companies offering oils and colourants and those who do have a large market share.

Oils Level of Colourants Category of solutions competition Category of solutions Naffe Bueno Direct Oils from waste Colourants from Indirect producers waste producers Brands producing Natural colourant their own oils producers SCG upcyclers SCG upcyclers SCG downcyclers General SCG downcyclers Base oil producers and im- exporters Specialty oil producers Synthetic oil Synthetic colourant Budget producers producers

Figure 11: Levels of competition

The final level is about the budget competition, products that roughly solve the same purpose but are already there or a cheaper option.

The first two levels are most important to watch as these categories compete with Caffe Inc.. on a similar product. To differentiate Caffe Inc. from their competitors there needs to be looked at the added value that Caffe Inc. provides. This might be in terms of pricing, amounts, a higher quality product or a better story.

These market definitions only look at the output side of Caffe Inc., competitors of Caffe Inc. can also be found at the input and technique side. For the input side there will be the waste processors, spent coffee grounds collectors and processors. On the technique side companies using a similar technique to Caffe Inc. are found. Several companies are creating valueadded products from spent coffee grounds. A few of these are described below:

Kaffe Bueno: Kaffe Bueno is a company from Denmark that uses spent coffee grounds to create coffee oil, coffee flour for baking and coffee fibres. They also provide a coffee recycling service. This is the only company competing with Caffe Inc. on the direct level. They recently partnered with Givaudan, the global leader in creation of flavours and fragrances and together with Nivea launched the first personal care products containing coffee oils. Kaffe Bueno promotes their coffee oil mainly by its active components and benefits.

Coffee Based: Coffee Based is a Rotterdam-based company that makes biobased products form spent coffee grounds. At this moment they create notebooks, cups and planters, in the future they plan to make, lamps, trays and panels for furniture. They have set up a coffee-recycling service together with MAAS and Suez to collect spent coffee grounds from bigger companies and offices.

**Kaffeeform:** This Berlin based company creates coffee cups from spent coffee grounds together with local and social partners throughout Germany.

**Bio bean:** Bio-bean is a company from the United Kingdom that aims to extract valuables from the coffee and created biomass from the leftovers. They develop flavours and coffee logs and pallets for domestic wood-burners, additionally they are looking into creating bio-oils and bioplastics.

**Revive-Eco:** Revive is another company working in the United Kingdom, they aim to create cosmetics from spent coffee grounds. Currently processing around 2.5 tonnes of spent coffee grounds weekly.

**Rotterzwam:** Another well-known competitor of Caffe Inc. is the Rotterdam based company Rotterzwam. They use local coffee grounds to grow mushrooms on.

In the other countries examined for this thesis there are also a few companies growing mushrooms on spent coffee grounds. Other smaller scale companies can be found that use spent coffee ground to produce scrubs and soaps.

In conclusion, the first two levels of competitions are important to watch for Caffe Inc. as they compete on the same product. The other competitors, in the other levels as well as on the technique side are also important but easier to differentiate from as they all have a different competitive advantage.

## 4.5 Context analysis

The context is analysed by performing a trend analysis and a country analysis. In the trend analysis, trends will be gathered, categorized and selected by several methods. The found trends will then be used to identify opportunities and threats. The country analysis analyses several countries by aspects to find out which are the most relevant countries for Caffe Inc. to venture into.

## 4.5.1 Trend analysis

Trend research combines intuitive observations; the changes that happen all around you, with strategic scanning of the environment. Trend research is done to explore the opportunities and values for the future (Simonse, 2017).

First up is strategic trend scanning; the systematic scanning of an organisations business environment for relevant information (Aguilar, 1967). Strategic trend scanning is done to spot early changes in the environment and industry as to be able to quickly respond to important trends and events which might have an impact on the business or industry. This is done with the help of the DEPEST method, to make sure that early signs from possible changes in the macro environment are not to be missed.

## **Depest**

The DEPEST method structures the trends into six categories: D-demographic, E-economic, P-political, E - environmental, S - social, T - technological. The insights generated from the DEPEST analysis provide an overview of the bigger picture that influences the organisation and is used to prepare the organisation adequately. As the markets to be entered are still unclear a broad focus will be kept.

## Demographic

- In 2030 there will be more than 10 billion people living on the planet.
- Gen Z is entering the work field, knowing the current state of the planet, 62% wants to buy sustainable.
- Generational thinking; gaps between generations make for companies to think in generations.

### Economic

• The new economy is coming up: turn away from

the traditional to biobased, circular, experience or donut economy.

• Disruption is innovation: Climate crisis and Covid-19 make for changes.

### Political

- Paris Climate agreement
- Creation of more and more green policies and laws.

### Environmental

- Ecovenience: Consumers want to buy sustainable, however they do not want to pay extra of put additional effort in.
- Material scarcity: quest for renewable sources, taxes on raw/harmful materials, increase of prices for raw materials.
- Regenerative agriculture.

### Social

- A shift from the 'me' culture to 'we' culture; making this as crowdsourcing possible.
- Consumers pressuring governments and business into becoming more climate focussed.

## Technological

- Digitisation
- New energy production methods

## **Trend topics**

To make sure nothing is left out of the context analysis, one of the four types of doing creative trend research is done. Trend topic is most relevant for the information that is needed. Trend topics helps to the act of understanding in combining and unifying the isolated data of sensation into a recognisable whole of a trend (Simonse, 2017). Important to note is that the identification of trends and the predication of the future is subjective, meaning that the insights are an interpretation of the author.

Trends that are somewhat alike, had the same impact or are influenced the same market definition were clustered to trend topics. The most relevant trend topics can be seen on the right.

**Ecovenience:** Consumers do want sustainability but they do not want to put in any additional effort or pay extra.

Rise in sustainability practises: More and more possibilities arise to do 'sustainable'. Fast fashion companies are urging slow fashion. Refill-models are coming up, re-usable product, eco-friendly last mile opportunities, etc.

Coffee knowledge is growing: Coffee is becoming an experience, consumers care more about the cup of coffee they drink. They want Fairtrade or sustainable coffee. They invest in more advanced machines and expensive coffee.

**Material scarcity:** The world is running out of resources. Prices for certain resources are already rising. Looking for renewable sources. There is being thought of taxing raw materials.

Green laws, regulations and policies: The EU, Netherlands and other companies are establishing more and more green laws, regulations and policies. Paris Climate Agreement is being urged. The Green deal.

New economy is coming up: Circular economy, biobased economy, blue economy sharing economy, experience economy. The traditional economics are simply enough any longer. There is need for a new way of doing economics.

Green marketing: Companies putting the 'Why' at the centre of their business. Consumer start to buy more products based on values, emotions, actions and trust. Marketing is storytelling, is selling, selling a green story works better.

Pressure on the companies: Consumer awareness on sustainability is growing and they want to see that reflect in the companies as well, they want transparency from the companies. Additionally, the government is also pressuring companies, for instance by making them responsible for waste and after product use.

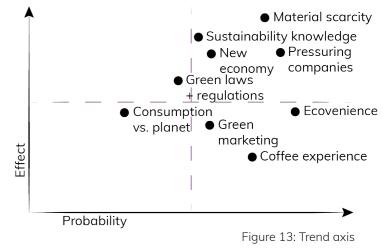
Consumption vs. Planets: Consumer awareness is growing on the environmental impact certain products have. 73% of consumers will change consumption habit is bad for the environment. A rise is seen the demand of organic products. Gen Z is starting to spend their own money and 62% wants to spend it on sustainable products.

After the trends were identified they are plotted in a perceptual map, see figure 13. On the x-axis the probability of the trends is plotted, which says something on the trend being strong and its probability to pick up. On the y-axis the effect of the trend is plotted, which will tell how big the impact of the trend might be.

To conclude, the trends in the top-right corner have the highest probability and the biggest effect. It can be said that: material scarcity, sustainability knowledge, the new economy and the pressuring of companies, are the trends that need to be further explored as they have an effect on the business of Caffe Inc..



Figure 12: Depest and trend topics brainstorm



## 4.5.2 Country analysis

Caffe Inc. plans to market the products in multiple countries. On top of the list, established by Caffe Inc. are Belgium, Luxembourg, Germany, France and Switzerland. This list is of initial countries to look at, this does not mean that the products will not be marketed in other countries or Caffe Inc. will not venture there. An analysis is done to see which countries are worth venturing into and to which expand first.

First, an introduction on each country is given, the introductions explore the population, GDP, circular economy, waste management and other factors. Afterwards, multiple numbers are explored based on the factors of Root (1994) on choosing a target country. These numbers include economic, sustainable and governmental (ESG) factors along with factors as the ease of doing business, the number of innovations, energy supply, coffee consumption, etc.

After this information is retrieved, the countries are compared to see which country is most viable for Caffe Inc. to expand to first.

## **Country exploration**

The Netherlands
Population: 17.231.017
GDP: 831 billion

The Netherlands is the 12th most densely populated country in the world and 2nd most densely populated in Europe. Even though it is a small country, the Netherlands is the world's second largest exporter of food and agricultural products. Ranking 10th in world's leading exporting countries. Which is why the Netherlands has the busiest seaport of Europe, the Port of Rotterdam. The Netherlands has the 17th-largest economy in the world and ranks 10th in GDP (nominal) per capita.

The circular efforts of the Netherlands have made that Politico ranked the Netherlands 12th of Europe. The circular economy is mainly from done the entrepreneurial angle, innovating on material, business models and services. Recycling of materials is fine, they scored first in material reuse rate, however the Netherlands still ranks high in waste and food waste.

## Belgium

Population: 11.422.068 GDP: 495 billion

Belgium is a high-income economy. They have high standards of living, quality of life, healthcare and education, ranking very high in the Human Development Index. It also ranks as one of the safest or most peaceful countries in the world. There is a large economic gap between Flanders and Wallonia. Flanders doing better thanks to industries.

Belgium currently recycles 77% of total waste. By 2050, the Flanders region wants to have a circular economy where nothing is wasted. Wallonia promises that organic waste is separated from household waste by the end of 2025.

### Luxembourg

Population: 607.728 GDP: 62,32 billion

Luxembourg is one of the smallest sovereign states in Europe and the least densely populated country. Nevertheless, it has one of the world highest GDP per capita, in 2019 averaging 261% of the EU average. The Luxembourg government is wanting to attract internet and technological start-ups to its country.

Politico ranked Luxembourg just one place below the Netherlands, not particularly good but also not too bad.

### Germany

Population: 82.927.922 GDP: 3.693 trillion

Germany is the largest country in Europe and fourth largest economy by nominal GDP. It is the world's third largest exporter and importer of goods. Germany is very innovative and leading in several industrial, scientific and technological sectors. As they have an industrial economy, much innovation is happening within material flows, ranking them high in the circularity ranking.

### France

Population: 66.987.244 GDP: 2.583 trillion

France is ranked as the world's tenth largest economy, being the second largest Europe. A GDP ranking 6th in the world. France has a diversified economy, mainly topped by the service and agricultural sector. France is ranked among the 10 most innovative countries in the world. Additionally, they are also the second largest of Europe on Research and Development. France is ranking high in the circularity index. Mainly on their innovativeness on the industrial and agricultural sectors. Their use of plastics and recycling opportunities are lacking.

### Switzerland

Population: 8.516.543 GDP: 679 billion

Switzerland is not a member of the European Union or economic area. Switzerland has the world's twentieth largest economy by nominal GDP. Switzerland has the highest nominal wealth per adult. It ranks in the highest for quality of life as well as highest costs of living. Most competitive economy in the world, most innovative country in Europe. Most important sector is manufacturing: mainly of specialist chemicals, health and pharmaceutical goods, etc.

## **Exploring numbers**

With the data from EuroStat, the Worldbank, the OECD, Bloomberg and the World Economic Forum a table, table 1, is established for the comparison of the specific countries. The factors that are chosen either tell something on the business climate and the possibilities to do business, the circular economy and look on sustainability, or the amount of spent coffee grounds available to process. Putting all the factors in a table makes it easier to create an overview and compare between the countries. While there are more factors which influence the viability of a certain country, with these numbers an overview is created to provide a first idea on the potential. From there more research into the potential of a country can be done.

In the table the Netherlands is added to serve as a baseline country. The best-scored numbers are underlined with purple.

## **Explanation of factors**

The GNI per capita helps to understand the economic standard enjoyed by the average citizen.

The ease of doing business index number, retrieved from Worldbank (2020), measures an economy's performance with regard to the best practice and is based on 41 indicators. These indicators tell something on the ease of starting a new business; the procedures needed, costs of contracts, export and import opportunities and more.

The governance performance index is based on the country's regulatory framework and infrastructure environment to facilitate sustainable competitiveness.

Bloomberg ranked countries in their overall ability to innovate, based on research & development expenditures, manufacturing, patents, manufacturing, education and manufacturing.

The RobecoSAM country sustainability ranking ranks countries on different ESG factors: environmental, social and governmental factors.

The sustainable development report created a ranking on the progress of countries towards achieving all 17 SDG's.

The environmental performance index provides information on the state of sustainability in a country, how close it is to reaching the established environmental policy targets. It is based upon 32 indicators, for example: general environmental health, waste water treatment, CO2 growth rate, etc.

The 'contribution to the UNFCC on climated related expenses' measures the total amount spent to contribute to the UNFCCC; the United Nations Framework Convention on Climate Change (UNFCC).

To conclude, Germany scores best on multiple factors assessed: they have a large amount of spent coffee grounds available, they have a slightly better climate for starting businesses than in the Netherlands. Besides that, Germany has a government that regulates competitiveness and is by far the most innovative country in this list. Many developments are made on environmental related technologies and they rank highest in transitioning to the circular economy. The relative distance to Germany might also make it easier for Caffe Inc. to start their foreign ventures there. As of this moment the only company working in Germany with spent coffee grounds is Kaffeeform producing coffee cups. All this considered makes that Germany has the best possibilities for Caffe Inc. to venture into.

Table 1: Comparison of countries.

	Unit	Netherlands	Belgium	Luxembourg	Germany	France	Switzerland
Population	Number	17.231.017	11.422.068	607.728	82.927.922	66.987.244	8.516.543
GNI	US per capita	51.280	45.430	77.820	47.450	41.070	83.580
Coffee consumption	Kg. per capita	8,4	6,8	6,5	5,5	5,4	7,9
Amount of SCG available	Tonnes	143,3	76,9	3,9	451,5	358,1	66,6
Ease of doing business	0-100	76,1	75	69,6	79,7	76,8	76,6
Governance performance index	0-100	59,4	60,9	63,9	66,6	56,7	60,7
Bloomberg's innovation ranking	Ranking	20	19	28	3	9	16
RobecoSAM Country sustainability ranking	Ranking	10	19	8	11	18	6
SDG Achievement score	0-100	80,37	79,96	74,31	80,77	81,13	79,35
Environmental performance index	0-100	75,3	73,3	82,3	77,2	80	81,5
Development of environmental related technologies	Inventions per capita	23,73	16,46	23,88	41,90	18,6	27,33
Renewable energy supply	% of total energy supply	7,18	7,76	7,40	14,63	10,68	22,46
Contributions to the UNFCC on climate related expanses	Millions of euro	405,44	104,92	40,43	6.729,60	4.377,38	-
Rank on Circular economy	Ranking	12	8	11	1	3	-

## 4.6 Key insights

The goal of this chapter was to provide insights into the workings of the company, its products, the competitors and the context.

Caffe Inc. wants to give people the power to participate in the transition towards a world where every resource is used to its fullest potential. Their mission is to become the largest biorefinery of used coffee, scaling up the solution. They create value from waste and make products that fit the conscious lifestyle. Their business model can be described as: Creating value from waste and eliminating waste by turning waste streams into useful and valuable input for other production. They are also developing a scale-up solution: Delivering sustainable solutions at large scale to maximise benefits for society and environment. The products that they create from spent coffee grounds are coffee oil and colourants, each product has many possible applications, both

There are only few competitors competing on the same products, however there are many rigid competitors in the oil and colourant market. To differentiate Caffe Inc. from their competitors there needs to be looked at the added value that Caffe Inc. gives. This might be in terms of pricing, amounts, a higher quality product or a better story.

The important trends to watch are: The need for renewable sources, New economies coming up, More and more social initiatives and Companies being pressured to become more sustainable or transparent, therefore putting the why at the centre of their business. Caffe Inc.'s product is one that can play into these trends by properly positioning their products and keep these trends in mind.

Germany scores best in multiple established categories assessed, the relative distance to Germany might also make it easier for Caffe Inc. to start their foreign (ad)ventures there.

## 5. Research

This chapter explains the research done and the insights derived from the research. Through expert interviews with four circular start-ups, research on the challenges of circular start-ups is done. Dutch consumers were asked to fill out a questionnaire with the purpose to get to know how they perceive products created from spent coffee grounds. Finally, the current markets of coffee oil and colourants are researched for their potential.

## **5.1** Research objectives and approach

In this chapter research is done on circular start-ups as well as potential Caffe Inc. consumers and the potential markets.



Figure 14: Research objectives

Four circular start-ups are interviewed to gain more knowledge on the specific challenges that circular start-up face and how they overcome them (RQ4). The semi-structured interviews asked questions on establishing the start-up, the market introduction, what makes a circular start-up, the advantages and disadvantages and if they had any advice for new circular start-ups. Through the means of the Grounded Theory method, these insights are structured.

Quantitative consumer research is done in order to get to know who the consumer of Caffe Inc. might be. To enrich the insights, there will be looked at what the consumer perception is of products created from spent coffee grounds (RQ 5). This will be done by sending out a questionnaire to Dutch consumers. The potential customers are questioned on: their shopping behaviour, coffee products and their perception on them and demographic.

For the potential market research, research is done on possible markets where the coffee oil and colourants can be sold. Reports and articles are explored to get an idea on how these markets look like. To scope this research there will be a focus on the European market and extra look is taken at the German markets as this country came forward in the country analysis.

The set-up of the specific research is explained in more detail in this chapter.

## 5.2 Interviews with circular start-ups

As covered in the literature review, circular start-ups are to play a leading role in the transition towards a circular economy. However, circular start-ups experience more challenges than linear startups and current regulations do not favour circular businesses. As literature in this field is not as evolved yet, research on these specific challenges and how to overcome them will be done by interviewing experts. The goal of these interviews is twofold: One objective is to understand the challenges that circular start-up face and how they overcome them. It is therefore, Caffe Inc. can see to these challenges and manage accordingly. The other objective is to look at how these start-ups have positioned their products, is this influenced by their circularity and how have they or have not been successful in this.

The main research question for the conducting the interviews is stated as:

What is the influence of this start-up being circular?

## 5.2.1 Set-up

For the interviews a semi-structured approach will be taken. A semi-structured approach has been chosen as it offers the opportunity to have a protocol to stay connected to the subject and to be able to compare the given answers, but still have the freedom to interact with the interviewees. This will make the interview interactive and sure to reach its goal without losing sight of it.

To provide more structure to the interview, the main research question has been divided into four themes (Patton, 2002). This is also done to prevent that the research question is mentioned in full to the participant, which might influence their perception and steer it in a certain direction. The structure of the interview is roughly based on the path of expression by Sanders and Stappers (2012), a common method used during interviews. It starts of in the present, moves to the past through memories, to eventually end in the future. By using this method, it is made easier for the interviewee to be aware of the present and recall and reflect on the past, supporting the underlying layers of their thoughts.

The four themes and their description are as followed: **Introduction:** This theme is about the basics, what is the company, how was it established?

Circular start-ups: This theme is also more general, it explores what make start-ups circular and what the experts think are the advantages and disadvantages of start-ups being circular. Lastly, there will be asked what makes their start-up circular.

Market introduction: This them is focusses on the operations of their company. How did they put their product in the market, why did they do it like that, what went well, what did not, etc. There will also be some reflection here: looking back on it, what would they do differently now.

**Tips:** The last theme is about what they wish for future circular start-ups. What they would advise circular start-ups, what they wish they would have known before they started and what systemic change needs to happen to make the industry more favourable to circular start-ups.

The interview consists of 15 main questions and 15 follow-up questions. The specific questions asked can be found in the interview guide in Appendix C. Four experts from different circular start-ups have participated in the research, the circular start-ups have been randomly selected. Each conversation has been held by phone and the audio was recorded.

## 5.2.2 Results

During the interviews a large amount of raw data was collected. The interviewed are transcribed to make it possible to structure and analyse all raw data. The data has been structured using the grounded theory methodology. The grounded theory methodology coded the data and structures it into important groups or words to be analysed (Birks & Mills, 2015).

The first two interviews were coded, meaning that the transcript was read carefully and important or interesting quotes received a code. A code is a word or short sentence that simplifies the quote and makes the quotes comparable. These codes established in these two interviews were then compared and a new and complete list of codes was created. With this new list of codes the other two interviews were coded. After all interviews were coded the codes, 32 in total, were structured into larger families, codes which are roughly similar were put together. These families of codes were analysed to find relationships between the codes to find an underlying structure to the interviews.

## 5.2.3 Insights

An overview of the insights derived from the interviews can be seen in figure 15. The insights are sorted per question asked in the interviews. Quotes from the interviews have been added to provide an extra dimension.

The challenges that the circular start-ups face are different per start-up. However, many have the problem that a circular business model is more expensive than a linear business model would be, which makes it hard to be competitive. While their raw material may be cheaper to acquire, circular start-ups need to account for risks as their business model is not proven yet and have extra costs for reparations or service.

One thing that came forward multiple times, is that circularity is not something to position the product on. These start-ups have put the added value of the product above the circularity, for example: the transparency or a service. Circularity is not yet the main reason for many consumers to buy something. However, the circularity of a product does need to be properly and understandably explained to the consumer. Circularity then can be seen as an extra objective to buy this product instead of the competitors. The consumers to target need to be found and targeted appropriately. Additionally, it was found that a circular needs to put the consumer wishes above their own. The only way to create the change you want as a circular start-up is when the consumer buys your products instead of the competitors alternative.

## What is the influence of this start-up being circular?

Circular start-ups have to put more attention to rightful communication to the consumer, as they need to be convinced. The Dutch consumer is not yet ready for circularity. Circularity in the company and products needs to be properly explained and visible throughout the whole company, however circularity is not the main selling point or added value. A big part is also to instruct consumers on how to properly use a product, so the lifecycle of the product is prolonged.

Being a circular start-up also has it advantages, the expenses for raw materials are usually lower and there are more possibilities to focus on niche markets. Disadvantages are that the circular products are not preferred by consumers, and it takes time, as consumers and markets are not ready yet.

Start-ups overcome these challenges by putting the MVP's on the market and improve from there, by using the existing markets and infrastructure, by taken linear business models and making them circular on the back-end or by targeting specific niches. The main thing for start-ups still is to be flexible and make sure to pivot quickly. To think in big actions, however act and start with small steps. Additionally the consumers needs to be put first, circularity second.

## Implications for Caffe Inc.

The main challenge for Caffe Inc. in this stage is to think about the communication to the consumers: what is the added-value that needs to be addressed, how to explain the circularity. Besides that, they can be searched for a specific niche market where the products is needed for its added-value and from there the product can be further developed.

### Research question Key insights

What makes a start-up or

Part of it is the informing and educating the consumers on maintaining their products.

Circularity isn't just one aspect of the company, it needs to be found throughout.

The expenses of buying raw materials are usually lower than for non-circular counterparts as you are buying waste, so lower costs but also no risks of price shifts for when certain materials run out.

The Dutch consumer is not ready yet. They are afraid to try new things.

As long as other product still work fine, those products will have a preference.

Do not target to broadly, find the right

There is a fine balance between circularity and the added value offered.

To overcome a few of these challenges improved. Next to that, they also advice to better alternative.

Be flexible, be quick to pivot, keep an eye out for possibilities, but accept you cannot please all.

can stimulate with funds and taxes, but also set restrictions and force consumers and companies to make a shift in thinking.

against you, the change is needed.

Think big, but start small.

Consumer is at the front, circularity at the back.

## Explanatory quote

'Circular companies may not be in favour now, but in the future to get an upgrade, make they will be the ones to thrive.

'To make a change, you have to

start somewhere. Create the

market you need, people will

follow, and then together you

'Connect to companies that

can use their resources and

them become a little greener.'

'You have to work together:

want to become greener, so you

clients to grow yourself and help

can make that change.'

Possibility to pivot quickly.

When speaking of

waste, materials need

sure that the proces is

CO<sub>2</sub> neutral or positive.

More possibilities to focus on a niche market.

Be patient, it takes time: Market possibilities need to open up, and markets still need to be developed.

Circularity is never the main reason to buy something. Convince them of the advantages in 10-20 seconds.

You can take a provento-work business model, but make it circular in the back.

Find your niche first, these don't have to be people who already believe in the circular economy. They need the added value you give.

The proof of concept of

companies needs to be

enough proof for investors

Communication is

have a good and

inspiring story to tell.

everything: explain it in

'lip en Janneke'-taal and 🕨

other (non-circular)

to invest in circular.

'To create impact we can think of adding a waste-tax of some sort, but already account for

Large scale options for the → efficiency and small scale options to convince the consumer to choose circular.'

'Do not think that everyone believes in a circular economy, there are people who do, but even more who do not. But do not let that demotivate you.'

'For the market to be created, it will take a lot of time, but we already started too late, so there is no time to waste now.

that in the price.'

'Do not push away companies who aren't green enough? They can learn from you, you can learn from them. Everyone needs to work together.'

Figure 15: Interview insights

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company circular to you?

What are the advantages of circular start-ups?

What are the disadvantages

How to convince consumers

How did you introduce your

What would you now have

What do you think needs to

more favourable to circular

What tips do you have for

change to make the industries

product to the markets?

What is the challenge?

done differently?

initiaves?

of circular start-ups?

of circularity?

start-ups usually put the MVP on the market, and together with the consumers they look at how the product can be make use of existing logistics, but sell a

The government plays a big role, they

Pull through, even when everything is

48

circular start-ups?

## **5.3** Consumer questionnaire

Whether Caffe Inc. sells their products to manufacturers, starts producing consumers products or collaborates with a partner to create consumer products, consumer research needs to be done. The goal of this consumer research twofold: first, it is important to know what the perception of consumers is on products created from spent coffee grounds. Secondly, this research is done to get an idea of who the target group might be and what their needs are.

## 5.3.1 Set-up

Dutch consumers are asked to participate in the research. Dutch consumers are generally a good reference for the Western European market.

The questionnaire consists of 20, or 21 questions: depending on if one is already familiar with products created from spent coffee grounds. There are eleven closed guestions and nine or ten open guestions. To increase the willingness of people participating in the study there has been chosen to keep the questionnaire relatively short.

The questionnaire is divided into 3 parts: shopping behaviour, products created from spent coffee grounds and demographics. The specific questions can be found in Appendix D. In the first part, shopping behaviour, the respondents are asked about how they generally make choices when buying new products. The questions asked are about which factors influence their choices, if sustainability is of importance and what makes them buy a new product.

The second part is about products created from spent coffee grounds. The first question asks if the respondents are already familiar with products created from spent coffee grounds. If respondents are familiar with these products, they will be asked for what products they know and what they think about these products. Respondents who are not yet familiar with these products are asked to think about the possible products that can be created from spent coffee grounds. After these questions it will be explained to all respondents what products can be created from spent coffee grounds. With this knowledge they will be asked for their first thoughts, what kind of products they would or would not buy, what they think the advantages and the uniqueness to these kind of products are, what they would pay for these products and if they would buy it sooner when it is released with a brand they are already familiar with. Lastly, in the final part the respondents will be asked for their demographics: age, gender, education, personality, hobby's and where they live.

The questionnaire has been created in Google Forms, the link is shared on social media platforms as Facebook, LinkedIn and Instagram. Everyone who has ever bought something in a Dutch store was asked to fill out the questionnaire and to share it with friends and family.

The questionnaire has been filled out by 144 respondents in total. The answers to the nine openended auestions were clustered based on the words used and counted.

To find the potential consumers for Caffe Inc. the data was put into SPSS, a tool that is used organise large data sets, to be clustered. An hierarchical cluster analysis is done based on the answers given on: factors on which they choose products, how important they find sustainability, when they would try new products, their thoughts on buying recycled or second hand products. The respondents were clustered into one of five groups. After the groups were created, the groups were analysed to see why they were clustered like this and if any similarities in demographics and other answers could be found.

## 5.3.2 Results

The complete results can be found in appendix E. An overview of the results can be found in figure 16.

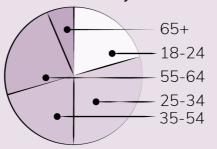
The male to female ratio was found to be off, 25.7% to 74.3%, as well the questionnaire is mostly filled in by people with a university degree - 51.4%.

## The perception of the Dutch consumer on products created from spent coffee grounds

## 144 Respondents - Who are they?

107 females 37 males

## How old are they?

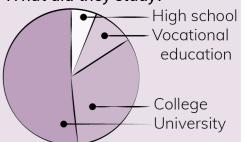


## What they like to do?

50.3% Hanging out with friends and family 42% Doing sports 25.9% Watching films and series 24.5% Reading 21.7% Cooking

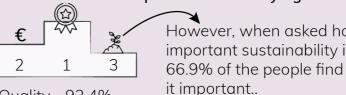
 $\mathbf{7}$  67.4% lives in the city 2.8% in the countryside

## What did they study?



## 144 Respondents - How do they shop?

## What factors are important when buying?



Quality - 92.4% Price - 74.3%

68.1% has never

Sustainability - 34%

## When do they buy new things? When it is time - 36.1% However, when asked how

Recommended by friends - 28.5% When finished with the old - 26.4%

2.1% doesn't like the idea of repurposing

## 144 Respondents - What do they think of products created from spent coffee grounds?

## Have they heard of products created from SCG? $\longrightarrow$ And when they hear of it:

## They think you can make: What they know: Carton like things - 15x Compost - 13x Tableware - 8x Textiles - 5x

Cleaning supplies - 5x

## Reasons to buy: Sustainability - 31x Circularity - 26x The story - 19x

## 31.9% has

important sustainability is,

Mushrooms base - 12x Coffee mugs - 10x Notebooks - 6x Soaps - 5x For gardening - 5x

## Perceived advantages Sustainability - 36x

Less harmfull - 23x Value from waste - 15x

54x a positive affirmation 13x 'Why didn't I know this 12x 'Wow, multifunctional..'

Er worden minder primaire grondstoffen gebruikt, geeft mensen inzicht in de waarde van koffiedik/ander afval. opent de ogen naar circulariteit.

**52.1%** will not pay extra. **35.9%** will pay up to 10% extra.

Figure 16: Questionnaire insights

## 5.3.3 Insights

By clustering the respondents and assessing the characteristics five possible target consumers could be created, the finalisation of these groups can be found in figure 17.

The age is left out as there was not one that that was significantly bigger than the means. The age distribution of group A, C and D was: 23.5% 19-24 year olds, 34.6% 25-34 year olds, 21% 35-54 year olds, 13.5% 55-64 year olds and 7.4% of 65+ year olds.

## Implications for Caffe Inc.

In accordance with Caffe Inc. it has been established that group A, C and D are the most promising. For these groups a more detailed persona is created. The information of group A, C & D is combined and the answers to the questions have been analysed again. The answers most given are combined in the persona, which can be found in figure 18.



### Bio

Living in the city, has a university degree, prefers to drinks coffee black. When not working, enjoys to hang out with friends and family, to do sports, mostly running and tennis and some late night fiction reading. Secretly wishes that sustainability could be more 'fun'.

## Personality

- loyful
- Creative
- Curious
- Headstrong
- Energetic

## Buying behaviour

Not that loyal to current products. Buys new things whenever they are wanted, but watches not too much useless stuff. Whenever friends recommend something, the need for that products grows immensely. New products are judged on 1: quality, 2. price and 3. the looks. Would buy things faster if sold by a brand already familiar with.

## Products created from spent coffee grounds

Does not own any products from spent coffee grounds, but can think of products that could be created from spent coffee grounds. Really likes the idea of repurposing, especially the story behind it. Would really like to buy her coffee to-go's in a cup made from spent coffee grounds. Or just would buy anythings created from spent coffee grounds, if quality is equal, but not food, and as long as there isn't a smell. Wouldn't pay that much more, +10% max., just because it is created from spent coffee grounds.

'Ik vind het leuk dat het koffiedik een totaal andere bestemming krijgt, waardoor minder nieuwe materialen nodig zijn en het dus bijdraagt aan een betere leefomgeving.'

Figure 18: Consumer persona

## The story shoppers



- 23 people
- Mostly women older than 35, 80%.
- They really care about sustainability.
- They want the story to be right.
- Main reason to buy certain products: quality or when recommended by friends or family.
- Enjoy cooking > 50%, going for a walk >50%.



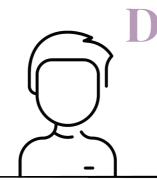
## The convenience seekers

- 17 people
- They choose their products on convenience.
- They find themselves to be 'gezellig'.
- Between the age of 25-34.
- They are a bit hesitant, they have questions that need to be answered first or they need proof.



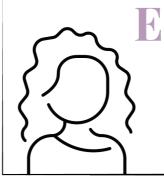
## The doesn't really matter to me group

- 42 people
- Mostly 18-34 year olds.
- Will buy the products faster when sold by a brand they already know.
- They find themselves to be 'curious' and 'gezellig'.
- They have the wildest product suggestions: tea, toothpaste, cat litter, etc.
- They mostly, 70%, enjoy chilling with friends.



## The open-minded consumers

- 19 people
- They want to pay a little (+ 0-10%) extra if the product is sustainable
- Doesn't really matter who sells the product.
- They do not care about which products get created, they just do not want something to eat.
- They want a story.
- 65% likes to do sports.



## Inflexible but demanding consumers

- 37 people
- They care a lot about sustainability but are really critical on things they do not yet know.
- They will only try new things when their current products let them down.
- 50% is above the age of 55.
- Cosmetics are a no-go.

Figure 17: Consumer clusters

## **5.4** Market potential

## **5.4.1** Coffee colourants

As of now, there is no other company selling coffee colourants, thus the market for coffee colourants is non-existent. To get an idea on what the market of coffee colourants will look like in the future markets where coffee colourants might possibly be sold are researched. Possible markets where the coffee colourants might be successfully sold include but are not limited to: Cosmetics or personal care products, food colouring, natural textile dyeing, dyes, paints, stains, resins and coatings, ink for printing, stamping, pens and paints.

Europe is one of the most important markets for dyes, accounting for 28% of the global market in 2019. European dye usage is estimated to be 398.82 thousand tonnes in 2019 and is expected to reach 411.06 by 2024, with a compound annual growth rate (CAGR) of 0.8% from 2019 to 2024 (Market data forecast, 2020).

The natural dye market is being driven by the demand for products which use natural raw materials and there is an increasing demand for natural, organic and sustainable products. According to industry experts from the CBI (2019), Europe is becoming an interesting market for sustainable apparel. There is a widespread concern by consumers about environmental problems and an increasing need for more sustainable lifestyles. Sustainability awareness and initiatives are growing among consumers, retailers, businesses and governments.

Another trend essential to a sustainable clothing industry is transparency. For consumers and companies along is it important to know that human and environmental rights are respected, which would be impossible to know without knowing where the products are made. Many clothing suppliers are already starting to make the list of producer's facilities public.

The environmental awareness and need for transparency make for an increased use of natural dyes. Personalised fashion may also positively affect the use of natural dyes, as natural dyes offer unique colourings and shading (CBI, 2019).

Sustainability is becoming a standard. The European Union is acting upon this by restricting the use of an extra 33 chemicals used in textile sector as they are classified carcinogenic, mutagenic or toxic for reproduction (CMR). The adoption of these CMR chemicals has been set out in the REACH Regulation list (EU) 2018/1513 as of December 2020 (Ecotextile, 2018).

This growing number of consumers who care about the environment, the need for transparency, regulation and the growing end user industry makes for a larger demand in the natural colourant market for textiles, creating market opportunities for Caffe Inc.'s colourants. Growth restraints for this market can be the high competition from synthetic colourants, due to lower costs and higher colour effectiveness and a lack in wastewater treatments.

Looking at the specific hues that can be created by Caffe Inc. colourants, brown tints mostly, are not trend sensitive. Since season 19/20 brown tints are one of the fastest growing colours across all womenswear markets. As consumers priorities are switching to longetivity, praticality and function, colours need to be versatile, timeless and seasonless. According to WGSN (2020) this is exactly what brown tints can do, meaning the market potential for the brown pigments will not lessen.

## 5.4.2 Coffee oil

Coffee oil has several possible utilisations, it can be used as a base oil, essential oil, substitute for palm oil, essential oil or fruitseed oils etc. Thus, markets for base oil essential oils are examined to get an idea of the market potential and size for coffee oil.

As could be seen in the textile market, sustainability is also becoming more important in the oils markets. Vegetable oils are predominantly used in cosmetics. However, it is not possible to specify the share of imports used specifically in cosmetic products as cosmetic companies like to choose from a range of different oils in order to stand out from their competition.

According to the CBI (2020), a growth can be seen in the European market for natural and organic cosmetics. Which has grown from €1 billion in 2007 to €3.82 billion in 2018 and is expected to reach 5 billion by 2023, 25% increase from 2018 to 2023. In comparison, the total European cosmetics market is only growing at about 1% per year. Consumers are buying natural and organic cosmetics because they perceive these products as safer for human health and the environment. Additionally, Europe's ageing population is also increasing the demand for natural ingredients with active properties, such as antiageing.

Short informal interviews done with brand owners of personal care companies revealed that they indeed experience an increased consumer need to create sustainable products. This is sustained by increased media attention for the pollution of the cosmetic industry and EU legislation requiring higher quality. Effecting the need for companies to innovate and change their current oils to natural oils, including coffee oil.

The CBI (2021) notices that by-products of food are becoming a more regular source of natural ingredients for cosmetics. For example, palm kernel oil has been used in cosmetics and personal care products for many years now. Recently, the cosmetics industry has started using more upcycled food by-products as raw materials. This trend is also partly due to high consumer demand for natural personal care products, another reason is sustainability.

Europe has some of the tightest regulations for cosmetics in the world. The use of hazardous chemicals in cosmetics is regulated under the REACH Regulation. Suppliers must comply with these regulations to ensure market entry. According to the CBI (2020) regulations tend to become even more strict, which can affect many exporters. Caffe Inc. can comply with the requirements, as their product is fully natural which offers opportunities to the company. Ways to act on these opportunities are by acquiring the certification to show Caffe Inc. meets the environmental and social standards.

Additionally, the CBI (2017) records that the European import of specialty oils, oils with unique properties as palm, shea, sunflower etc., grew by 6% annually from 2012 to 2016 in terms of volume. In 2016, the imports amounted to 321,000 tonnes at € 713 million. The biggest im- and exporters of Europe are the Netherlands and Germany. The Netherlands houses several large oil refineries and traders, as well as refiners dedicated to small-batch refining. These companies play a vital role in the value chain for most specialty oils as traded volumes are too small for other refiners. Germany is not only a leading importer of raw materials for cosmetics, but also the European leader in natural cosmetics. Germany has a share of 35% on the total European market, worth €1.3 billion. According to exporters of natural ingredients for cosmetics in developing countries, ingredients such as vegetable oils, essential oils and botanical extracts are in high demand in Germany.

The small batch refineries in the Netherlands offer opportunities for Caffe Inc. as in the beginning the operations still have to be scaled. The high demand for specialty oils for cosmetics in Germany show attainable market potential for Caffe Inc.'s coffee oil.

## 5.5 Key insights

This chapter aimed to contribute new insights to the challenges of circular start-ups, the potential consumers of Caffe Inc. and the market potential. From the interviews it was derived that there needs to be thought about the added value as consumer do not buy for circularity. For selling the products a circular start-up needs to find a niche from which they are sure that your consumer will buy, which does not necessarily have to be the initial consumer you thought of or a consumer that thinks want circularity. One quote that has been mentioned by all start-ups: 'Think big, act small'.

Consumers buy products based on quality and price. Most of them are not yet familiar with products created from spent coffee grounds, however they are open to the idea. They do not like to pay extra, 10% extra is the maximum. The products they would like need to be of equal quality, preferably do not smell and be products they use on a daily base.

The target consumer cares about sustainability but more than that, it wants the product to be of good quality and to be fun. All products created from spent coffee grounds deserve an equal chance as long as their quality is equal to that of its alternative. They rather do not buy food created from spent coffee grounds and they do not like it if their personal care or cosmetics smell of coffee.

There is market potential for both coffee oil and the colourant, this is mostly due to the markets wanting to become more sustainable and thus a growing need for sustainable offerings.

## 6. Key findings

This chapter will act as an intermediate conclusion. The insights that were found in the literature review, analysis and research will be put together. Firstly, with the insights found the answers to the sub research questions are given. Secondly, the insights are summarised in a SWOT analysis. Lastly, a list of requirements for strategy and design will be discussed.

The answers to the sub research questions and the SWOT analysis will serve as the main input for the creation of the final strategy and answering the main research question.

## 6.1 Answers to sub research questions

Before the main research question is answered in the next part, the answers to the sub research questions are given here.

## RQ 1: What does a go-to-market strategy consist of?

A go-to-market strategy is described as: 'a game plan for reaching and serving the right customers in the right market, through the right channels, with the right products and the right value proposition'. For this thesis, the go-to-market strategy will exist of the elements:

- Target consumer
- Positioning
- The marketing mix or 4P's
- Timing
- Entry sequence and mode of entry

## RQ 2: What is the context Caffe Inc. is working in?

Caffe Inc. is establishing a company in the circular economy, an economy that aims to close materials loops and creates value from waste. Due to resource depletion, climate change, and growing landfills the need for a circular economy is growing. Besides that, the consumer awareness on sustainability is growing and they are pressuring companies into becoming more sustainable and transparent. Additionally, companies also start to care more about the impact they make. The products of Caffe Inc. can be a solution to these companies, providing a circular and sustainable alternative.

### RQ 3: What does Caffe Inc have to offer?

Caffe Inc. is a circular start-up. They want to give people the power to participate in the transition towards a world where every resource is used to its fullest potential. They create value from waste and make products that fit a conscious life style. They are pursuing a circular business model, based around

creating value from waste as well as developing a scale-up solution.

The products that they create from spent coffee grounds are coffee oil and colourants, each product has many possible applications, both high- and low end.

Coffee oil has many interesting natural properties, as for example: anti-ageing, UV-filter or moisturising properties. Possible applications for the coffee oil are:

- Paints and finishings,
- Cooking or food additives
- Medical purposes
- Cosmetics
- Personal care products
- Flavouring or fragrance in both personal care and food sector
- Lubricant
- Biofuels

The colourants can be used in:

- Cosmetics or personal care products,
- Food colouring
- Dye or colourant
- Paints as resins and coating,
- Ink for printing, stamping, pens.

Trials are done with using the colourants as dye for textiles, with have proven to be very successful.

## RQ 4: What is the influence of this start up being circular?

Being a circular start-up comes with some extra challenges, as the markets and (Dutch) consumers are not yet ready for circular alternatives. Circular business models are more expensive than linear business models, which makes it harder to be competitive. While their raw materials may be cheaper to acquire, circular start-ups need to account for risks as their business model is not proven yet and extra costs for reparations or service. Unfortunately, circularity does not yet offer a base to ask for a higher price and is not something to position your product on. The products that circular start-ups offer need to be positioned on their added values, how the consumer wants it, and the circularity can be found in the back-end. When the product is similar to that of a competitor, it can be an objective for some consumers to buy a circular product.

Start-ups overcome some of the challenges by putting the MVP's on the market and improve from there, by using the existing markets and infrastructure, by taken linear business models and making them circular on the back-end or by targeting specific niches. The main thing for start-ups still is to be flexible and make sure to pivot quickly. steps. Additionally, the consumers needs to be put first, circularity second.

Circular start-ups have to put more attention to rightful communication to the consumer, as they need to be convinced. Circularity in the company and products needs to be properly explained and visible throughout the whole company, however circularity is not the main selling point or added value. A big part is also to instruct consumers on how to properly use a product, so the lifecycle of the product is prolonged.

The main challenge for Caffe Inc. in this stage is to think about the communication to the consumers: what is the added-value that needs to be addressed and how to explain the circularity. Besides that, they can be searched for a specific niche market where the products is needed for its added-value and from there the product can be further developed.

## RQ 5: What is the perception of consumers on product of coffee waste?

Consumers buy products based on quality and price. Most consumers aren't yet familiar with products made from spent coffee grounds. They are open to the idea of products created from spent coffee grounds. The products they would like need to be of equal quality, preferably do not smell and be products they use on a daily base. They do not like to pay extra for these products, 10% extra is the maximum. They rather do not buy food created from spent coffee grounds and they do not like it if their personal care or cosmetics smell of coffee.

The target consumer, who would buy the products created from spent coffee grounds cares about sustainability but more than that, it wants the product to be of good quality and to be fun. All products created from spent coffee grounds deserve an equal chance as long as their quality is equal to that of its alternative.

## RQ 6: Can Caffe Inc. venture into other countries?

There are many opportunities for Caffe Inc. to venture into other countries. From the shortlist provided by Caffe Inc. is was established that Germany offers the most opportunities for Caffe Inc.. Germany scores best in multiple established categories assessed: they have a large amount of spent coffee grounds available, they have a slightly better climate for starting businesses, they have a government that regulates competitiveness and are by far the most innovative country in this list. The relative distance to Germany might also make it easier for Caffe Inc. to start their foreign (ad)ventures there.

Germany is also one of the biggest im- and exporters in oils. Germany is not only a leading importer of raw materials for cosmetics, but also the European leader in natural cosmetics. Germany has a share of 35% on the total European market, worth €1.3 billion. According to exporters of natural ingredients for cosmetics in developing countries, ingredients such as vegetable oils, essential oils and botanical extracts are in high demand in Germany.

## **6.2 SWOT Analysis**

The SWOT analysis is an analysis done on the Strengths, Weaknesses, Opportunities and Threats of a company. The goal of the SWOT analysis is to position a company in its business context, from whereof strategic decisions for the next phases can be made (van Boeijen, 2014).

The SWOT analysis is done by performing an internal analysis and an external analysis. The internal analysis, the company analysis, is done to find the Strengths and Weaknesses of the company in the business context. The external analysis is based on the current market, the context and the competitors, and tells something on the company in relation to the competitors and context. From the external analysis the Opportunities and Threats are derived.

In figure 19, an overview of the found strengths, weaknesses, opportunities and threats can be found. These findings will serve as guidance in creating search areas and strategy.

## **Opportunities**

- New economy and circular economy are coming up, relevant markets and waste regulations and for CE initiatives.

- oils, and acts as a re-exporter of vegetable oils to European countries.

## Threats

- Current regulations do not favour circular startups: high taxes and material depreciation.
- Dutch consumer is not ready yet.
  High interest in valorising of spent coffee grounds may cause increase of prices.
  Generational thinking: the gaps between
- be more risk averse and unwilling to bet on the

Figure 19: SWOT analysis.

## 6.3 List of wishes and requirements

In the beginning of the project a brainstorm, see appendix A, has been conducted to uncover the wishes and requirements for future business as well as values to be associated with. The goal of this brainstorm was to uncover the wishes for the future of the company. As a result of this brainstorm the future vision was created and a list of wishes and requirements.

At a later moment in the project, a creative session was held with the company, see appendix F. As a part of this creative session, the founders could write down their golden rules for the company. These golden rules were the things the founders wanted to keep true to, when building the company. A few of these golden rules are added to the list of wishes and requirements.

For the future vison it came forward that the empowerment is important to the business.

They want to provide sustainable alternatives to current polluting materials, while show the health benefits of coffee. They aim to create products that make everyone feel special and make sure to use all the resources optimal and create more from what already is. Thereby creating value from waste and sharing the value and collaborating in the chain. For the consumers they want everyone to become an enabler of the circular economy themselves, prove them that sustainability is not a luxury and that they have the power to actually improve everything around us.



## **PART THREE - Strategy**

The third part exist of the go-to-market strategy created for Caffe Inc.. It will start with the last decisions that need to be taken to create the strategy. In chapter 8 the go-to-market strategy will be introduced.

## Content

7. Creating a go-to-market strategy
7.1 Approach
7.2 Search areas

7.3 Creative session

7.4 Contrarian branding

8. Go-to-market strategy
8.1 Overview go-to-market strategy
8.2 Tactical roadmap
8.3 Timing
8.4 Horizon 1 - Let it sprout!
8.5 Horizon 2 - Let it grow!
8.6 Horizon 3 - Let it flourish!

## 7. Creating the strategy

This chapter covers the last steps done before the final go-to-market strategy is created. Possible opportunity areas are created, which can serve as directions for the go-to-market strategy. These directions will be showed to Caffe Inc. to rate them on their feasibility as well as desirability. Lastly, there is thought of a branding strategy for Caffe Inc..

## 7.1 Approach

To be able to create the go-to-market strategy a few insights need to be translated. In addition to that, there are also a few decisions that need to be made. In this chapter these decisions are taken along with the translation of certain findings.

First, the insights from the SWOT analysis will be translated into opportunities with the method: search areas. By combining the opportunities and the strengths a brainstorm on opportunity areas can be done. These opportunity areas are valuable ideas that may or may not be useful in the final goto-market strategy.

Through the means of a creative session the ideas derived from the search areas are rated by the company. This is done to establish what Caffe Inc. finds important as well as potentially valuable to the company. The highest rated ideas can then be used to create the go-to-market strategy with.

To establish more on how Caffe Inc. should brand themselves a brainstorm was done on how contrarian branding could potentially help Caffe Inc. to stand out from its competitors.

## 7.2 Search areas

The goal of search areas is to come up with opportunity areas, in where new ideas can be generated (van Boeijen, 2014). The SWOT analysis will serve as input for the creation of opportunity areas.

In figure 20 the synthesis of the search areas can be found. On the x-axis the external opportunities can be found and on the y axis the internal strengths can be found. By combining the specific strengths with an opportunity, possible areas for development and

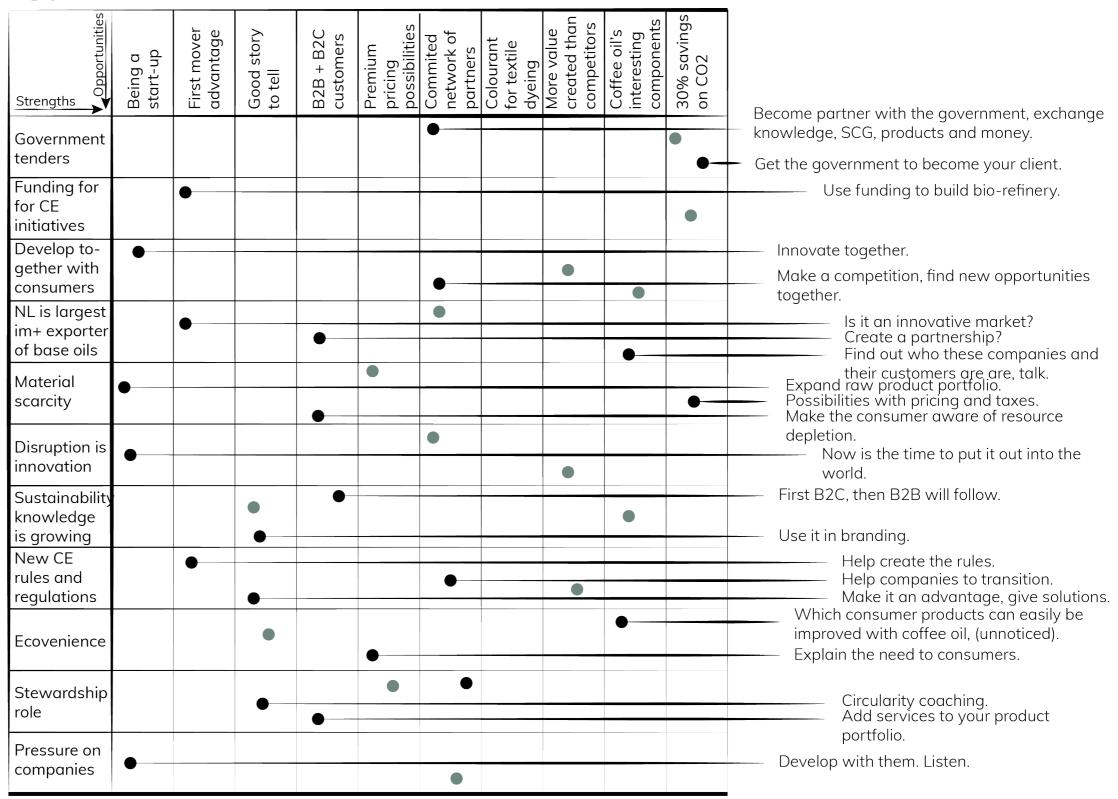


Figure 20: Search areas

new ideas are created. The lined dots mean that an idea has been found, however it was not interesting enough to be selected. The ideas found and selected can be found on the right. Many of these still need more research on the viability, but some interesting starting points can be found. Next to that, some ideas have been found multiple times, meaning there is probably an opportunity there.

## 7.3 Creative session

To get an idea of which search areas are of value to the company, the ideas derived from the search areas together with a few insights found earlier in the project were translated into a creative session. The full creative session, along with an explanation of the insights can be found in appendix F. In this creative session the insights and ideas were shared to be rated on several aspects. The aspects on which the founders of Caffe Inc. would rate the ideas on are the following:

- How big the return will be if this was to be implemented,
- What the need to implement is for the insight: essential, desirable or not yet,
- How big the impact on the operations will be if it was to be implement and
- How relevant it is to the operations of Caffe Inc.. From this creative session it was concluded which insights are interesting to Caffe Inc. and thus for the go-to-market strategy.

The insights mapped most relevant:

- •'Separate operations': to a fun small scale product and less fun mass product,
- 'Brand endorsement': work together with established brands.
- 'Go full VPRO flowerboy on the brand': make the brand really cool/hipster,
- 'Partner up': partner up with less green companies and use their network.

All these insights were experienced to have a moderate to high impact on the operations of Caffe Inc..

The insights mapped as essential are:

- 'Go full VPRO flowerboy on the brand'
- 'Separate operations'
- 'Work together with the government': start working with the government by taking on a advising role. The return on implementing this insight is perceived to be high.

Desirable insights are:

- 'Partner up',
- 'Brand endorsement'
- 'Customize each product to the wishes of the clients': personalise the product to the clients wishes.

The first two are perceived to have a high return.

'Add circularity coaching to the product portfolio' and 'Exploring value-added ways together with consumers' are perceived to be out-of-the-box but with a high return.

With the information acquired on which insights are important or valuable to Caffe Inc. the go-to-market strategy was created.

## 7.4 Contrarian branding

To stand out in the competitive marketplace being different is no longer enough. The contrarian branding concept by Van der Vorst (2017) shows how brands can camouflage the competition and maximise the brands own visibility; by introducing a polarity to the brand. This polarity can be absolute, where a characteristic is highlighted that is completely opposite from the competition. It can be a bipolarity, where two opposites characteristics are emphasized both desired by the market, but non-existent with the competition. Or a tripolarity, where three mutually contradictory characteristics are chosen.

Using contrarian branding, the brand remains open to a larger market while simultaneously maintaining the ability to get noticed. Contrarian branding splits the competitive field into absolute opposites which helps the customer to choose more quickly as they only have to choose which side they are on.

Caffe Inc. positions their oil in the oil market. The oil market is a place where there are many big players and not much innovation is happening. As a new market entrant Caffe Inc. wants to blend in with the big players to show that they also have a high-quality product, while simultaneously stand out to show how innovative and sustainable their offering is. That is why the choice for contrarian branding is made for Caffe Inc.: Caffe Inc. can emphasize their product characteristics of being advanced, trustworthy and sustainable. See figure 21. Advanced shows their innovativeness, while trustworthy shows that it is quality oil and sustainable is about the sustainability and circularity. The contrarian branding is used to create the final positionings.

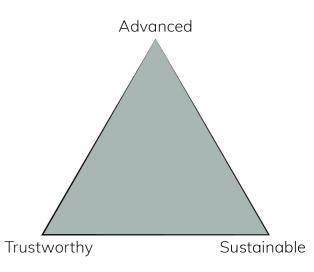


Figure 21: Contrarian branding

## 8. The go-to-market strategy

In this chapter the final go-to-market strategy will be introduced. The insights derived in research served as building blocks for creating the strategy.

First, an overview is given, explaining the three horizons. Afterwards, the choices for the horizons are reasoned by the timing and tactical roadmap. Lastly, a more detailed of each horizon is given along with the positions and different elements.

To create structure there has been chosen to focus on the oils for now. The strategy can be used for the colourant but might need a few tweaks.

## 8.1 Overview

The strategy can be divided into three 'horizons', points in the future that Caffe Inc. can work to. These horizons will build up to the final vision of: 'Giving people the power to participate in the transition towards a world where every resource is used to its fullest potential.' In figure 22 an overview of these horizons is shown.

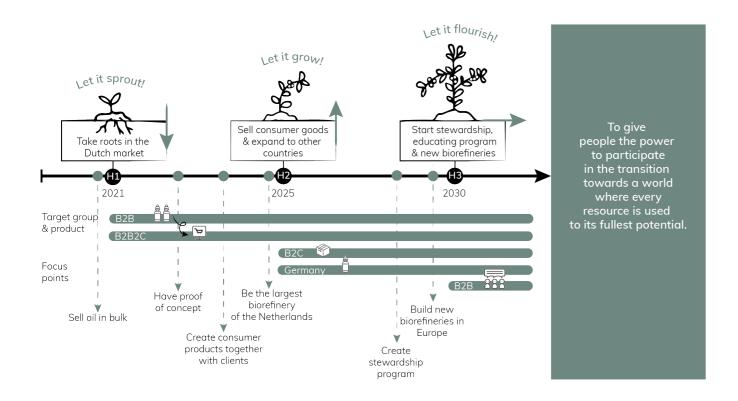


Figure 22: Overview of the three horizons

## **Horizon 1 – Let it sprout!**

Horizon 1 is set to be 2021/2022 and will focus on taking roots in the Dutch market. There is a focus on establishing Caffe Inc. as a brand, company and biorefinery. The goal of this horizon is to build the biorefinery and sell the oil in bulk on the Dutch market and achieve a proof of concept.

The products to be sold will be the oil and colourants to B2B clients, so they can create consumer products from it. The products are preferably sold in bulk as this establishes the first steps to repurposing larger volumes the circular economy needs. To reach the consumers and introduce them to products created from spent coffee grounds a web shop is added to Caffe Inc.'s website where products created from Caffe Inc.'s colourants or oils are sold.

## Horizon 2 – Let it grow!

Horizon 2 is set to be in 2025 will be about growing the company and becoming the largest biorefinery of the Netherlands. There is a focus on expanding the product portfolio and the markets that the product is sold in.

When there is proof of concept, Caffe Inc. can focus on creating fun consumer products, for example personal care, cosmetics or cleaning supplies to stimulate the circular economy. In addition, there can be thought of starting to sell the products in other European countries, preferably Germany.

## Horizon 3 – Let it flourish!

Horizon 3 is set to start in 2030. In this horizon Caffe Inc. is ready to spread its wings and flourish. The product portfolio is further expanded as a stewardship strategy is added, to help the government and other companies to become more sustainable and circular and to give back to the coffee farmers. As the finances are now settled the 'Give back' program can be put into place, and everyone in the coffee supply chain, but mostly coffee farmers, can enjoy the value creation at the end of the chain. The opportunities to expand to other European countries will be explored, looking at putting biorefineries in other countries, Germany, Switzerland.

## 8.2 Tactical roadmap

The tactical roadmap focusses on the reasoning behind the roadmap and the implementation of the strategy. There is a focus on the business model, the markets, trends and resources required. In figure 23 the tactical roadmap can be seen. The next sections elaborated upon the tactical roadmap and implementation of the strategy.

## 8.3 Timing

The timing for the three different horizons is based on the trends and on the resources required to be able to execute the horizons properly. While startups are generally able to grow and pivot quickly, the proposed timeframe for the horizons has been kept broadly. This has been done as all start-ups gave the advice to 'think big, but act small', and to leave room for the unknown. If the resources required to move to the next stage are achieved the horizons can be accelerated.

To move from the first horizon into the second stage it is required to have proof of concept. The proof of concept is evidence that show that the biorefinery for spent coffee grounds is feasible. With the proof of concept, it is easier to convince investors and the foreign businessmen. Additionally, the proof of concept will also make sure that enough spent coffee grounds are processed into oil and colourant.

Adequate financing is needed for the investment in consumers goods. Along with the investment financing is needed to execute the marketing plan that is needed for selling consumer goods. For the creation of the consumer goods more knowledge is needed on the desirability and the feasibility of the oil.

To move from the second to the third horizon the main resource needed is knowledge. Knowledge is required on the expansion to foreign countries and business climate and culture there, to go from selling the products in other countries to building biorefineries there. Furthermore, knowledge is required to build the educational program for governments and businesses. Additionally, adequate funding is required to set up the 'Giving back' program, this will be an additional stream expenses but increases the integrity of the company.

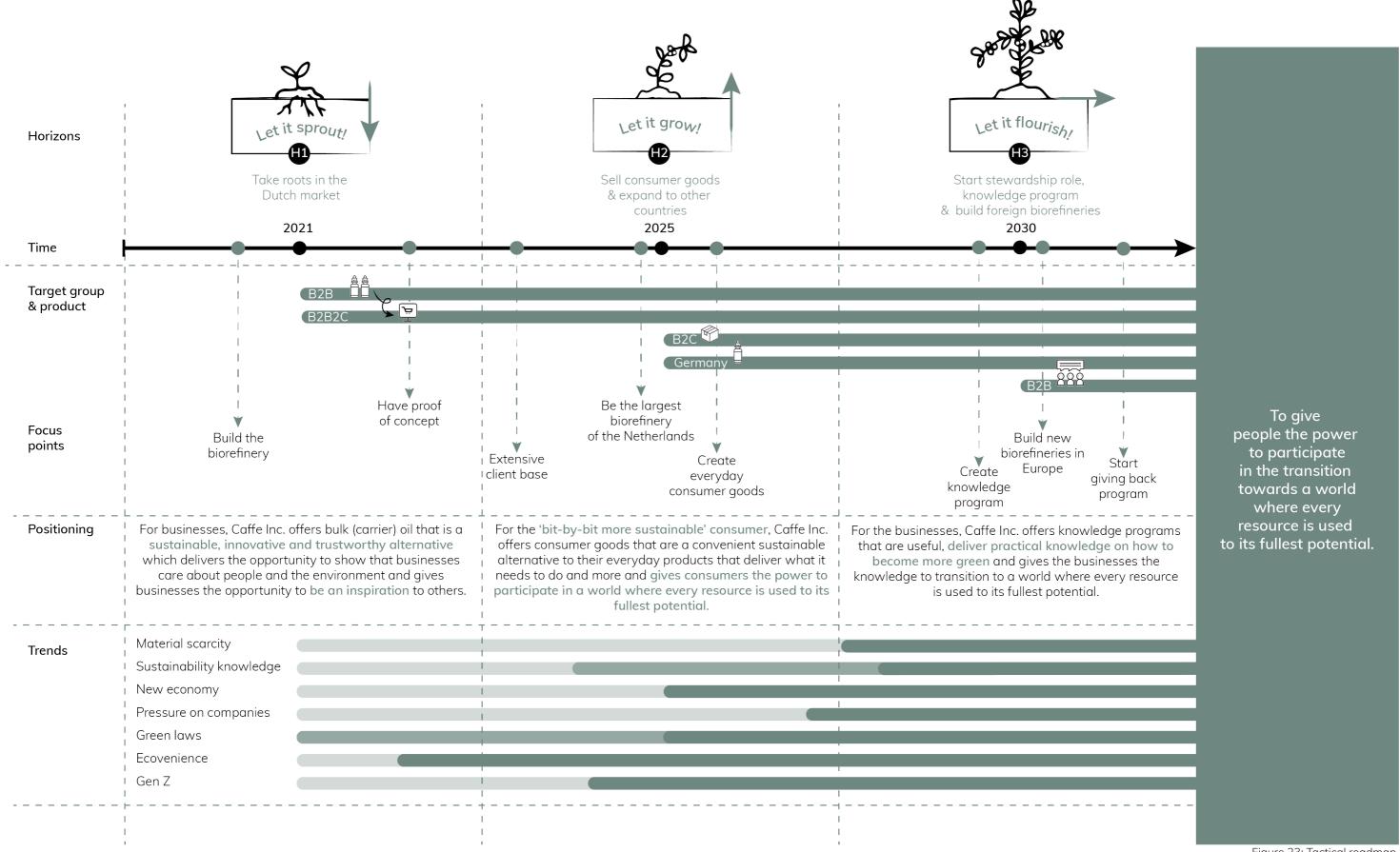


Figure 23: Tactical roadmap.

#### 8.4 Horizon 1 – Let it sprout!

The goal of the first horizon is to build the biorefinery and sell the oil in bulk on the Dutch market and achieve a proof of concept.

#### Time

The first horizon is set to be 2021 or now.

#### Target consumer

The target consumer for the first horizon are businesses who make consumer products from the oil. These businesses are companies that create high quality personal care and cosmetics. Caffe Inc. can offer them the opportunity to show that they care about people and environment.

#### **Positioning**

For businesses, Caffe Inc. offers bulk (carrier) oil that is a sustainable, innovative and trustworthy alternative which delivers the opportunity to show that businesses care about people and the environment and gives companies the opportunity to be an inspiration to others.

#### **Business model**

The business model explains the business case in more detail, through the sustainable business model method of Bocken (2017). It explains the value proposition, the value creation and the value capture.

#### Value proposition

The value proposition says something about the product/service offering, the customer segments and relationships.

Caffe Inc. eliminates the idea of 'waste', by turning spent coffee grounds into useful and valuable input to other production. The product that Caffe Inc. will offer in this horizon is the coffee oil in bulk and is offered to companies who process this into consumer goods. This companies can be brand owners who produce cosmetics or personal care, companies who create these products on commission of other companies. Especially the last type of companies needs to be actively approached as most often they are not looking for new ingredients. If the brand owners experience problems with the purchase or harvest it can be expected they come to Caffe Inc. On the

other side Caffe Inc. proactively works together with the stakeholders, the waste collectors to think with them on collecting and utilising spent coffee grounds. If a shortage is experienced there is a possibility to start working together with central of decentral sources. The full story and production supply chain can be communicated to the customers, to improve the transparency of all companies. For companies it will also be important and interesting to know where their batch of coffee oil came from, which can be displayed to the consumer for transparency as well as a USP.

#### Value creation

The value creation and delivery will tell about the key activities, resources, channels, partners and technology.

The key activities for this horizon will be building the biorefinery, the active search for clients and introducing the product to them and helping them overcome their potential struggles, maybe with the help of a manual. In addition a web shop needs to be implemented and needs to be managed. The partnerships that are established across several industries are to capture and transfer all spent coffee grounds, making sure to deliver to all stakeholders and clients, while keeping in mind the environmental and general well-being. Production process and suppliers are selected because of the environmental and social benefits. The sustainable and circular business model can achieve growth by employing the right channels, and partnering with others. New, and potential unusual partners and business relations are acquired to grow the business, for instance decentral sources or food creators. Resources needed for this horizon are a fully working biorefinery with team. Further more, more time or people need to be spent on the acquisition of potential clients.

#### Value capture

The value capture is about the cost structure and revenue streams.

The economic and environmental costs are reduced by repurposing material and turning spent coffee grounds into value. This makes for a positive contribution to society and environment through reduced footprint, waste and virgin material use, while simultaneously lowering the costs. The price for the oil still needs to be calculated, it needs to be low enough to be competitive, but high enough to cover the costs and initial costs of the biorefinery.

### **Marketing mix**

Create a product sheet with information on the brand, the products and their possibilities and (if interesting) the target consumer.

#### Product

The product to be sold in this horizon is the coffee oil in bulk. The coffee oil will be of high-quality and is safe to use for high-end applications. The product will be presented with a product sheet which includes the specifics of the oil, and if needed how it can be used. The coffee oil offers companies a sustainable, innovative and trustworthy alternative, and gives the opportunity to show that businesses care about people and the environment

#### Price

The price for the oil still needs to be calculated, it needs to be low enough to be competitive, but high enough to cover the costs, risks and initial costs of the biorefinery. If consistently a high-quality product can be created a higher price can be asked. If the product is of lesser quality or fluctuations is quality apparent a lower price should be asked. The price asked for the oil can be changed after time, it is advised to start lower and increase price if quality and/or possible applications are improved.

#### Place

There need to be actively searched for clients. As most companies do not search for new ingredients, possible clients are brand owners who produce their own ingredients for cosmetics or personal care. Furthermore there can be looked at producers who create these personal care products on commission for other companies. These producers usually have a portfolio including all their ingredients, the coffee oil can be added to this portfolio.

Next to that there has been chosen to add a web shop to the website of Caffe Inc. where products created from the oil can be sold, either via Caffe Inc. themselves or affiliate websites. By implementing the web shop Caffe Inc. can showcase the opportunities of the oil to potential customers. In addition, the web shop can be used to attract consumers who wish to buy a product created from spent coffee grounds. Promotion

To properly introduce the oil to the market the AIDA (Awareness, Interest, Desire and Action) steps are considered, in relation to the technology adoption lifecycle of Bohlen and Beal (1957), which can be seen in figure 25. For the first horizon it is important to overcome the chasm, by attracting the early adopters. The early adopters only need a minimum viable product, together with them the product and marketing can be improved to be introduced into the mainstream market.

First awareness is created to explain the possibilities of the oil which is done by introducing the oil via the product sheet and a personalised explanation. Then interest is created by giving a small batch of coffee oil and let the clients experience the coffee oil for themselves.

Caffe Inc. will actively search for these clients and introduce them to the products and their possibilities.

#### Why?

The Netherlands is the biggest im- and exporter of oil and is home to small refineries. This makes the oil market a place with many competitors of which some big players. The oils sold on the market are mainly used for cosmetics, food and personal care. Given the fact that there is an established market in the Netherlands where the oil can be sold it is a chance for Caffe Inc. to start there, established the full business and acquire the proof of concept.

The web shop is added to inspire possible customers of Caffe Inc., and to give people the opportunity to buy products created from spent coffee grounds and thereby stimulate the circular economy.

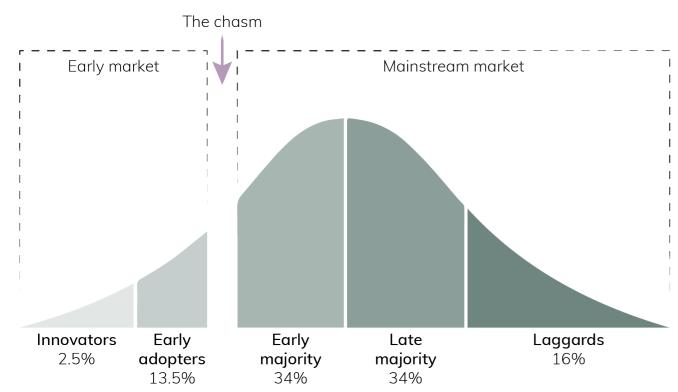


Figure 25: Technology adoption curve.

#### 8.5 Horizon 2 – Let it grow!

The goal of the second horizon is to expand the product portfolio by introducing a consumer good and expand to foreign markets.

#### Time

The time set for this horizon is 2025. This year has been chosen, as by this time Caffe Inc. has acquired proof of concept and the first consumers. The product has been developed further, business is stabilised, the chasm is overcome and hopefully all beginner difficulties have been solved.

#### Target consumer

The target consumer for this horizon is the 'bit-bybit more sustainable consumer' as derived from guestionnaire, which was found in section 5.3. Furthermore, the target market will be the German market.

#### **Positioning**

For the 'bit-by-bit more sustainable' consumer, Caffe Inc. offers consumer goods that are convenient and sustainable alternatives to their everyday products, that deliver whatever it needs to do and more and gives consumers the power to participate in a world where every resource is used to its fullest potential.

#### Mode of entry and entry sequence

For Caffe Inc. it is advised to take the waterfall approach, as competition in the oil market is high but slow moving. Each market is to be entered one by one. If the business is fully established and new applications for the products are thought of, a sprinkler strategy can be used, as the knowledge of the market is available which will make the entry of the new products easier.

For the mode of entry there has been chosen to use the strategy rule of Root (1995), where a best-fitting entry model is created for each foreign market. For this market there has been chosen for a non-equity based entry mode. Non-equity based modes of entry do not require an equity investment and they have a low degree of ownership and control. Export and contractual agreements need to be established. Germany is chosen for the first target country because of the close proximity to the Netherlands.

and favourable business climate.

**Business model** 

The business model explains the business case in more detail, through the sustainable business model method of Bocken (2017). It explains the value proposition, the value creation and the value capture.

#### Value proposition

The value proposition says something about the product/service offering, the customer segments and relationships.

The value proposition for horizon two is almost similar to the value proposition of horizon one. A difference is that the market where there is searched for clients is expended to Germany. Additionally, consumers products are being produced and marketed by Caffe Inc.. To reach the consumers there needs to be thought of additional ways of communicating. Relationships need to be established with storefronts and perhaps marketing companies.

#### Value creation

The value creation and delivery will tell about the key activities, resources, channels, partners and technology.

The key activities in the second horizon are an active search for clients in Germany, getting the contractual agreements right. Simultaneously, the consumer product needs to be developed. For creating the consumer product Caffe Inc. either needs to partner with a producer or needs to acquire knowledge, technology and people to design in in-house. Additionally, the partnerships and relations with all stakeholders and clients need to be kept as in the first horizon.

#### Value capture

The value capture is about the cost structure and revenue streams.

lust as in the first horizon, the economic and environmental costs are reduced by repurposing material and turning spent coffee grounds into value. This makes for a positive contribution to society and environment through reduced footprint, waste and virgin material use, while simultaneously lowering the costs. In this stage the price for the oil can be recalculated to see if it still competitive and reflects the costs and worth of the oil.

#### **Marketing mix**

#### Product

The product to be sold in the second horizon will be the oil to the German market and a consumer good to be produced by Caffe Inc..

The consumer good to be created will be an everyday personal care product. However, in time covered there might be more knowledge on the use and potential of the coffee oil and there can be thought of more everyday products. From the questionnaire it was derived that people want a product for everyday use, this can be either a shampoo, hand wash or hand crème, as they preferred it not to be cosmetics. Most importantly is the story that the product will explain to the consumer, not only that of Caffe Inc. but also about the need of the circular economy.

#### Price

The price of the consumer goods needs to be calculated as well, it needs to be low enough to be competitive, but high enough to cover the costs, risks and initial costs of the production. The price of the oil needs to be recalculated to reflect the current situation

#### Place

Comparatively to the first horizon, in this horizon there needs to be actively searched for clients. In the German market there will be looked for the producers to be put into their portfolio and for the brand owners who produce their own personal care products.

The new consumer good of Caffe Inc. can be sold through their website and can be introduced into several storefronts.

#### Promotion

In the second horizon the last two steps of the AIDA model are fulfilled: Desire and Action. The last two steps of the AIDA model are targeted at the early majority. In the first step, desire, the desire by the mainstream market is awakened as Caffe Inc. has the proof of concept and products created by other companies to prove so. As the mainstream market now has an example of what the product could do for them, they are more likely to try the product for themselves. In the final step of the AIDA model, Action, the companies are set to take action. It this stage is needs to be made clear to the companies

where the product can be bought, what it exists of and what the benefits are. For this stage the website of Caffe Inc. can be used. If needed a back-end can be created where only clients of Caffe Inc. can come and find more information on the product.

#### Why?

The timing has been chosen as the Europe Green Deal is coming closer, the need for sustainable and circular materials is growing and Caffe Inc. has a proof of concept which make them more appealing.

Germany has been chosen for its favourable business climate, the adoption to the circular economy, the close proximity and because Germany is largest importer of many different oils, which are mainly used for cosmetics.

The choice for consumer goods is to stress the need of a circular economy with the consumer. Currently the consumer already

#### 8.6 Horizon 3 – Let it flourish!

The goal of the third horizon is to add the knowledge programs to the product portfolio, build biorefineries in foreign countries and start the giving back program.

#### Time

This horizon is set for 2030. With Europe's green deal and the Paris climate agreement, several countries and governments have promised to be partly, or fully, circular by now. This will increase the need for Caffe Inc.'s product and knowledge.

#### Target consumer

The target consumers will be the consumers and businesses from the first and second horizon along with companies or governments who want to improve their business and become more sustainable or circular.

#### **Positioning**

For businesses, Caffe Inc. offers knowledge programs that are useful, deliver practical knowledge on becoming more sustainable and circular and gives businesses the knowledge to transition to a world where every resource is used to its fullest potential.

### **Mode of entry**

To build a biorefinery in a foreign country, Caffe Inc. needs to think about mode of entry and the level of commitment they want. In both cases there needs to be found a local partner who wants to collaborate with. A lower level of commitment is set when there is chosen for a non-equity based mode, which can be licensing or franchising. With licensing or franchising the intellectual property is shared with an organisation that can build the biorefinery. Another option is to make an investment, build the biorefinery themselves and train personnel accordingly, this way less intellectual property is shared. Higher levels of commitment are necessary with equity based modes of entry as joint ventures or wholly owned subsidiaries, where complete organisations are acquired.

For Caffe Inc. it is advised to choose a non-equity based mode, as this expects a lower level of commitment and risks. Licensing or franchising is the preferred mode of entry. With the right contractual agreements the circular economy in other countries can be stimulated, biorefineries can be build and spent coffee grounds can be turned into value.

The preferred countries for building the biorefineries in would be Germany or Switzerland.

#### **Business model**

The business model explains the business case in more detail, through the sustainable business model method of Bocken (2017). It explains the value proposition, the value creation and the value capture.

#### Value proposition

The value proposition says something about the product/service offering, the customer segments and relationships.

In addition to the value proposition of the previous two horizons, in this horizon the knowledge programs, the biorefineries in foreign countries and the giving back program are added. The knowledge programs add the sharing of knowledge to stimulate the circular economy. This will add the governmental institutions as clients, as Caffe Inc. can help establish programs and laws around the circular economy. Additionally, other companies who want to become circular, more sustainable or want to know more can become clients. Schools or educational institutions can also use this service to provide scholars with information on the circular economy.

The biorefineries in foreign countries will reach consumers in these countries and stimulate the circular economy there. The full story and production supply chain can be communicated to the customers. Caffe Inc. also wants to give back to the supply chain, for example by providing fair wages to the coffee farmers to also ensure their long-term health and well-being through a giving back program. The full story and production supply chain can be communicated to the customer.

#### Value creation

The value creation and delivery will tell about the key activities, resources, channels, partners and technology.

Caffe Inc. will share knowledge through a knowledge program for scholars and companies alike. This can be done by giving lectures, create a knowledge platform with information and by giving recommendations to the governmental institutions. A stewardship role will be taken on by Caffe Inc. by introducing the 'Give back' program, to make sure everyone in the supply can benefit, partnerships with business higher in the supply chain need to be established.

#### Value capture

The value capture is about the cost structure and revenue streams.

In the third horizon an extra revenue stream is added with the introduction of the knowledge programs, however by introducing the giving back program extra costs are made. The social costs of the giving back program will probably pay off in the future as this will improve the story of Caffe Inc.. Building biorefineries in foreign countries will ask for an initial investment as well, additional to the costs for the contractual agreements.

### **Marketing mix**

#### Product

The product to be sold in this horizon is the knowledge programs. The knowledge program will exist of lectures that can be given at institutions, conferences, classrooms, businesses, etc. and a more detailed program which is focus on giving personal advice and working together with companies or institutions that want to become greener.

#### Price

The price for the knowledge programs is dependent on the amount of work that goes in to each talk or workshop. If the clients want it to be custom the price will be higher.

#### Place

As Caffe Inc. has made its mark by now, there is a probability that the clients will come to them. In addition, Caffe Inc. can do some talks at conferences or the circular economy week to show what the possibilities are. More information can be added to the website.

#### Promotion

The promotion for the knowledge programs will be done through networking and explaining the possibilities to everyone.

#### Why?

Caffe Inc. believes that the wins of a company should be shared, not only sharing the gained knowledge to stimulate the circular economy but also give back to the supply chain and close that loop.

Other countries also drink enough coffee, so in other countries there is a need to do something with that on big scale as well. Transporting all the spent coffee grounds to the Netherlands, would not be viable, that is also a reason to choose to expand to foreign countries. Switzerland drink large amounts of coffee and has good numbers on the ease of doing business, which makes them a good candidate for building a biorefinery there.



# **PART FOUR - Finalisation**

In part four the conclusion to the project is given as well as what this means for Caffe Inc.. Afterwards, the outcome of the thesis will be discussed for the viability of the project, along with the limitations of the thesis and recommendations for further research. The chapter ends with a reflection on the process of this project as well as a personal reflection.

### Content

Conclusion

Conclusion

Contribution to strategic design practice and the circular economy

#### Discussion

Innovation sweet spot Limitations Recommendations

#### Reflection

Reflection

## **Conclusion**

In the conclusion the answer to the main research question is given. Afterwards, there will be discussed what that will mean for Caffe Inc..

#### **Answering the research question**

This thesis explored the company of Caffe Inc., their offerings and doings and the context that they work in

Caffe Inc. is currently taking the first steps in creating value from spent coffee grounds. They wish to grow as a company and to build the largest biorefinery for processing spent coffee grounds into colourants and oil. With the biorefinery they want to stimulate the circular economy and show to everyone what the possibilities for repurposing are, and to prove that waste does not have to exist. The need for the circular economy is high, due to our current linear economy valuable resources end up on the landfill, the climate is changing and resources are getting exhausted.

The products that Caffe Inc. create offer many possible applications. However, Caffe Inc. still needed to establish in market(s) their products are of value and how they should position themselves and their products there. To provide a relevant advice and strategy to Caffe Inc. the following research question was established:

### How and where should Caffe Inc. position their products in the market?

To answer the research question a go-to-market strategy was formed as a roadmap covering the steps that need to be followed when entering the target markets. It explains which markets to enter and how to successfully enter them. For Caffe Inc. it was established that they should first focus on taking roots in the Dutch market. In this horizon of 4 years, from now to 2025, they can build the biorefinery, start selling the oil in bulk to personal care manufacturers, brand owners and producers, create an extensive list of clients and aim to have proof of concept. For the potential clients the oil will be positioned as a

sustainable, innovative and trustworthy alternative which delivers the opportunity to show that businesses care about people and the environment and gives companies the opportunity to be an inspiration to others. Together with their clients Caffe Inc. can improved the oil. Caffe Inc. can reach their goal of having the largest biorefinery for used coffee by 2025.

After this has been achieved and Caffe Inc. has proved that their concept works they can move to the second part. The goal of the second horizon is to expand the product portfolio by introducing a consumer good and expand to foreign markets. A consumer good is created to stimulate the circular economy and tell Caffe Inc.'s story directly to the consumer, along with stressing the need of a circular economy. The consumers prefer an 'everyday product', so they can more easily transition to adding circular products to their everyday life. The consumer good will be positioned as: For the 'bit-by-bit more sustainable' consumer, Caffe Inc. offers consumer goods that are convenient and sustainable alternatives to their everyday products, that deliver whatever it needs to do and more and gives consumers the power to participate in a world where every resource is used to its fullest potential.

As Caffe Inc. is now fully rooted in the Dutch market, foreign markets can be explored. Germany is seen as most promising because of its close proximity, the high oil import, the ease of doing business, the transition to the circular economy and because a lot of cosmetic manufacturers can be found there.

In the third horizon, which starts in 2030, Caffe Inc. will focus on sharing their wins. They can implement knowledge programs to educate institutions, scholars and companies on the circular economy. Additionally, workshops or special advice sessions can be done to give companies or institutions a more personalised

advice on how they can become more green and circular. The knowledge programs will be positioned as knowledge programs that are useful, deliver practical knowledge on becoming more sustainable and circular and gives businesses the knowledge to transition to a world where every resource is used to its fullest potential. They will also focus on implementing a giving back programs, and sharing the turnover with the people higher in the supply chain.

## Contributions to strategic design practice and the circular economy

While answering the research question, this project contributes knowledge to the strategic design practice and the circular economy. It has shown how a strategic design practice can contribute to the circular economy and vice versa. The literature on designing and positioning in the circular economy is not yet as advanced as for the linear economy. This thesis hopefully inspires other scholars or circular companies of the possibilities of strategic design.

## Discussion

In the conclusion the answer to the main research question is given. Afterwards, there will be discussed what that will mean for Caffe Inc..

#### **Innovation sweet spot**

To create a successful innovation many try to hit the innovation sweet spot, Calabretta (2016) defines the sweet spot of innovation as the combination of desirability, feasibility and viability, see figure 26. Desirability is about the actual need of the user. Feasibility is about the ability, technological and operational, to deliver the innovation. Viability is about the ability and sustainability of the business model. Creating a balance between people, technology and business would make the project viable. With the growing need for a circularity and sustainability another criteria can be added: integrity. Integrity is about how the innovation impacts society and the planet (Shahbazi, 2020). Adding integrity to the innovation sweet, will create a new innovation sweet-spot, see figure 27.

For this project it was not only intended to hit the innovation sweet spot but also think about the impact it may have. This project has been executed in the context of the circular economy and it was important that this was reflected in the project.

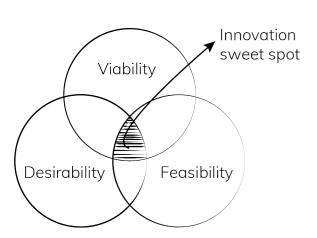


Figure 26: Old innovation sweet spot.

Based on the outcome of this project, I believe that there has been designed in the new innovation sweet spot. The integrity and feasibility lie mostly within the capabilities of Caffe Inc. and have only been briefly touched upon. Through the consumer questionnaire the desirability of the product has been improved and the interviews and market research improved the viability.

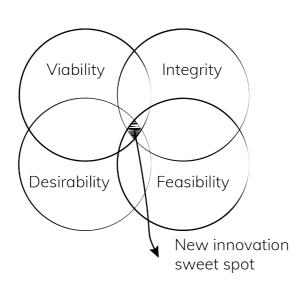


Figure 27: New innovation sweet spot.

#### Limitations

#### The scope

The scope of this project has been limited twice, first by not including the residue and secondly by leaving the colourants out of the go-to-market strategy.

The interviews with the circular start-ups could have been done face-to-face, however due to COVID-19 this was not possible. Face-to-face interviews provide more cues on the emotions of the interviewee as well as the possibility to further probes. This could have had an impact on the quality of the interviews conducted and insights found.

#### Go-to-market strategy

The go-to-market strategy provides a general overview of the possible phasing and steps that can be taken by Caffe Inc.. There are more ways to achieve the vision and only time can tell whether these are actually the right steps. The proposed steps in the go-to-market strategy are an estimation, unforeseen circumstances might need to quicken or slow the steps of the go-to-market strategy.

#### Lack of knowledge

Due to a lack of knowledge on the technical properties and applications, little effort has been made into creating a completely new product (category) for Caffe Inc. While adding an unforeseen product idea for Caffe Inc. into the go-to-market strategy, this has not been achieved. However, this does not mean that in the future, more product ideas are possible for the offerings of Caffe Inc..

#### Recommendations

Based on the limitations of the previous section and the results of the research, the recommendations are drafted.

#### Residue and colourants

The residue and colourants have not been adopted into the go-to-market strategy. While the products can probably be marketed in the same way it is advised to take another look at this.

#### Validation

The go-to-market strategy has not been validated with the company. A few of the found insights that contributed to the go-to-market strategy were validated, this session proved a lot of insight on the applicability or certain insight. For the final creation another of this session might have been useful to validate whether Caffe Inc. has the resources to execute the strategy.

A validation session with the intended target consumers for the positionings might also prove worthy to establish whether the target consumers feel identified with the positionings.

#### Strategy execution

It is advised for Caffe Inc. to measure the value and impact of the strategy, as some parts of the strategy are estimations and not yet proven. By measuring and evaluating the impact of the strategy can be measured and if needed it can be adjusted accordingly.

## Reflection

To end this thesis a personal reflection is given on the personal ambitions and experiences.

I am glad that I was able to find a project that aims to create a more sustainable future, during my studies I also found these projects to be the most rewarding. Furthermore, I believe that there is a great need for more of these projects and that designers have a great responsibility for creating a positive impact.

A challenge is to find the balance between the academic report for the faculty as well as a report for Caffe Inc.. I believe that in this result is a balance where both have got their wishes and there is a relevance for both stakeholders.

#### Personal

Prior to beginning this graduation project, I wrote down a list of personal ambitions, things that I believe I missed out on in the Masters or things that I wanted to do better and would be useful for the rest of my career. These personal ambitions consisted of involving experts and applying co-creation, plan things right and to become more visual.

Together with Caffe Inc. multiple brainstorms and creative sessions were executed. I got a lot of positive feedback on those session and they provided a lot of insights. I believe involving the other party into the project has proven to be really valuable for both parties and also created some engagement and a feeling of ownership by Caffe Inc.. It was great to organize these sessions, they provide me with a lot of insight but also with some much-needed inspiration and motivation. Furthermore, I involved experts by interviewing circular start-up. At first, I feared the time this would cost me. But for the amount of insights they provided me, it was totally worth it. The same went for including the clients of Caffe Inc. or getting in contact with cosmetic companies. Even though, it might seem meaningless at first, it provided me with so much insights and they also surprised me in how eager they wore to help me.

My more personal goals were to plans things right and to become more visual. Creating the visuals has been challenging at times, however it is nice to see how they all turn out and how much I have grown on creating them. Especially, the infographic for the questionnaire or the interview insights are so much easier to read now that they are in a visual. The planning at times still was a challenge, I wrongfully estimated how much time certain things would cost me. However, I managed to stay on top of my work and do most of the work between office hours. To achieve this, prioritising is key, which is hard, but sometime you have to let things go.

Another challenge were the COVID-19 restrictions. I am glad that I was able to execute my project at the company. This provided a certain motivation as I was doing it for someone else as well as inspiration from beyond the IDE faculty. The COVID-19 restrictions were limiting as I enjoy working around and with people, my bedroom is just not that inspiring. This limited my creativity as well as sometimes my motivation. The few days that I was able to work at the IDE faculty were often the most productive days of the week.

One of the main take aways, which I will also use in my future career, is to dream big and act small. The advice was given by all circular start-up as well as Caffe Inc.. While writing this thesis I often found the task of writing it all down daunting. Instead of letting the reporting become a bigger and bigger task, the best thing to do was to see as a process of smaller steps. Sometimes the step could even be to just start writing as to not fear the blank page. This quote also let me realise that every project you do and choice you make will help into getting one step further onto reaching your goal.

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X

Y

Z



# **Appendix**

- Content
  A. Project brief
  B. Brainstorm 1
  C. Interview guide
  D. Consumer questionnaire
  E. Results consumer questionnaire
  F. Creative session

#### Procedural Checks - IDE Master Graduation

# A. Project brief

### **IDE Master Graduation**

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- · SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

#### USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser

SIUDENI	DAIA & N	MASIERI	PRUGE	RAMME

Save this form according the format "IDE Master Graduation Project Brief\_familyname\_firstname\_studentnumber\_dd-mm-yyyy".

Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1!

family name	Clein	4583	Your master program	nme (only select the options that apply to you):
initials	T. given name Tiffany		IDE master(s):	☐ IPD ☐ Dfl ★ SPD
udent number	4356829		2 <sup>nd</sup> non-IDE master:	
street & no.			individual programme:	(give date of approval)
zipcode & city			honours programme:	Honours Programme Master
country	The Netherlands		specialisation / annotation:	Medisign
phone				Tech. in Sustainable Design
email				Entrepeneurship

#### SUPERVISORY TEAM \*\*

** chair ** mentor	Erik-Jan Hultink Renske van den Berge	dept. / section: MCR dept. / section: MCR	•	Chair should request the IDE Board of Examiners for approv of a non-IDE mentor, including motivation letter and c.v	
2 <sup>nd</sup> mentor	Josephine Nijstad		0	Second mentor only	
	organisation: Spaak Circular Solution	ns b.v.		applies in case the assignment is hosted by	
	city: Amsterdam	country: The Netherlands		an external organisation.	
comments (optional)			0	Ensure a heterogeneous team In case you wish to include to team members from the same section, please explain why.	

ard of Examiners for approval non-IDE mentor, including a vation letter and c.v..

ire a heterogeneous team. ase you wish to include two n members from the same ion, please explain why.

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30

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#### APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair <u>Erik-Jan Hultink</u>	date	- signature
CHECK STUDY PROGRESS  To be filled in by the SSC E&SA (Shared Service The study progress will be checked for a 2nd time		udent Affairs), after approval of the project brief by the Chair. light meeting.
Master electives no. of EC accumulated in total:	_36 EC	YES all 1st year master courses passed
Of which, taking the conditional requirements into account, can be part of the exam programme	_30EC	NO missing 1st year master courses are:
List of electives obtained before the third semester without approval of the BoE		
name <u>C. van der Bunt</u>	date <u>23 - 11</u>	C. van Digitally signed by C. van der Bunt Date: 2020_11.23 - 2020 signature Bunt 11:56:31 +01'00'

#### FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked \*\* Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks?

 Does the composition of the supervisory team comply with the regulations and fit the assignment?

Content:	★ APPROVED	NOT APPROVED
Procedure:	★ APPROVED	NOT APPROVED
1		1
		comments

name Monique von Morgen	date <u>07 - 12 - 2020</u> signature	
IDE TU Delft - E&SA Department /// Graduation	project brief & study overview /// 2018-01 v30	Page 2 of 7
Initials & Name T. Clein	4583 Student number <u>4356829</u>	
Title of Project <u>Creating a go-to-market stra</u>	ategy for the circular start-up Caffe Inc.	



#### Personal Project Brief - IDE Master Graduation

#### Creating a go-to-market strategy for the circular start-up Caffe Inc. project titl

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date <u>16 - 11 - 2020</u> end date

#### INTRODUCTION \*\*

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money....), technology, ...)

When making your daily cup of coffee, you're only using 1% of the coffee. The other 99% gets thrown away but isn't any less useful. Luckily Caffe Inc. found a way to the other 99% of your cup. They produce ink and oil and with the residue that is left other beautiful products can be created. This graduation project will be executed for Caffe Inc, a small start-up that is working hard to become the largest biorefinery and processor of spent coffee grounds by 2025.

Caffe Inc. has been working hard for the last two years. The complete extraction process is known and the first machinery has been bought. Multiple markets have been scanned, several seemed worthy of trying, but not yet one clear market has been indicated where luck would be found easily. A pilot biorefinery is running and research on the potential and the quality of the oils and colourants is being done. The first trials of colouring textiles have proven to be successful and the oil has some exiting active ingredients that could be of great value to, for instance, the cosmetics industry. The first partnerships for developing products are being established and funds for scaling the start-up are coming in. Yet there is little knowledge on how to move from here. There is a goal to become the largest biorefinery by 2025, but what steps need to be taken in order to get there are more or less unclear. Raising funds, doing the pilot tests and general tasks are taking up a lot of time. Caffe Inc. is just going with the flow, seizing every opportunity that comes along. To achieve their goal it is getting more and more important to start thinking about the future and what needs to be done to get there. It is time to grow into a viable business with a sustainable business model and to create the market opportunities themselves instead of waiting for them to come along. A plan for the coming five years with an idea on what markets are of value to Caffe Inc. and how a viable business can be created is of great importance to them

As of right now, Caffe Inc. has no strategic approach on how to grow and become the largest biorefinery of the Netherlands by 2025. There is a limited plan for what needs to be done in the coming 5 years, but this is mostly based on the technical aspects. There are some ideas on what kind of product/service Caffe Inc. can offer, but they are still questioning which markets are of most value. This lack of information on the market and their business' opportunities makes for no overview on the market opportunities and thus strategies of growth.

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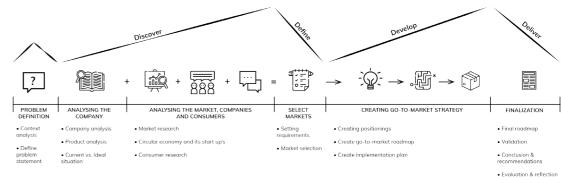
Initials & Name T. Clein 4583 Student number 4356829

Title of Project Creating a go-to-market strategy for the circular start-up Caffe Inc.

### **TU**Delft

#### Personal Project Brief - IDE Master Graduation

introduction (continued): space for images



E Time

image / figure 1: The approach

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Initials & Name T. Clein 4583 Student number 4356829

Title of Project Creating a go-to-market strategy for the circular start-up Caffe Inc.



### Personal Project Brief - IDE Master Graduation

#### PROBLEM DEFINITION \*\*

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

Caffe Inc has a lot of potential and it is a shame to not get the most out of it. It is important for Caffe Inc to know what they are able to do and have a clear goal to work at with concrete steps on how to get there. Due to the ability of start-ups to react fast to their environment and work agile, growth can generally be reachable in a short time. With the right steps start-ups can rapidly scale up and utilise opportunities to their fullest potential.

In order to become the largest biorefinery Caffe Inc needs to establish in which market(s) their offerings are of value, where they want to be, and how they should position their offerings there and which market to enter in which order. Then there can be thought of a strategy to achieve growth in these markets and grow as a company.

Other questions to answer in this project:

- What is the product/service that Caffe Inc can offer?
- What are the market opportunities for these product/services? Which markets are off value? How should they position themselves in these markets?
- · As the circular economy is guite new and evolving rapidly, there isn't a lot of knowledge of how start-ups in the circular economy should behave. What is the influence of this start-up being circular and how can it benefit from that? • What is the perception of coffee waste products in the market or with consumers, how will this affect the
- Besides markets, in which countries should Caffe Inc. offer their products? Looking at Benelux, Germany, France and Switzerland, what changes when entering the market in a different country?

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, .... In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

A go-to-market strategy will be created for Caffe Inc. The go-to-market strategy will explain which markets to enter and how they should position themselves and their offerings in these market. The choices for this strategy are based on extensive market and context research and on Caffe Inc.'s synergies and interests.

The deliverables will be an extensive report on company, products, context and markets, followed by an go-to-market strategy based on the outcome of the research.

The go-to-market strategy will be formed and visualised as a roadmap; the steps that need to be followed when entering the target markets. It will cover the product, the target market, the consumer need to be fulfilled, the competition, the positioning, the pricing, the distribution, a little bit of marketing, and more. The choices for the strategy are based on extensive market and context research and on Caffe Inc.'s synergies and interests.

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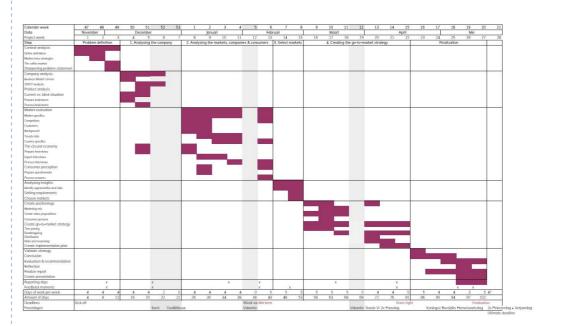
### **TU**Delft

#### Personal Project Brief - IDE Master Graduation

#### PLANNING AND APPROACH \*\*

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

20 - 5 - 2020 start date 16 - 11 - 2020



This is not a fixed approach as I still have to find out the exact and useful elements of the creation of a go-to-market strategy and I might come along better fitting tools or methods to use.

Approach, as can also be seen in figure 1:

Problem definition: First the context will be explored and a deep dive on the problem will be done.

- 1. Analysing the company: Afterwards the company and their products will analysed. There will also be look at where the start-up is now and where they want to be.
- 2. Analysing the markets, its companies and its consumers: In this step the markets, different markets and different countries will be analysed along with start-ups in the circular economy. Next to that a small consumer research will be done on the perception of product made from spent coffee grounds.
- 3. Evaluating and selecting markets: In this step the finding of the previous step will be looked into along with some requirements that need to be set up in order to select the appropriate markets.
- 4. Creating the go-to-market strategy: With all the insights gained in the previous step the go-to-market strategy will be created, showing which markets to be entered, how to position themselves there and how to get there. Finalisation: Finalising the go-to-market strategy, the project and its deliverables and reflect upon those.

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Title of Project	Creating	a a go-to-market strategy for the o	circular start-ui	o Caffe Inc.	



#### Personal Project Brief - IDE Master Graduation

#### MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... . Stick to no more than five ambitions.

#### Motivation

From the projects I have previously done the ones involving actual business cases and people have stuck with me the most. I feel that you learn the most by 'helping and advising' people without a design background; whenever you can explain your concept properly and convince them of the need, that is when you know you succeeded. The projects that where there because of an actual relevant problem or those that would create a positive impact to people and environment would have the most impact on me. I enjoy working on a project that could have a positive impact on people and environment most. I believe that in these times proper design can be of a big influence and when done right could have a positive impact on people, environment and society.

That is also why doing a graduation project for Caffe Inc made sense to me, with my 'designerly' way of working I can help to set/scale up their business so they can enlarge their positive impact on people and environment.

#### Personal learning objectives:

Include co-creation and expert insight

Involve multiple people (not all designers) into the project. To learn from their expertise, by interviews. Get to know what they think about something, by consumer research. As well as brainstorming and co-creation session with the stakeholders. I always find it very inspiring to also see things from a 'non-designerly' perspective.

• Learn to plan things right

The main tip I always got when talking about graduating was plan everything and set deadlines for yourself. As I in previous projects already had problems with this; I would make a planning but not look at it anymore, I think I must include this in order to stay on top of my work. As well as to make it strategic and keep it relevant, evaluation moments will be planned to connect the project back to feasibility, viability, desirability and integrity. Integrity being the added layer based on the impact created. These moment will be planned at the end of each step. These evaluation moments will also be used to reflect on my work, the quality of it and the general process. As well as feedback moments at every step, I also plan to set some days at the end of each step to work a full day on reporting.

Design language

Another wish of mine would be to include more visuals into my work as I believe this is the proper way to explain my 'designerly' ways of working to 'non-designerly' people and make everything more easy to understand.

#### FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevan

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### B. Brainstorm

#### **Uncovering what Caffe Inc. stands for**

#### Goal

Explore what Caffe Inc. is about, what the brand is, what is stands for and what it should look like.

#### **Participants**

Me and the complete team of Caffe Inc.: Josephine Nijstad en Evaluna Marquez

#### Agenda

Introduction 20 min. max

Questions that need answers 20 min. max

Brand DNA 60/80 min. max
Brand manifestation 60 min. max
Next steps +/- 10 min.

#### Content

#### Introduction

In the introduction the activities of the session will be revealed, see agenda. First, the general workings of a brand will be explained, as this is what will be worked on.

#### **Brand DNA**

What the brand encompasses to the consumer in order to meet the values and needs of the consumers. For internal purposes: More or less the 'behind the scenes', the story behind the brand.

#### **Brand manifestation**

How the brand encompasses the message to the consumers. For external purposes: What the consumer sees and hears about the brand, how they will remember it.

Second, a 5 minute brainwriting session will be held, so the session can be started with a clear mind. Third the questions of: 'What makes Caffe Inc. important to you', 'How do you want Caffe Inc. to feel like' and 'What do you want Caffe Inc. to be associated with' is explored', by each participant individually. Afterwards the answered will be shared.

Lastly, there will be looked at the competitors and what they do right and what we do not like about it.

#### Questions that need answers

This part of the brainstorm is about answering more general questions that might help with future decisions and questions to come.

The questions explored:

- Who is the target market? And what are they like?
- Create one brand or multiple brands?
- What are the USP's of Caffe Inc.? What are you proud of? What does your company have that another doesn't?

#### **Brand DNA**

In this 60 minute brainstorm, the brand DNA is explored. The first ideas on the several elements were explored. The elements brainstormed on:

- Purpose: Want do you want to achieve with the product/brand? Or the vision: which change do you want to bring to the world? Why? How?
- Personality: If CARE-Coffee was a person, how would you describe this person? 56 possible character traits were given to choose from.
- Positioning: What CARE-Coffee would do and for whom? Or the mission: what a company is and does. Why is does that and how it does that.
- Values: What do we want to strive for in the company? What do you care about in this company?

#### **Brand Manifestation**

Next up was the brand manifestation, where there was thought about visual element and everything the consumer sees. The elements explored/brainstormed on:

- Value proposition: Rewriting the mission statement as seen from the consumer.
- Brand name: At the time of this brainstorm the company was called CARE Coffee. There was a need for a new name so there has been brainstormed on the possible options, and the requirements for a new name. The linguistic naming toolbox from Globrands has been used as inspiration.
- Logo: Explore the different possibilities; only typography, monogram, emblem, combination, etc. Exploration on the internet for logos liked.
- Key message + slogan: Explore the different suggestions, create a list.
- Tone of voice: Exploring the way to communicate with the world. What examples can be thought of, why are these good.
- Colour: Thinking of what the colours need to reflect, what colour scheme is liked.
- Imagery: Explore the possibilities by collages previously made, what kind of feeling does it give and what would you like to give.

#### Next steps

Exploration of what has been done, and what needs to be done in the following meetings.

#### Results

The complete results of the brainstorm are confidential and can be made available upon request. The results useful for this thesis can be found in the thesis.

# C. Interview guide

#### Goal

Learn from the experts. Learn from the mistakes and successes of others. Explore the possibilities and uncover and be ahead on mistakes and steps needed to be made. Find out how other circular start-ups introduced themselves and their products to the market. What and why would they have done some things different if they could do it again.

#### **Participants**

Kartent – Co-founder Bundles – Founder Seenons – Circular relationship manager Bikeflip – Co-founder

The names of the interviewees are withheld for privacy reasons, the names are available upon request.

#### Interview guide

Allereerst, is het oke als ik dit gesprek opneem?

#### Introductie

Mijn naam is Tiffany, voor mijn afstuderen aan de TU Delft, master Strategic Product Design, ben ik aan het onderzoeken hoe circulaire start-ups zichzelf goed kunnen positioneren op de markt. Ik ben bezig met het creëren van een go-to-market strategy voor de circulaire start-up Caffe Inc. die van koffiedik olie en pigment maken. Maar in mijn onderzoek merkte ik dat er weinig literatuur te vinden is die specifiek voor start-ups, laat staan circulaire start-ups te vinden is. Nu weet ik natuurlijk niet of er een verschil is voor markt introducties tussen start-ups, circulaire start-ups en andere beginnende bedrijven, maar daar kom ik graag achter. Vandaar dat ik met een aantal experts aan de praat ga om te kijken of er nog iets interessants te vinden is. Zo ga ik opzoek naar of er voor(oor)delen voor een circulaire start-up zijn. Hoe circulaire start-ups (succesvol en niet zo succesvol) zijn begonnen en zich positioneren op de markt.

Voor dit korte interview heb ik een paar vragen over jouw bedrijf, hoe het begonnen is. Hoe de markt introductie is gegaan en als laatste of je nog tips voor beginnend circulaire start-ups hebt.

Voor wij beginnen, heb jij nog vragen voor mij?

#### Vragen

Introductie:

- Wie ben je?
- Wat is je bedrijf?
- Wat doe je?
- Wat is je functie?
- Hoe ben je op dit idee gekomen?
  - Wat was het moment waarop je dacht: hier moet ik mee aan de slag?
  - Hoe begin je?
- Waar was je bang voor je dit begon?

#### Circulaire start-up:

• Wat maakt iets voor jou een circulaire start-up?

- Hoe is jouw bedrijf circulair?
- Heb je bewust circulariteit als USP gebruikt om je start-up bekend te maken?
  - Of is dat iets dat je juist niet moet doen?
  - Waarom wel/niet?
- Wat zijn de voordelen van een circulaire start-up ten opzichte van een niet circulaire start-up?
  - Hoe merk je dit in de markt?
- Wat zijn de nadelen van een circulaire start-up ten opzichte van een niet circulaire start-up?
  - Hoe merk je dit in de markt?

#### Markt introductie:

- Heb jij je bedrijf en producten geïntroduceerd op de 'normale' markt?
  - Hoe ging dat?
  - Zijn er voordelen voor circulaire producten op de 'normale' markt introduceren?
  - Of vooroordelen?
    - Hoe merk je dat?
- Wat was er vantevoren allemaal klaar?
  - Wat was nog niet allemaal klaar?
  - Wat voor invloed had dat?
- Wat ging er goed?
  - Wat ging er niet goed?
- Had je achteraf iets anders willen doen?
- Mocht je het nu allemaal nog een keer kunnen doen, wat zou je veranderen?

#### Tins:

- Zijn er tips die jij aan circulaire start-ups die nog in de beginfase zijn, zou willen meegeven?
  - Waarom deze tip?
- Wat kan er volgens jou gedaan worden de markt introductie van circulaire start-ups te vergemakkelijken?
- Wil je nog iets kwijt?

#### Afsluiting:

Bedankt! Heb jij nog vragen of tips voor mij?

# D. Consumer questionnaire

#### Introduction

There has been chosen to do the questionnaire in Dutch as it is about the Dutch consumers. Answering questions in your own language is found to be easier and to give more truthful answers.

The questionnaire exists of 20 questions and would take a maximum of 10 minutes to fill out. 144 respondents filled out the questionnaire.

#### Goal

The goal of the questionnaire is to find out how consumers think about recycled products and products created from SCG.

#### Questionnaire

#### Introductie

Korte introductie over het grotere onderzoek en wat je van deze questionnaire kan verwachten. En bedanken. Superfijn dat jij mee wil doen aan mijn korte onderzoek! Voor mijn afstuderen aan de TU Delft master Strategic Product Design ben ik benieuwd hoe de Nederlandse keuzes maakt wanneer zij iets koopt en wat ze vinden van producten gemaakt van (koffie)afval.

De enquête heeft .. vragen en duurt maximaal 10 minuten.

Nogmaals heel veel dank!

Lieve groet,

Tiffany

#### Shopping behaviour

Deze vragen over hoe jij een keuze maakt tot een aankoop. Het liefst hoor ik hoe jij producten uitkiest die je niet dagelijks koopt. Denk aan een nieuw interieurproduct, shampoo, kleding, etc.

- 1. Welke factoren vind jij belangrijk in de keuze tot een product? Kies er maximaal 3.
- Kwaliteit
- Gemak
- Aanbevolen door vrienden, familie of partner
- Aanbevolen door winkelpersoneel
- Prijs
- Beschikbaarheid van de producten
- Duurzaamheid
- Uitstraling
- Product ingrediënten
- Geur
- Dierproefvrij
- Verpakking
- Anders, namelijk:
- 2. Hoe belangrijk is duurzaamheid in de keuze tot een product?
- Duurzaam is heel belangrijk
- Duurzaamheid is belangrijk
- Het maakt mij niet zoveel uit, geen idee.
- Duurzaamheid is niet zo belangrijk
- Duurzaamheid is totaal niet belangrijk

- 3. Wanneer zou jij een nieuw product proberen? Kies het best passende antwoord.
- Ik wil niets nieuws proberen.
- Wanneer ik iets niet meer fijn vind.
- Wanneer ik iets te duur vind.
- Wanneer iemand mij iets aanbeveelt.
- Wanneer ik denk dat het tijd is voor vernieuwing.
- Ik koop altijd iets nieuws/anders.
- 4. Hoe denk jij over het kopen van producten die zijn hergebruikt of recycled?
- Ik vind dit leuk.
- Ik probeer graag nieuwe dingen uit.
- Ik zie de toegevoegde waarde er niet van.
- Ik vind het niet leuk.
- Anders, namelijk:

#### Coffee products

5. Heb jij ooit gehoord van of bezit je producten gemaakt van koffiedik?

- Indien ja, door met vraag 6. Wat voor producten ken/bezit je? Vul in: 7. Hoe denk je hierover? Vul in:
- Indien nee. 8. Wat denk je dat er voor producten gemaakt kunnen worden van koffiedik? Vul in:

Van koffiedik kunnen veel producten gemaakt worden! Zo kun je de vezels gebruiken voor het creeren van sterke materialen en deze vervolgend maken tot meubilair, koffiebekers, karton en papier. Je kan er olie van maken dat je kan gebruiken in persoonlijke verzorgingsproducten, eten, zeep en meer. En je kan de koffie kleurstoffen gebruiken om textiel mee te kleuren, of ook gebruiken in cosmetica en nog veel meer.

- 9. Wat is het eerste dat je denkt, nu je dit weet? Vul in:
- 10. Wat voor producten gemaakt van een ingredient van koffiedik zou jij kopen? Vul in:
- 11. Wat voor producten gemaakt van een ingredient van koffiedik zou jij NIET kopen? Vul in:
- 12. Waarom zou jij iets gemaakt van koffiedik wel / niet kopen? Vul in:
- 13. Wat denk jij dat de voordelen zijn van producten gemaakt van koffiedik? Vul in:
- 14. Wat zou jij betalen voor een product gemaakt van koffiedik in vergelijking tot een vergelijkbaar product?
- Ik zou meer dan 25% minder betalen.
- Ik zou ongeveer 10% minder betalen.
- Ik zou evenveel betalen.
- Ik zou ongeveer 10% meer betalen.
- Ik zou meer dan 25% meer betalen.
- 15. Zou je een product gemaakt van koffiedik sneller kopen wanneer dit uitgebracht wordt door een merk waar je al bekend mee bent?
- Ja, ik zou het sneller kopen
- Nee, maakt mij niet uit wie het verkoopt
- Nee, ik zal het daardoor niet sneller kopen
- Nee, ik zou het nog steeds niet kopen

16. Wat lijkt jij leuk of niet leuk aan een product gemaakt van koffiedik? Wat maakt dit bijzonder? Vul in:

#### Demographics

Tot slot ben ik benieuwd wie deze enquête heeft ingevuld.

- 17. Wat is jouw geslacht?
- Vrouw
- Man
- Zeg ik liever niet
- Anders

18. In welke leeftijdscategorie val jij?

- 18 24 jaar jong
- 25 34 jaar jong
- 35 54 jaar jong
- 55 64 jaar jong
- 65 75 jaar jong
- 75+
- 19. Wat is jouw hoogst genoten opleiding?
- Basisschool
- Middelbare school
- Beroepsonderwijs
- HBO
- WO
- 20. Waar woon jij op dit moment?
- In een stad
- In een dorp
- Op het platteland
- 21. Als je jezelf moet beschrijven, welke woorden zou jij dan gebruiken? Kies er maximaal 3.
- Charmant
- Creatief
- Dapper
- Eigenwijs
- Energiek
- Gezellig
- Handig
- Humeuriq
- Humoristisch
- Ingetogen
- Intelligent
- Kieskeurig
- Lui
- Lief
- Nieuwsgierig

- Onhandig
- Uitgesproken
- Verzorgd
- Vrij
- Vrolijk
- Zakelijk
- Zelfbewust
- 21. Wat doe jij het liefst in je vrije tijd? Kies er maximaal 2.
- Sporten
- Met vrienden chillen
- Koken
- Muziek luisteren
- Creatief bezig zijn
- Spelletjes
- Lezen
- Films of series kijken.

#### Einde

Bedankt voor het invullen van deze enquête!

Ben ik nog iets vergeten te vragen? Of wil je nog wat zeggen? Laat het hieronder achter! Vul in:

## E. Results consumer questionnaire

The respondents: 144 in total, 107 females, 37 males. Of which: 20.8% 18-24 year olds, 29.2% of 25-34 year olds, 20.8% of 35-54 year olds, 22.9% of 55-64 years old and 6.3% of 65-75 year olds.

In their free time: most enjoy chilling with friends - 50.3% or sporting - 42%. Next to that the people enjoy: watching movies or series - 25.9%, reading - 24.5%, cooking - 21.7%, being creative - 18.2%, doing games, 9.8%, listening to music - 8.4%, making music - 7%, walking - 1.4%. Other answers given - 0.7%: gardening, walking with friends, biking, do outside, riding a motorbike, enjoy drinks with friends,, go on the internet, do nothing.

Most of them -51.4% have finished WO, 32.6% HBO, 9.7% beroepsonderwijs and 6.3% of middelbare school. Of all respondents 67.4% lives in a city, 29.9% in a village and 2.8% in the countryside. The respondents find the following most important in selecting products: Quality -92.4%, Price -74.3% and sustainability -34%. The other factors were scored the following: Recommended by friends or family -32.6%, appearance -29.9%, the ease of use -22.9%, ingredients -11.1%, smell and availability -6.9%, not tested on animals -4.2%, packaging -2.8%, recommendations by shop personnel -1.4%, and 1.4% mentioned it differs per product.

64.3% + 12.6% of the people finds sustainability important the selection of a product. Yet only 34% selected it as one of the three most important factors in the previous question. 12.6% finds sustainability very important in the selection of a product. For 17.5% sustainability doesn't really matter and 5.6% doesn't find it that important. No one found sustainability to be unimportant.

People are overall eager to try new things, only 4.2% never wants to try something new. People will try new products whenever it is time – 36.1%, whenever someone recommends the product – 28.5%, whenever their current product runs out – 26.4%, or becomes too expensive – 2.8% or they constantly buy new products – 2.8%.

Only 2.1% of the respondents do not like the idea of reused or upcycled products and another 42.8% has some extra requirements to the idea of reusing/recusing or upcycling. 67.4% likes the idea of reused or recycled products, and 22.2% likes the idea of it being something unique. The remaining 3.5%, 8 people, has mentioned reasons as: 'nice, but no refurbished appliances or second-hand' – 2x, 'I like the option but it is not for me' – 2x, 'it depends on the product' – 2x, 'just a way for companies to ask more money' – 1x and 'I find this important' – 1x.

Around 68.1% of the respondent have never heard of products created from SCG. 31.9% have heard of products made from SCG.

Of the 31.9% that has heard of products from SCG most of them mention products like: a base to grow mushrooms on -12x, coffee mug -10x, notebooks -6x, soil -5x, soaps -5x, compost -4x, plant pots -4x, ink -4x, clothes -3x, scrubs -2x, paint/dye -2x, substitute for strooizout- 1x, lampshades -1x, to clean with -1x, to keep slugs out of the garden -1x, coasters -1x, paper products -1x.

They think this about these products: Positive affirmation. Words used were: 'nice', 'good initiative', 'cool', 'awesome', 'super' -32x, 'Feels good to do something useful with something that would be thrown away'. -4x Sustainable -3x, 'Awesome that these things are possible' -3x, Interesting -3x, Nice smell -2x, 'Deserves more attention' -1x, Expensive though -1x, 'I don't have a feeling about it' -1x

Of all the people - 98 that haven't heard of products created with spent coffee grounds, when asked what they think you can create with SCG they answer:

no idea -26x, products that are usually made of carton -15x, compost -13x, tableware -8x, textiles -5x, scrubs -4x, cleaning supplies -3x, clothing -2x, soil -2x, plant pots -2x, a base for growing mushrooms -2x, furniture -2x, to keep away insects -2x, perfume -1x, toothpaste -1x, substitute for strooizout -1x, gootsteenontstopper -1x, tea -1x, ink -1x, fuel -1x, dyes/paint -1x, kattenbakvulling -1x, oil -1x.

After these question the respondents were all informed about the possibilities of creating with spent coffee grounds.

The responses of people that heard it for the first time: Positive affirmation. Words used are: 'nice', 'cool', 'useful' 'special' – 79x, 'Wow, why didn't I know this before' – 13x, Multifunctional – 12x, 'How?' – 11x, 'Would be a nice material for furniture.' – 4x, 'Really useful' 'Could become big' – 7x, Interesting – 5x, Meh – 5x, 'Where can I buy this?' – 3x, Sounds kind of gross – 2x, 'How does it smell?' – 1x, 'I can make money while drinking coffee?' – 1x. 'Zeer goede en waardevolle producten die meer mainstream aandacht verdienen. Fijn dat materialen hergebruikt worden. Al is het wel zo dat het koffiedik in sommige producten beter tot zijn recht komt dan in andere, waardebehoud van de grondstof staat bij mij voor op.'

The products created from SCG that all respondents would buy: would buy everything. In order of times mentioned: coffee cups – especially in the horeca – 40x, paper products – 37x, everything – 28x, personal care products – 25x, furniture – 22x, textiles – 12x, everything I already use on daily base – 10x, cosmetics – 8x, oil if it is good for you – 6x, everything as long as the quality is good – 5x, colourants – 4x, everything as long as price is good – 3x, withheld to answer – 2x, food – 2x, everything but won't search for it particularly – 2x, everything that can constitute for plastic – 1x, everything but food – 1x, mushrooms grown on SCG – 1x Products created from SCG that they would not buy: nothing in particular – 36x, food – 24x, furniture – 16x, cosmetics – 15x, no idea – 13x, personal care products – 12x, withheld to answer – 9x, I won't buy it if I do not need/like it – 6x, textiles – 4x, coffee cups – 3x, expensive products – 2x, perfumes – 2x, something of lesser quality – 1x, steunpilaren, fundering, etc. – 1x. 5 people mentioned that they are afraid of the smell the product might have.

The reasons why people want to buy products made from SCG: because it is sustainability -31x, because of the circularity -26x, it is better alternative than its substitute -15x, because I need the product -11x, it has a good story -8x, because there are extra advantages to the product -1x, I will buy it as long as I do not have to eat it -1x. The reasons for people not to buy products made from SCG: might be of lesser quality -13x, because the price isn't right -12x because I do not know enough about it -9x, it might smell weird -8x because I do not have an affinity with coffee -6x, afraid of the hygiene -5x, because it might stain -4x. 11 people withheld to answer.

An answer that was given a lot was that they wanted to test personal care products and cosmetics before using. And that they were afraid of products that smell like coffee.

The advantages the respondents write off to products created from SCG are: sustainability -36x, circularity (recycling, hergebruik) -36x, less harmful to environment -23x, create value from waste -15x, less use of scarce resources -14x, less waste -14x, cheaper than substitutes -10x, biologische afbreekbaar -8x, natural product -7x, less use of (harmful) chemicals -4x, made from easily accessible material -4x, langere houdbaarheid -1x, verlengen leefperiode koffie -1x, gives insight of in the value of waste -1x, active properties good for humans -1x, smell -1x, locally produced -1x. 9 people withhold to answer or didn't know.

'Er worden minder primaire grondstoffen gebruikt, geeft mensen inzicht in de waarde van koffiedik/ander afval, opent de ogen naar circulariteit.'

The respondents were asked would pay for the products created from SCG in comparison to a substitute. 52.1% of the respondents would pay the same. 35.9% would pay around 10% more for a product created from SCG, 7% of the respondents will pay 10% less. 2.1% of the respondents will pay more than 25% extra, 0.7% of the respondents will pay up to 25% more. 1.4% wants to know more about the product before they can respond to the price.

Around 45.5% of the respondents will buy the product faster if it is released with a brand they already know. For 53.9% is does not matter who sells the product. 1 person still wouldn't buy it at all. When asked what makes products created from SCG special they answer: sustainable – 30x, the story behind the product – 17x, creation of value from waste – 15x, innovative – 13x, hergebruik – 12x, onverwacht – 11x, koffie – 11x, unique – 10x, inspiring – 8x, the feeling it gives – 4x, we need it – 3x, easy idea – 1x. Withheld to answer – 15x.

'Ik vind het leuk dat het koffiedik een totaal andere bestemming krijgt, waardoor minder nieuwe materialen nodig zijn en het dus bijdraagt aan een betere leefomgeving.'

'Het geeft het product wel een extra dimensie. Het klinkt best duurzaam, dus kan me voorstellen met een beetje goede marketing dat het snel een Tony Chocolony vibe krijgt. Het lijkt mij minder leuk als het toch blijkt dat het product van mindere kwaliteit is. (Ik vind het zelf prima om bijvoorbeeld refurbished producten te gebruiken, maar uit mijn ervaring blijkt het dat refurbished producten vaak toch een slechtere kwaliteit hebben dan de nieuwe, wat ik vooral stom vind bij dure producten, maar kost het maar een paar euro, dan maakt het me niet zoveel uit).'

## F. Creative session

#### Goal

The goal of the creative session is to create alignment between the ideas and Caffe Inc.'s visions. To see how Caffe Inc. stands with some probable ideas the company might move in. What do they like, what will too much of a change, and what might work for them.

Besides the creative session will also be done to create a feeling of ownership over the project.

#### **Participants**

Me and the complete team of Caffe Inc.: Josephine Nijstad en Evaluna Marquez

#### Agenda

10 min. max Introduction Perceptual mapping 20 min. max How to's 15 min. max Brainstorm 10 min. max Golden rules 10 min. max

#### Content

#### Introduction

Introduction on the content of the creative session. Quick recap on the project and showing the insight cards and target consumers and quickly talk about them.

The insights used in this session, were insights that were found to be a bit more controversial, using these insights would help to see how the company thinks about them.

#### Insight cards used:

- Brand endorsement: Find a brand to put the product on the market. Source: questionnaire input
- Applying stewardship strategies to the product portfolio: Add circularity coaching to daily operations. Source: Opportunity areas brainstorm
- Seperate operations: Create one product to sell in bulk, for scale. And one product to sell on the consumer market to promote circularity. Source: interviews.
- Do not talk about 'adding value to waste' to the consumer: Consumers do not find sustainability a main reason to buy products. Source: questionnaire
- Go full 'VPRO Flowerboy/Tony Chocolonely' on the brand: Put the story before the product. Source: interviews
- Work toegether with the government: Share knowledge and resources. Source: opportunity areas
- Explore value-added ways to use the product together with clients/consumers: Write out a competition for the consumers, think of new products.
- Customize each product to the wishes of the client: Best way to start selling to the clients. Source: interviews
- Dutch consumer isn't ready vet: Do not market as something new or innovative.
- Partner up with a company that wants to become greener: So you can use their resources, knowledge and clients.

#### Perceptual mapping

Perceptual mapping is done twice. The insight cards would be mapped on the axis:

Return: how big will the return on this innovation be?

Innovation: is the implementation of the innovation: essential, desirable or out of the box?

Impact: how big will the impact on the operations be if implemented?

Relevance: how relevant is this to the operations of Caffe Inc.?

#### How to's

Three how-to's were done to see how the company would solve certain challenges. Each how to was done by one person for 3 minutes, if the three minutes were over the how to's would rotate. The how-to's brainstormed

- How to convince people?
- How to give people power?
- How to start a transition?

#### Brainstorm

A brainstorm has been done together on 'Why should people not but Caffe Inc. products?' to uncover the insecurities and anxiety the company might have about their product.

Lastly the participants could write done the 'Golden rules' for the company. By writing down what they found are the most important factors to take into account on Caffe Inc.'s operations, the author knows what to take into account in the strategy.

Results

IMPACT: How big is the impact on the operations?

Customize each product to the wishes of the client

Seperate operations Brand endorsement

Go full VPRO Flowerboy / Tony Chocolonely on the brand

Applying stewardship Work together strategies to the with the government a company who wants product portfolio

Partner up with to become greener

etc.

Explore value-added ways to use the product together with client and consumers

Do not talk about 'adding value to waste' Dutch consumer to consumer

isn't ready yet

RELEVANCE: How relevant is this for the operations?

RETURN: How big will the return be?

Go full VPRO Partner Flowerboy / Tony a company Chocolonely on the brand to become			
Seperate operations Br Work together with the government	rand endorsement	Applying stewardship strategies to the product portfolio	
		Explore value-added ways to use the product together with client and consumers	etc.
	nize each product vishes of the client	with eacht and consumers	
Essential  INNOVATION: How essential is it for	Desirable the operations?	Out of the box	

5. Be perseverant! No not accept the first 100 NOS.

#### Brainstorm

Why people should not buy Caffe Inc. products:

- Because it is not perfect.
- Because there are already cheaper/ high performance products.
- Because it is brown.
- Because every time you have to explain the story.
- Because you need to make a lot of new steps to get something that is already there [ It is complex.
- When you are not hipster enough.Don't like cool new stuff.
- Don't like coffee.
- Are not willing to step up to the challenge of working with a start-up and all the things that come with it.
- Expect a 100% developed product.
- It is made from waste.

- Smetvrees.
- Brown is not their colour.
- It is too expensive.
- It is waste.
- Because it is new.
- You do not know where it came from.
- You do not know what is in it.
- It might stain.
- Your mother will not like it.
- It is for geitenwollensokkentype's.
- It hasn't proven to be successful.
- It isn't cool to be sustainable.
- It might smell.
- It is too cool for you.