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

**Unlocking the Potential of Cascara with Impact Entrepreneurship: A Journey from Coffee By-product to Market Innovation – Financial Strategy**

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## **Abstract**

This work project explores the innovative transformation of Cascara, a by-product of coffee production, into a functional, health-conscious beverage while laying the groundwork for an impactful and profitable business. Among global challenges in the coffee industry, such as economic vulnerability, social inequities, and environmental degradation, Cascara emerges as a promising solution. The project identifies opportunities for economic empowerment of small-scale farmers, environmental conservation, and market innovation through Cascara's commercialization. The study follows a structured journey, addressing challenges and opportunities through diverse methodologies, ultimately identifying one key focus area that got explored deeply, which is the financial strategy. Using a data-driven approach, it evaluates key financial metrics such as cost structures, revenue potential, and funding requirements to determine the venture's economic viability. By adopting a circular value chain model, this work project aims to redefine the value chain, fostering sustainability and inspiring impact-driven entrepreneurship.

**Keywords:** Impact entrepreneurship, start-up, sustainability, consumer goods, Cascara, Cascara-based beverage, Financial Strategy, Entrepreneurial Finance, Funding Strategy, Break-even analysis, 3C Pricing Model, Scalability, Profitability Metrics, Unit Economics, Cost of Goods Sold, Cost Structure Analysis, Revenue Stream Analysis

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## Part I: Group Part

### 1 Introduction

Coffee is one of the most consumed beverages in the world, deeply embedded in cultures across all continents. With over 2 billion cups of coffee consumed daily, the global coffee industry plays an important role in supporting millions of livelihoods, particularly in coffee-growing regions such as Latin America, Africa, and Southeast Asia (International Coffee Organization 2020). However, despite the industry's size and importance, its production and trade are fraught with challenges. Climate change, volatile market prices and social inequalities contribute to the complexity and imbalance of the coffee industry (Haque 2023).



**Figure 1: The Coffee Cherry**

Most attention in the coffee industry is focused on the beans, but the coffee cherry itself is often overlooked. While the beans drive much of the global trade, the remaining part of the cherry, known as *Cascara* (See Figure 1), is typically discarded. Historically considered a waste product, Cascara has the potential to play an impactful role in the coffee sector, presenting an opportunity for innovation, sustainability, and added value to coffee farmers (Murthy, Pushpa and Naidu 2012; Iriondo-DeHond et al. 2020). This *work project* explores how Cascara can be turned from an underutilized by-product into a valuable and sustainable beverage ingredient, benefiting not only the environment, but also coffee-producing communities, and consumers.

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## 2 The Foundation: From Problem to Solution

### 2.1 The Problem: Overview of the Coffee Industry and Small-Scale Farmers

The global coffee industry is increasingly facing challenges that extend beyond the simple production and trade of coffee beans. On the surface, coffee is a valuable commodity with global consumption continuing to rise (International Coffee Organization 2020). However, beneath this demand lies a deeply inequitable system that especially affects the large majority of small-scale coffee farmers in producing countries (Fridell 2007). These farmers are typically defined as those relying primarily on family labor, hand-picking their harvest, producing limited volumes of coffee, and lacking direct access to international markets (Montgomery 2023). In general, the global coffee industry is deeply rooted in history, and many farms have been passed down through generations. However, in recent years, large industrial farms have gained prominence, dominating the global market with low-cost coffee beans. Hence, small coffee farms have increasingly struggled to maintain a sustainable livelihood in the face of fluctuating market conditions, exploitative trade practices, bad working conditions, and changing climate patterns. The problem space can be described along three dimensions: the *economic*, *social*, and *ecological* factors of influence.

***Economic Factors:*** The economic challenges facing coffee farmers stem from a range of structural issues that reduce their income potential and make them highly vulnerable to external pressures. A central issue is the fluctuation of global coffee prices. They are influenced by factors such as climate events in major producing countries, cartel dynamics, and the entry of new, large-scale producers (La Azotea, personal communication, 2024; Narayanan and Tomar 2024). For instance, when major producing countries like Brazil experience crop failures due to extreme weather, global prices can spike, benefiting some farmers temporarily but destabilizing others. Conversely, the rise of new producers like Vietnam, which exports large

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volumes of lower-quality Robusta coffee, has flooded the market and led to price drops that disproportionately affect higher-quality producers in regions like Guatemala (Tadasse et al. 2016). This volatility is intensified by the power imbalance within the coffee supply chain. Small-scale farmers in countries like Brazil, Ethiopia, and Colombia often lack direct access to global markets. Hence, they are forced to sell their harvest to intermediaries called "coyotes". These intermediaries purchase coffee at prices below market value, capturing the majority of profits. Studies indicate that only about 16% of the final retail price reaches farmers, while importers, roasters and retailers in consuming countries claim most of the revenue (International Coffee Organization, 2020; Melo et al. 2014). This imbalance extends poverty and economic insecurity for coffee producers. Many of them are unable to cover rising production costs driven by increases in fertilizer prices and labor shortages (Perfecto and Vandermeer 2015). This dependency on coffee revenue traps many farmers in a cycle of economic vulnerability, reinforcing their reliance on intermediaries and leaving them with limited bargaining power (Nagel, personal communication, 2024).

***Social Factors:*** The social challenges in the coffee industry are substantial, affecting the stability and well-being of farming communities. Due to the seasonality of coffee farming, the farmers and laborers primarily earn an income during harvest periods. This concentration of income often leads to rural exodus, where rural workers migrate to urban areas or other countries in search of more consistent work. This destabilizes local communities and weakens social ties as family members are frequently separated (Bacon et al. 2008; Jha et al. 2014). Moreover, coffee farmers and workers often lack access to essential social services, including healthcare, education, and social safety nets, which are often inadequate or entirely absent in many coffee-producing regions. This absence of social infrastructure increases vulnerability to exploitation and limits pathways to economic advancement (Hani 2024). In regions like Guatemala, labor shortages have emerged as another pressing concern. Migration, particularly

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to the U.S., has significantly reduced the local labor force, compelling farmers to recruit seasonal workers from distant areas. This not only raises operational costs but also requires farmers to provide housing, often under challenging conditions, further straining the limited resources of small-scale farmers (Reher, personal communication, 2024).

***Ecological Factors:*** The ecological challenges tied to coffee farming are largely rooted in unsustainable agricultural practices, which have severe repercussions for both local and global ecosystems. One of the primary issues is deforestation. As coffee demand grows, deforestation in coffee-producing regions directly contributes to global biodiversity loss, as coffee farms replace biodiverse forests with monoculture plantations that support far fewer species (Perfecto et al., 2019; Rice 2018). Soil degradation is another pressing concern. The intensive monoculture of coffee weakens soil fertility, as nutrient depletion and erosion become more prevalent over time (Cola 2023). To maintain yields, farmers often resort to synthetic fertilizers, which further degrade soil health. Additionally, pesticide and fertilizer runoff from coffee plantations pollute nearby water sources. This harm of aquatic ecosystems poses risks to communities dependent on these waters for drinking and irrigation (Soares et al. 2013; Knowlton 2023). Furthermore, the traditional disposal of Cascara after coffee processing contributes to environmental degradation (See Figure 2).

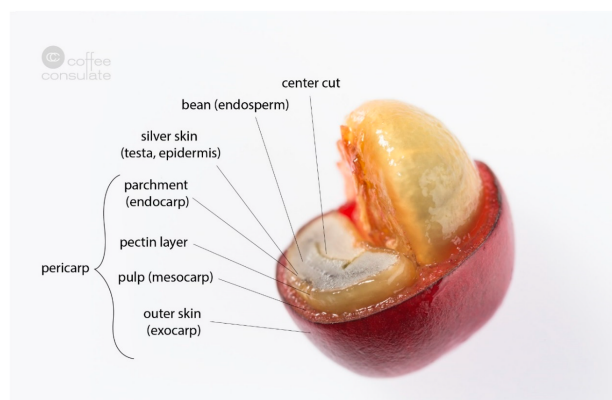
When discarded improperly, Cascara ferments release methane, a potent greenhouse gas, into the atmosphere. This decomposition also leads to soil acidification and water contamination. In Ethiopia, studies have shown that the improper disposal of Cascara significantly degrades river water quality, with decreased pH levels and oxygen content, impacting aquatic life and reducing biodiversity (Iriundo-DeHond et al. 2020).



**Figure 2: Discarded Coffee Cherries in Guatemala**

## 2.2 The Raw Material: Cascara

The name Cascara is derived from the Spanish term for “husk” or “peel”. It refers to the outer layers of the coffee cherry that surround the coffee bean and are typically removed during processing. Traditionally, Cascara has been used in Ethiopia, Yemen, and parts of Latin America as a tea-like infusion or “coffee of the poor”. Since nowadays coffee production focuses predominantly on the beans, nearly 90% of edible parts are discarded as organic waste, among them Cascara (Iriondo-DeHond et al. 2020). It has largely been overlooked as a resource within the broader coffee industry in industrialized countries (Schwarz, personal communication, 2024).



**Figure 3: Anatomy of the Coffee Cherry**

As seen in Figure 3, the coffee cherry has multiple layers: the exocarp or outer skin, the sweet-tasting mesocarp, and the parchment or endocarp that covers the bean itself (Iriondo-DeHond

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et al. 2020). Cascara's composition varies based on the processing method and region, but it generally contains a range of beneficial bioactive compounds, including antioxidants, polyphenols, and dietary fiber (Esquivel and Jiménez 2012; Lestari et al. 2022). Nutritionally, Cascara has been found to contain between 44-50% carbohydrates, 18-21% fiber, 10-12% protein, and 2.5% fat, along with caffeine and antioxidants like chlorogenic acid (Heeger et al. 2017). Its chemical profile indicates significant health benefits, which are increasingly drawing attention in the food and beverage sectors. The ingredients position Cascara as a functional ingredient with potential immune-boosting and anti-inflammatory properties (ThisSideUp 2020).

### **2.3 The Opportunity: A Cascara-based Beverage**

Through our research and conversations with coffee farmers in Mexico and Guatemala, we have discovered this untapped potential of Cascara. Using this by-product offers a promising solution to some of the coffee industry's deepest challenges, creating new opportunities for economic, social, and environmental sustainability. The recent shift in perspective on Cascara was significantly advanced in 2022, when the European Food Safety Authority (EFSA) granted approval for its use in non-alcoholic beverages as *novel food* in the EU. This regulatory milestone not only legitimizes Cascara as a safe ingredient in beverages but also opens doors for its large-scale commercialization (EFSA Panel on Nutrition et al. 2022). On top of that, Cascara is now being explored for a full approval across a variety of other product categories, including flour alternatives, jams, and even cosmetics. The EFSA approval elevates Cascara from a low-value by-product to a legitimate player in the global beverage market.

### **2.4 The Solution Design**

The unique characteristics of Cascara in combination with the recent legal change offer a promising opportunity. Putting the nutrient-rich profile, natural sweetness, and moderate

caffeine levels in the context of the EFSA regulation, Cascara can become a strong competitor in the non-alcoholic beverage market, appealing to consumers seeking alternatives to traditional teas, coffees, and energy drinks (Iriondo-DeHond et al. 2020). Hence, we are developing a non-alcoholic Cascara-based beverage (CBB).

Below, Figure 4 illustrates our solution design, showing how we aim to transform the traditionally linear coffee value chain into a circular model. By upcycling Cascara into a beverage ingredient, we take the first step in challenging the status quo. To fully close the loop, our future vision also considers downcycling options, such as converting remaining Cascara into biogas or fertilizer.

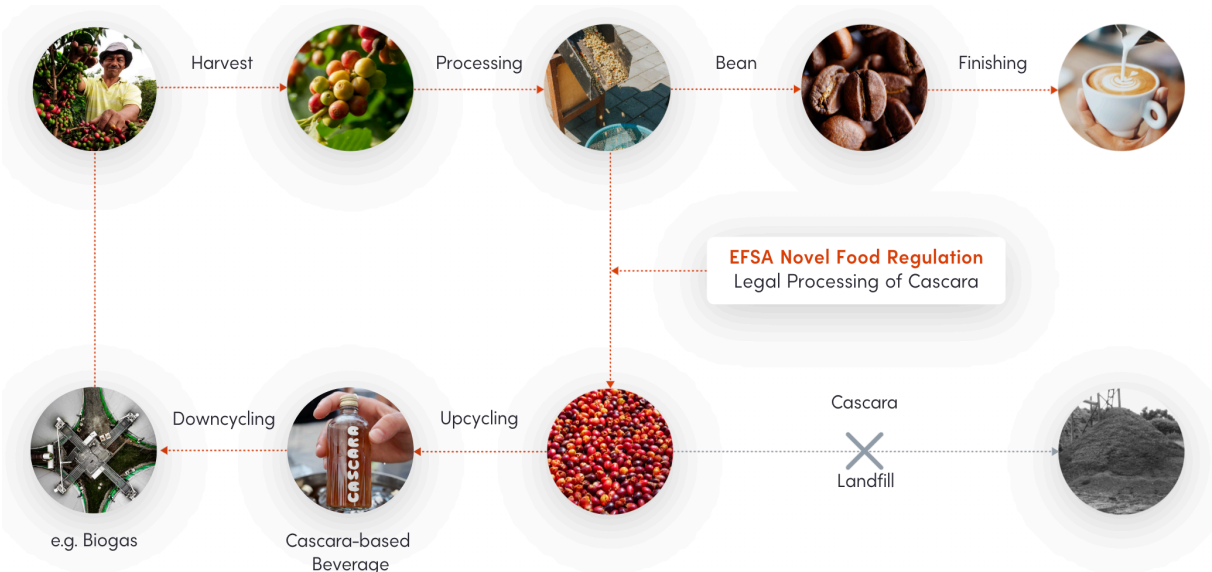
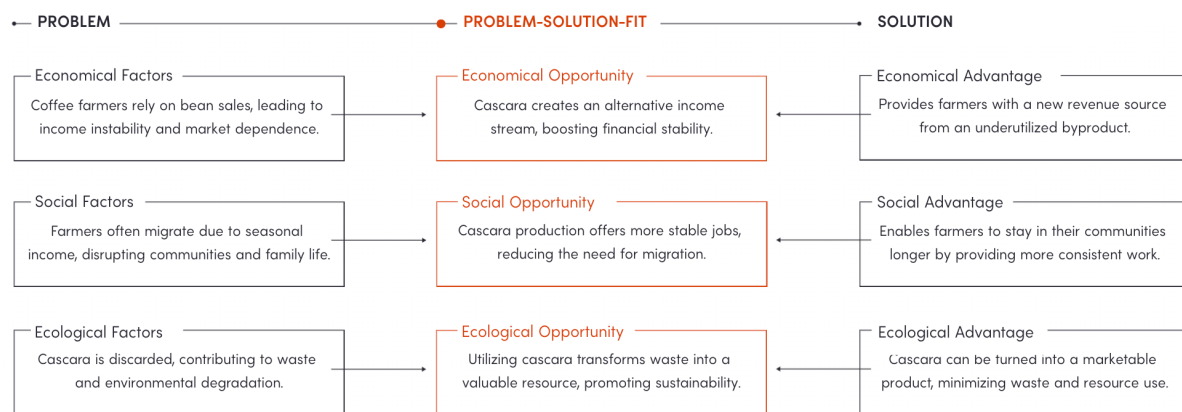


Figure 4: The Solution Design

As Figure 5 shows, this approach addresses several intertwined economic, social, and ecological challenges within the coffee industry.



**Figure 5: Problem-Solution-Fit with the use of Cascara**

Economically, the commercialization of Cascara enables small-scale coffee farmers to diversify their income stream, decreasing their dependence on coffee bean sales and mitigating the risk of volatile coffee prices. This transformation can help stabilize rural economies by reducing farmers' dependency on a single, fluctuating commodity and encouraging a more sustainable livelihood.

Socially, Cascara's commercialization offers a solution to the income challenges faced by small-scale coffee farmers. By creating demand for Cascara products, farmers gain a more consistent workload, reducing the necessity for seasonal migration in search of alternative employment. This continuity can strengthen local communities by maintaining family units and stabilizing the rural workforce.

Ecologically, the utilization of Cascara helps to address the environmental issues stemming from its improper disposal. Repurposing Cascara into marketable products reduces this organic waste, transforming an ecological liability into an asset. This practice not only minimizes environmental pollution but also supports global efforts in reducing the carbon footprint of coffee production.

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## 2.5 The Intended Impact: Sustainable Development Goals

A core component of our solution design is the impact we intend to achieve with our business model. Addressing interconnected economic, social, and environmental challenges within the coffee industry associates closely with several Sustainable Development Goals (SDGs) formulated by the United Nations, particularly SDG 8, SDG 12, and SDG 17.

**SDG 8:** “Promoting sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all” (United Nations 2024).

Providing small-scale coffee farmers with a new revenue stream aligns with Target 8.2 on increasing productivity through diversification. Additionally, our model helps stabilize local employment, reducing the need for seasonal migration (Reher, personal communication, 2024), and aligns with Target 8.8 on promoting safe and stable working conditions.

**SDG 12:** “Ensuring sustainable consumption and production patterns” (United Nations 2024).

Turning Cascara into a valuable resource supports Target 12.2 by promoting resource efficiency and Target 12.3 by reducing post-harvest waste. Our approach also contributes to Target 12.5 by embracing a circular economy model, where waste is minimized, reducing environmental pollution and promoting sustainable production practices (Iriundo-DeHond et al. 2020; Eckhardt et al. 2022).

**SDG 17:** “Strengthening the means of implementation and revitalizing the Global Partnership for Sustainable Development” (United Nations 2024).

Finally, by participating in the creation of an international market for Cascara, our project supports Target 17.1 by strengthening domestic resource mobilization. Partnerships with local cooperatives and international intermediaries expand market access and contribute to Target 17.11 by reinforcing economic resilience, promoting fair trade and increasing the global market share of developing regions (Nagel, personal communication, 2024).

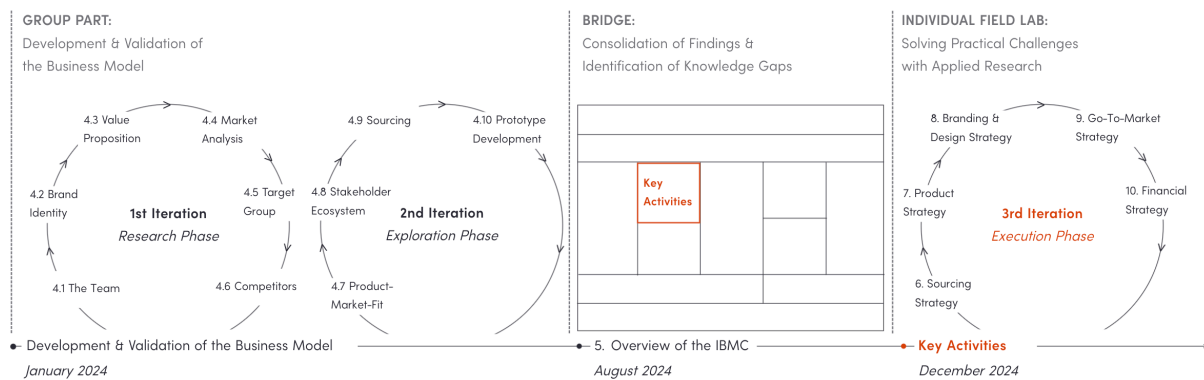
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Through these intended contributions to SDG 8, SDG 12, and SDG 17, our solution design aims to represent a sustainable and impactful business model that addresses the economic, social, and environmental challenges in the coffee industry. This alignment with global sustainability goals is our vision for creating meaningful benefits for coffee farmers and the environment.

### **3 Work Project Guidance and Applied Methodologies**

Before delving into the core of this work project, it is important to first provide a clear guide on how to navigate this document. This chapter outlines the methodologies, structure, and research approach employed throughout our work project. This overview is intended to not only facilitate understanding but also to highlight how each section contributes to our goal of launching a viable CBB venture.

This work project centers on applied research to address specific Knowledge Gaps (KG) and create actionable insights that directly support our business development and decision-making. In essence, this work project adopts a practical approach with the aim of launching a real-world venture. Designed as a roadmap for introducing a CBB to the market, this work project serves as both a development guide for our business model and an informative resource for potential investors seeking insights into core activities.



**Figure 6: Guiding Overview on the Structure of the Work Project**

**Work Project Structure:** Figure 6 outlines the structure of this work project. It starts with a group part, including two iterative development cycles that cover key practical advancements and insights gained, up to the start of the *Individual Field Labs*. To improve readability, these insights are organized by themes rather than exact chronological order. After these cycles, the results are visually summarized in an *Impact Business Model Canvas* (IBMC). The IBMC was chosen for its structured approach to holistically evaluate and refine our business model, allowing us to consolidate learnings and identify knowledge gaps that could impact our venture's success. Mapping out key components of our business model, the IBMC not only clarifies our strategic direction but also highlights areas that require further research. In detail, this analysis reveals unresolved knowledge gaps in the *Key Activities* section of the IBMC. These knowledge gaps guide the practical research goals for the *individual field labs* and will be addressed in a third iteration, representing our individual research contributions.

**Applied Methodologies:** The applied research methodologies used along the three development cycles include a blend of qualitative and quantitative methods. To give a broad overview of the approaches, these methodologies are mapped in Table 1.

**Table 1: Overview of Applied Research Methodologies**

Methodology	Applied Research Activity	Quantity	Purpose
Quantitative	Secondary Desk Research	N/A	Business Model Validation
	Customer Interviews	41	Customer insights: consumption patterns & preferences
	Stakeholder Interviews	10	Problem space: farmer challenges, value chain analysis
	Expert Interviews	41	Cascara value chain, Beverage creation, Brand Building
	Tasting Surveys	3	Prototype refinement; Target taste insights
Qualitative	Lab Work	N/A	Data-based Raw Material & Recipe Testing
	Prototype Tastings	8	Real-life feedback; data-driven improvements
	Field Trip	2	Problem space: Coffee farm field research
	Secondary Desk Research	N/A	Cascara background; regulatory overview

An overview of all interviewees with additional information is shown in Appendix D. Detailed explanations of the methodologies used are provided in each individual field lab chapter. The findings from our research are presented in dedicated chapters that illustrate how the learnings helped shape a viable business model and contributed to fill our knowledge gaps.

***Knowledge Gaps and Research Goals:*** The main purpose of this work project is to address these knowledge gaps through five distinct applied research goals, each focusing on a specific area crucial to the success of our project. Every research goal is approached individually, with each part of the research standing alone to ensure that it addresses a specific identified gap. This modular structure allows readers, including potential stakeholders or investors, to easily locate and understand each research section independently. In conclusion, this field lab approach underscores our goal to use applied research methods to address real-world issues with practical, data-driven solutions.

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## 4 Development and Validation of the Business Model

### 4.1 The Team

In April 2023, part of our team traveled to Latin America to explore the origins of one of our shared interests: coffee. After visiting several coffee farms in Guatemala, El Salvador, and Mexico, we not only had the opportunity to taste Cascara for the first time but also experienced firsthand the environmental and economic challenges faced by coffee farmers (See Chapter 2.1). From that moment, one question persisted: "How is it possible that such a superfruit remains largely unknown in Europe?".

Having previously collaborated on various university projects, we already recognized strong synergies in our work ethic and ambitions. Simultaneously, our diverse backgrounds and interdisciplinary skills enriched our collaboration, as each of us brought unique experiences to the table. These experiences made us an ideal team for the final entrepreneurial project within the master's program. While brainstorming several topics, the untapped potential of Cascara immediately resonated with all of us, aligning perfectly with our shared interests and values. United by our passion for coffee, impact-driven business models and the creation of a tangible product, we quickly realized that our ambitions to launch a startup in Germany were seamlessly aligned. Building on this foundation, we formed the *Cascara Collective*. A short description of each team member's role and individual background is shown in Figure 7.

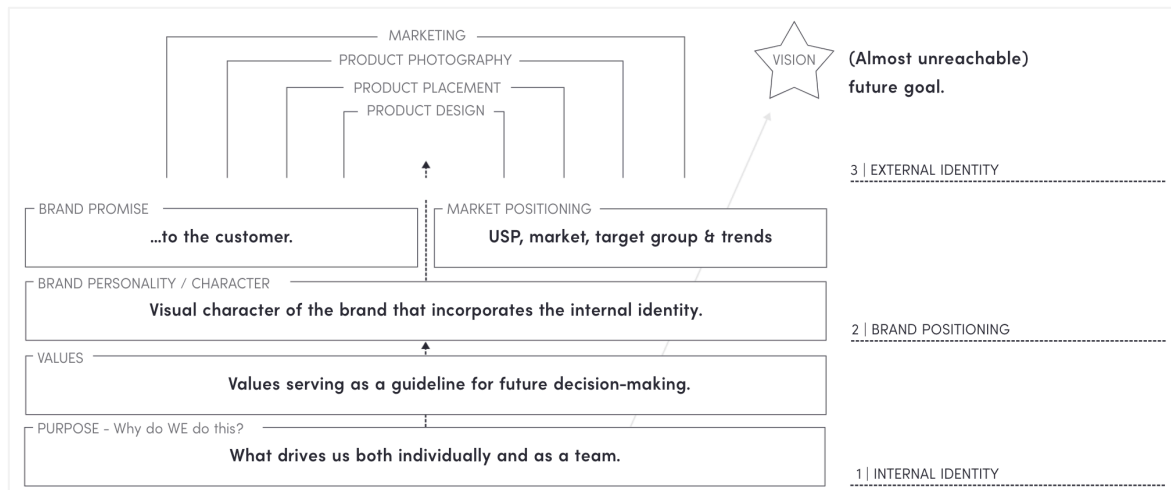


Figure 7: Team Member's Area of Expertise

## 4.2 Brand Identity

Haas (personal communication, 2024) said “In the beverage sector it is just about branding – that’s the most important job you have” (See Appendix D). Following this advice, our goal was to develop an authentic brand identity rooted in the core values and shared purpose of our founding team. By using our internal identity as a baseline, we aimed to create a strong, unified strategy that would finally translate into our external brand presence. This chapter outlines the strategic approach we took, focusing on the stages of development and the key milestones we achieved along the way.

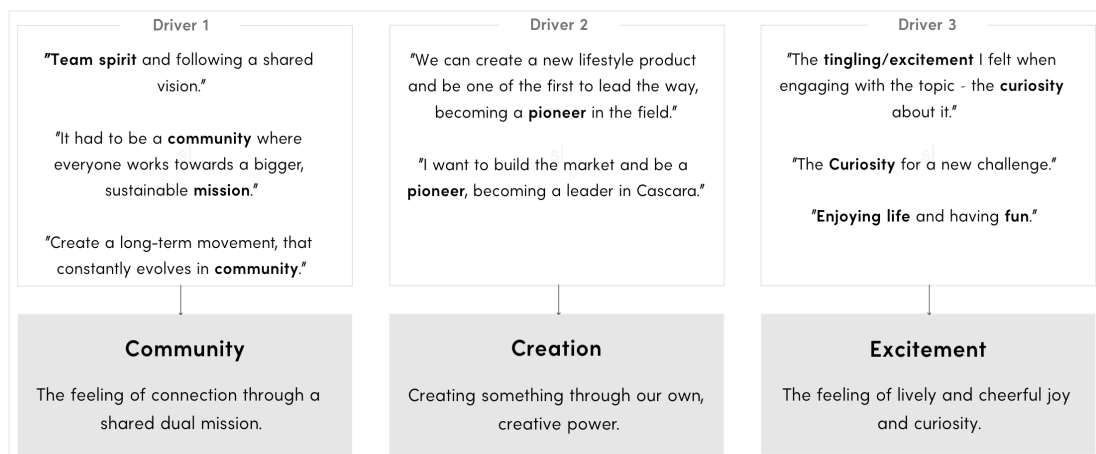
Figure 8 illustrates the key elements of our branding strategy. This framework is constructed from the inside out, aiming to establish a robust foundation that ensures cohesiveness as the project grows. Based on our “*why*”, we defined shared values that are incorporated in the company culture (Sinek 2009). Building on this internal identity, we subsequently articulated brand character themes, promises, and positioning to effectively convey this identity to the outside.



**Figure 8: Structured Process of the Identity Development**

**Stage 1: Establishing our Internal Identity**

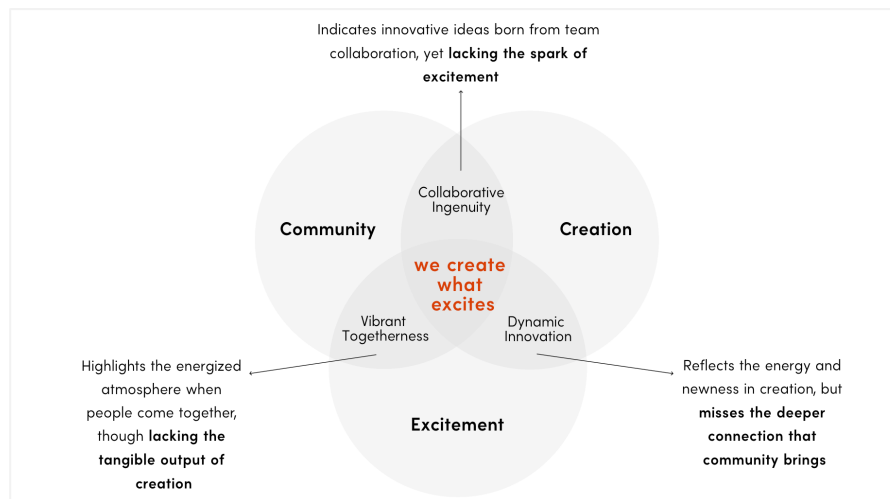
**Our Purpose:** In the context of new venture creation, research emphasizes the importance of a founding team aligning around a shared purpose and passion. This alignment fosters a cohesive organizational culture and supports effective decision-making, which is essential for a startup’s success (Murnieks et al. 2016). It forms the foundation of a brand’s core identity, particularly during the early stages of development, as the founders’ purpose often translates directly into the company’s vision (Sinek 2009). Figure 9 shows our common intrinsic drivers.



**Figure 9: Key Drivers leading to the Purpose Statement**

Identifying these three core motivations was essential for shaping our brand purpose. They brought together our individual aspirations into a unified, long-term direction. The goal was then to establish a central idea that would not only guide us as founders but also sustain our

enthusiasm over the long term. As illustrated in Figure 10, this reflection resulted in the articulation of our final purpose: “*We create what excites.*”



**Figure 10: The Brand Purpose**

This phrase captures the essence of our shared mission, embodying the excitement, creativity, and communal effort that we want to bring to the market.

***Our Values:*** According to Schjoedt et al. (2013), shared values within a founding team are a critical element for successful collaboration and long-term decision-making in new ventures. These values are designed to influence not only how we behave internally but also how we interact with our external stakeholders and navigate growth. We ultimately identified four key values:

1. ***Confidence:*** This value embodies being *bold* and *cheeky*. It is inspiring and lively and drives creativity. Confidence allows us to take risks and push boundaries.
2. ***Honesty:*** This reflects being *authentic* and *enthusiastic*. We strive to bring fun into everything we do, creating a culture of transparency and openness.

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3. **Curiosity:** With a focus on *inventiveness* and *eagerness*, curiosity drives our desire for growth and transformation. It represents the desire for progress and a better future. The longing for change and improvement guides our path forward.
  4. **Community:** This value highlights *empathy* and *friendliness*. We aim to foster an environment of collaboration and support especially in terms of building the bridge between coffee producers and our consumers.

### ***Stage 2: Developing our Brand Positioning***

**The Brand Personality:** The brand personality plays a central role in shaping how audiences perceive and connect emotionally with a brand, bridging the gap between internal values and the public image (Geuens et al. 2009). With this goal in mind, we identified the human characteristics that should be associated with our brand, which are the following: authentic, impactful, natural, sexy, light-hearted, friendly, surprising, sun kissed, young, and bold.

**The Brand Promise:** Murnieks et al. (2016) emphasize that a strong brand promise is derived from the founding team's ethical principles, which promotes trust and loyalty among stakeholders and customers alike. This perspective goes beyond simply establishing a brand image: it focuses on conveying our values transparently and without tending towards greenwashing. This highlighted the necessity for incorporating our vision of mutual benefits along the value chain:

1. Farmers, who gain additional income and reduce organic waste.
2. Consumers, who receive a healthy and functional beverage.
3. Our brand, which fosters a growing community that reinforces this cycle through increasing sales.

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Based on these aspects, the overarching promise emerged: *we promise to create a community where everybody wins*. This statement will serve as a guiding principle for future strategic decisions and help us anchor our focus on social impact deeply.

In conclusion, our internal identity and brand positioning form a solid foundation for our external brand identity, stage three (See Chapter 8). This foundation will serve as the baseline for future growth, guiding both our brand design and broader strategic decisions.

### **4.3 Value Proposition**

Our value proposition (VP) is based on three core pillars: Customer Expectations, Economic Empowerment and Ecological Advancements. Through iterative, feedback-based development, we established our core VP that creates a cohesive and compelling message for our product:

*“We transform Cascara, the often-overlooked coffee cherry, into a healthy and energizing beverage empowering traditional coffee farmers financially, embracing a circular economy approach by minimizing organic waste.”*

### **4.4 Market Analysis**

The global non-alcoholic beverage market has undergone significant transformations over the past decade. This chapter provides an overview of this market, with a focus on both global dynamics and specific trends in Germany. Germany offers a strategic market for our analysis due to several factors. The entire team is based in Germany, bringing valuable local knowledge, an existing network of contacts and understanding of the market dynamics. Moreover, Germany is one of the largest non-alcoholic beverage markets in Europe, characterized by significant growth potential (Statista Market Insights 2024). By examining the current landscape and emerging trends, we aim to highlight the market potential for innovative products, such as a CBB, and the forces shaping consumer behavior in this sector.

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***Overview of the Non-Alcoholic Beverage Market (Global and Germany-Specific):*** The non-alcoholic beverage industry is a dynamic and competitive space, with established brands and new entrants competing for market share. The market shows a wide range of water-based beverages to which flavor-enhancing additives (such as sugar, sweeteners, minerals, fruit flavors, etc.) are added. This category includes cola drinks, lemonades, energy drinks, fruit nectars, beverages containing fruit juice, and flavored mineral waters (Statista Market Insights 2024). These products cater to different consumer preferences, making this sector a broad and evolving space.

***Consumer Behavior and Preferences:*** In Germany, non-alcoholic beverages (NAB) have seen a consistent increase in consumption, particularly in categories that align with current consumer values. According to recent studies, three dominant trends shape the non-alcoholic beverage market: sustainability, health awareness and functionality (Schienkiewitz et al. 2020; Gupta et al., 2023; Rodriguez-Sanchez and Sellers-Rubio 2021).

- 1. Sustainability:*** Sustainability has become a cornerstone of the beverage industry, driven by consumer demand for products that are both environmentally and socially responsible. Rodriguez-Sanchez and Sellers-Rubio (2021) emphasize that consumers are increasingly considering the environmental impact of their purchases, with many willing to pay a premium for products that prioritize sustainability. This includes not only the ingredients and production methods but also packaging and supply chain transparency. Consumers show a growing preference for Fair Trade products (Rodriguez-Sanchez and Sellers-Rubio 2021). In conclusion, companies are increasingly focusing on cleaner production methods, ethical sourcing, and minimizing environmental impact to appeal to eco-conscious consumers.
- 2. Health Awareness:*** As consumers become more aware of the link between diet and health, the demand for beverages free from artificial ingredients has risen significantly. Health-

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conscious consumers are increasingly selective about the ingredients in their beverages, favoring products that are natural, plant-based, and free from artificial additives (Gupta et al. 2023). The German market reflects similar global trends, with a particular emphasis on reducing sugar content and artificial ingredients. Soft drinks are facing reduced demand as consumers shift towards healthier alternatives like flavored water and functional beverages (Schienkiewitz et al. 2020). Essentially, younger consumers are more inclined to consume juices and flavored water, while older demographics favor traditional drinks like coffee and water. This generational shift highlights the growing market for beverages that serve to diverse health needs, a trend reflected across Europe as well (Schienkiewitz et al. 2020).

- 3. *Functionality*:** The functional beverage market is one of the most rapidly expanding segments in the food and beverage industry. In 2023, the global market for functional beverages alone reached \$208.13 billion (Gupta et al. 2023). In average, the market for functional beverages is expected to grow by 9% CAGR worldwide (Hilton 2023). This growth is largely fueled by a rise in health-conscious consumers who are looking for beverages that offer additional health benefits, such as energy boosts, cognitive enhancement, or immune support (Nazir et al. 2019).

Based on these trends, we turn our focus to the market data to assess the growth potential of the non-alcoholic energy and sports drinks segment.

The European non-alcoholic energy drink and sports drink market has shown strong growth in recent years. In 2018, the combined market revenue in Europe was €17.79 billion, which grew to €28.73 billion by 2023. Projections indicate that the market will continue to expand, reaching approximately €43.20 billion by 2029. In Germany, the market size increased from €2.53 billion in 2018 to an expected €9.83 billion by 2029. This growth corresponds to a Compound Annual Growth Rate (CAGR) of 6.76% for Europe and 10.27% for Germany over the period from 2018 to 2029, reflecting a robust demand in both markets (Statista Market Insights 2024).

The Total Addressable Market (TAM), represented by the total European market, amounts to €43.20 billion by 2029. The Serviceable Available Market (SAM), or the market specific to Germany, is projected at €9.83 billion for the same year. Finally, the Serviceable Obtainable Market (SOM), which represents a potential market share of 1-5% in Germany, translates to an estimated range of €98.3 million to €491.5 million by 2029. These figures underscore the substantial market potential within the non-alcoholic energy and sports drinks segment, especially given the in-scope categories of non-alcoholic energy drinks and sports drinks (Statista Market Insights 2024)

For a CBB, the opportunity lies in meeting the market demand for natural, healthy, and sustainable products that align with consumer values. This environment presents a favorable landscape for the introduction of innovative, functional beverages that cater to the evolving needs of health-conscious and environmentally aware consumers.

### 4.5 Target Group

Given these market trends, it is essential to provide an overview of the key characteristics and preferences of the target audience within this landscape. The final target group was defined through a process, as seen in Figure 11.

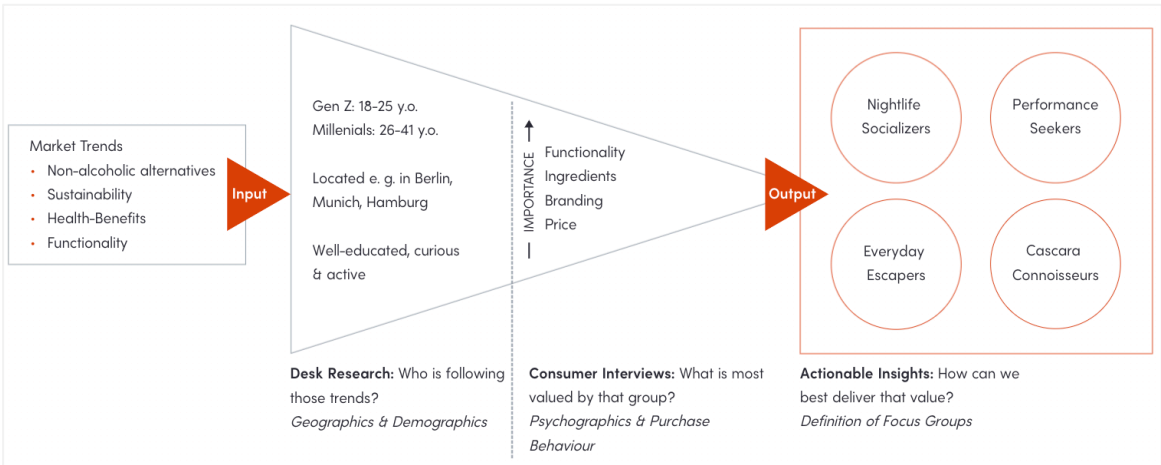


Figure 11: Process of Identifying the Target Group

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***Geographics and Demographics:*** The target audience in Germany consists of primarily younger urban residents, specifically Gen Z (ages 18–25) and then Millennials (ages 26–41), concentrated in metropolitan areas such as Berlin, Munich, and Hamburg (McKinsey and Company 2023; Euromonitor 2024). They tend to be well-educated and often choose beverages that align with their active lifestyles (Schienkiewitz et al. 2020).

***Psychographics and Purchase Behavior:*** Subsequent consumer interviews (See Appendix A) allowed us to test the following hypotheses on consumption behavior trends, gaining valuable insights from a real-world context:

*1. Consumers are regularly seeking alternatives to existing caffeinated drinks.*

Caffeinated drinks are consumed daily, with the choice of drink type depending on the timing and purpose of consumption. Therefore, it is important to clearly define how, when, and where the target group would benefit from an additional caffeinated alternative.

*2. The primary factors influencing consumer purchase behavior are health benefits, followed by functionality and environmental impact.*

Preferences for functional, healthy ingredients are evident and environmental impact influence purchase decisions less than anticipated. Branding, ingredients, and design are also important, whereas taste and price are critical factors (See Appendix O).

*3. Consumers are open to experimenting with new products they are unfamiliar with, especially in the context of a familiar category.*

Consumers are selective and require clear benefits, such as health advantages, appealing taste, or attractive packaging. Recommendations from trusted sources or local support increase their openness to trying new products.

These understandings and additional psychographic insights are provided in both the *Customer Exploration Maps* and *Empathy Maps* in Appendix A, to gain a deeper understanding of our target group's motivations, behaviors, and pain points. The key takeaway here is that the

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purpose and role of our beverage must be communicated very clearly. Consumers need to know when, where, how, and why to choose our drink, as well as the benefits it offers them.

**Focus Groups:** To address these diverse needs, we have identified four focus groups within our target group, each representing a distinct context and highlighting the unique role our beverage can fulfill.

- **Performance Seekers:** This group includes sporty individuals who seek out products that enhance their physical performance and energy levels.
- **Everyday Escapers:** This group seeks out beverages that provide joy and pleasure in everyday moments, for no greater reason than to have a refreshing drink with a satisfying taste.
- **Cascara Connoisseurs:** This group consists of coffee lovers and connoisseurs who value premium products. They are likely to appreciate sustainable sourcing and flavor profile of a CBB.
- **Nightlife Socializers:** This group is centered within the party and nightlife scene. They are frequent participants in music festivals, parties, and other social events where staying energized and alert is key.

Defining these focus groups helps us determine the best actions to reach potential customers within our target audience.

## 4.6 Competitors

For start-ups, a competitor analysis is essential to provide insights that inform market positioning or differentiation. As noted by Czepiel (2020), a competitor analysis is not a one-time activity but an ongoing process. Since Cascara-based products are new to the market, it is important to gain a high-level overview on adjacent categories that could influence our business activities in a broader sense. Therefore, our general competitor overview is structured into four

distinct clusters: direct competitors, indirect competitors, substitute products and beverage corporates, as seen in Figure 12. In the following, there is a brief description of these categories:

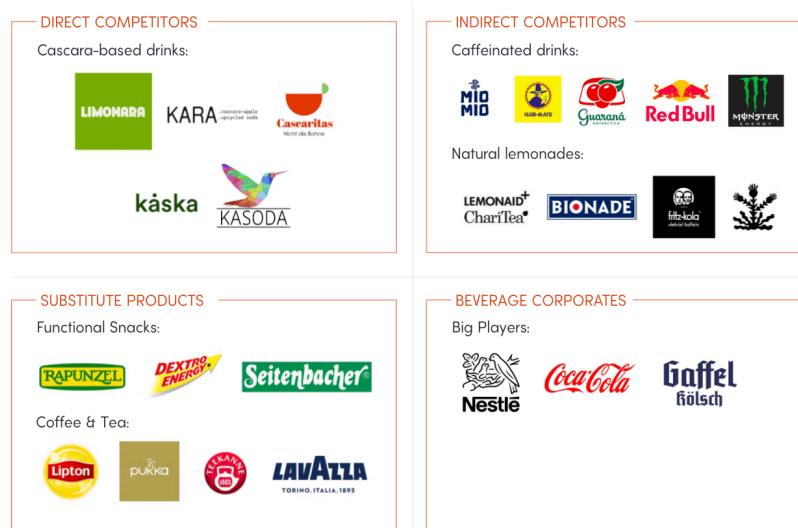


Figure 12: Broad Overview of Competitors Along Several Dimensions

- **Direct Competitors:** These companies represent our direct competitors that are producing CBBs as well. However, CBBs are still an emergent category, and all companies are operating on a relatively small scale.
- **Indirect Competitors:** These include other caffeinated drinks and natural lemonades. While not identical products, these beverages compete for a similar consumer base.
- **Substitute Products:** Functional Snacks, coffee, and tea are traditional alternatives that consumers might choose instead of our product, especially in terms of health and functional benefits. This cluster helps in understanding broader consumption patterns and potential market shifts.
- **Beverage Corporates:** Large beverage companies such as Coca-Cola or Nestlé dominate the beverage market, and while they are not direct competitors, their scale, distribution capabilities, and potential to enter niche markets like Cascara beverages are important considerations.

Since direct competitors are the biggest threat in the market (Delivered Social n.d.), an in-depth analysis helps gaining actionable insights for launching our product. Table 2 provides a detailed comparison of five active Cascara beverage brands along different categories.

**Table 2: In-Depth Analysis of Direct Competitors**

Company	Value Proposition for Consumers	Design	Price per liter	Location	Sales Channels	Ingredients (besides Cascara)	Followers on Instagram	Supply Chain	Target Group	Additional insights
Cascaritas	Coffein focused, fruity / refreshing drink	colorful, main color orange, South-America Vibe	7,03 €	Bielefeld	Online, LEH, Cafés, smaller local events	Cane sugar, lemon juice	863	Importeur: Knauer	young, energized, 18+	Biggest Player in the market, recent batch: 15.000 bottles
Kaska	Super-fruit, healthy because of Antioxidantes and iron, everything is natural	Mindful, sterile, clean, minimalistic	10,61 €	Berlin	Online, cafés, offices, bar, restaurants, private events	Lemon juice, ginger, agave	530	Importeur: Knauer	healthy, mindful, people who care about quality, 25+,	Entered the market recently
Limonara	Something new, made out of the coffee cherry, sustainabilty, support of the coffee farmers	colorful, coffee cherry as a design	-/-	Munich	Only per DM / Mail, Cafés	Lime, agave	303	-/-	30+, healthy, sustainable	Right now you can only purchase through DM / Mail
Kara Limo	Sustainability, using of waste products - upcycling	clean, mimimalistic, similar to Kaska	8,50 €	Frankfurt	Cafés, Kiosks Wine bars, SuperCoop	Apple and lemon juice	493	-/-	30+, healthy, sustainable	Right now you can only purchase through DM / Mail
Kasoda	Coffein focused, fruity / refreshing drink, something new due to Cascara	colorful, bright, South-America Vibe	7,80 €	Stuttgart	Local cafés, restaurants, smaller events (Vineyard events)	Sugar, Lime and lemon juice	280	-/-	young people, looking for alternative to caffeine, healthy	-/-

As noted, maintaining this analysis as an ongoing process is important, especially as we operate in an emerging market. Although the market for CBBs is still in its early stages, the current analysis provides valuable learnings to help shape our strategy:

1. Direct competitors emphasize only one key benefit of Cascara.
2. Their branding highlights natural elements, especially the coffee plant.
3. Their recipes show minimal variation.
4. Their sales channels show minimal variation, with a clear focus on Cafés.
5. It is not clear, who is consuming when and where - only a broad target group (no clear persona).
6. Market is largely unsettled.

The main learnings make clear that there is an unused potential of leveraging the combination of Cascara's benefits in one drink. This offers the opportunity to become a leader in this new category through uniting joy, functionality and sustainability. This competitor analysis helps us

to position our CBB effectively by identifying market gaps and opportunities for differentiation, as stated in our Product-Market-Fit below.

#### 4.7 Product-Market-Fit

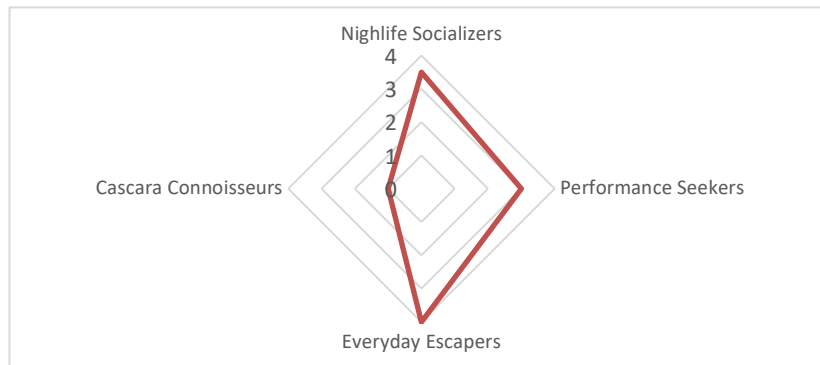
Figure 13 provides an overview of how our VP addresses an underserved need in the beverage market that competitors have not yet met.



**Figure 13: Product-Market-Fit**

It becomes clear that our product fulfills the market's need for a beverage that not only offers health benefits but also brings joy through its functionality (such as caffeine) and allows for guilt-free consumption - without concerns about harming the environment, others, or oneself. Covering this need with the usage of Cascara, we are introducing a new category of beverage that remains largely unexplored, with only five competitors operating on a very limited scale. Compared to direct competitors, we differentiate with a recipe enhanced by specific ingredients that boost functionality, such as higher caffeine levels or antioxidants, allowing our beverage to align perfectly with current market trends (See Chapter 4.4). Furthermore, we identified a crucial gap: existing Cascara brands fail to clearly communicate the role and purpose of consuming a CBB. By targeting a precise focus group or concrete persona and educating consumers about the specific benefits of our drink, we can acquire early adopters and cultivate first customers. Figure 14 shows our initial positioning within the previously defined focus

groups, based on our internal brand identity. This targeted approach enables us to experiment continuously for an iterative product market validation.



**Figure 14: Focus Group Positioning**

With this understanding, we can develop an appropriate beverage, a tailored branding strategy (See Chapter 8) and a targeted Go-to-Market (GTM) strategy (See Chapter 9) to strengthen the product-market-fit.

#### **4.8 Stakeholder Ecosystem**

To understand our stakeholder ecosystem, Figure 15 outlines every step of the value chain to identify key stakeholders and their relationships with us. The following analysis along the value chain allows us to define our regional ecosystem:

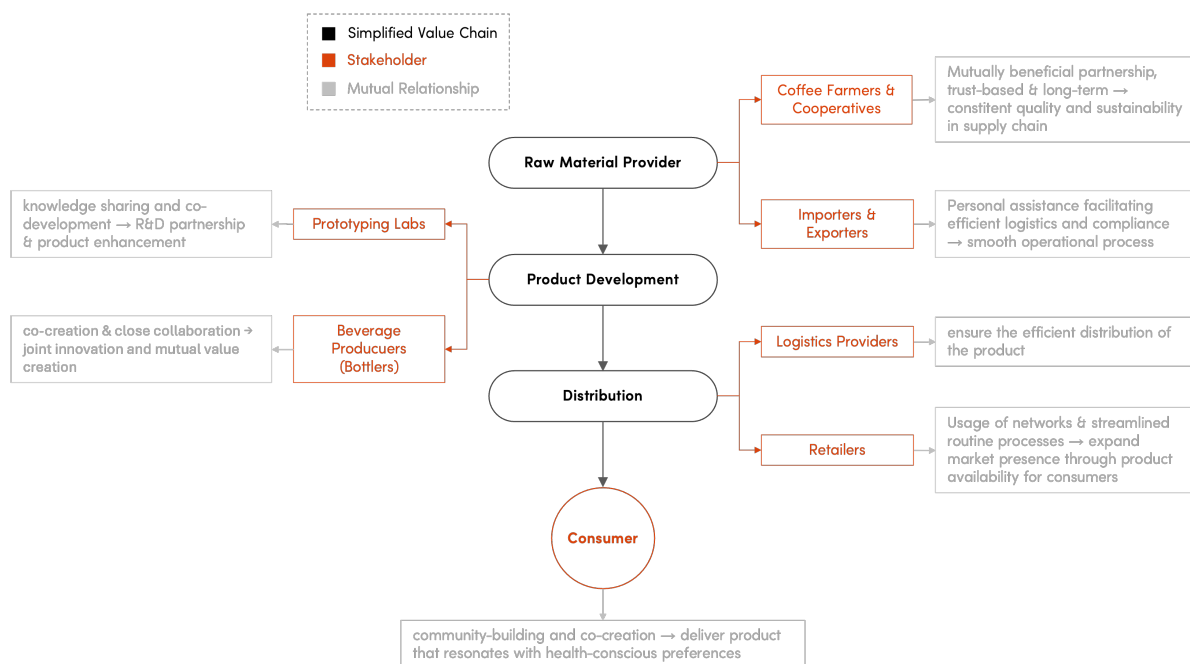


Figure 15: Stakeholder Ecosystem and Relationships

**Coffee Farmers & Cooperatives:** Coffee farmers and cooperatives are the primary stakeholder for Cascara sourcing. Farmers grow and sell coffee to cooperatives, which then aggregate and export it themselves or collaborate with Importers, providing another sourcing option, especially for European companies (See Chapter 6).

**Importers and Exporters:** Importers and exporters act as intermediaries in the supply chain, ensuring the smooth transit of Cascara from its country of origin to Germany. They manage customs clearance, quality control, and logistics coordination, enabling the product to reach European markets efficiently.

**Prototyping Labs:** Product development requires collaboration with laboratories or specialized food development companies. These partners help formulate the recipe and ensure it complies with all relevant regulatory standards. This step is foundational, as no bottling process can begin without a well-defined and compliant beverage base.

**Beverage Producers (Bottlers):** Once the beverage formulation is complete, the next essential step is bottling. These facilities are responsible for ingredient preparation, brewing method,

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carbonation, bottling, labeling, and packaging, while ensuring compliance with deposit systems, like Germany's recycling system. The result is a beverage in a bottle, ready for transport and distribution.

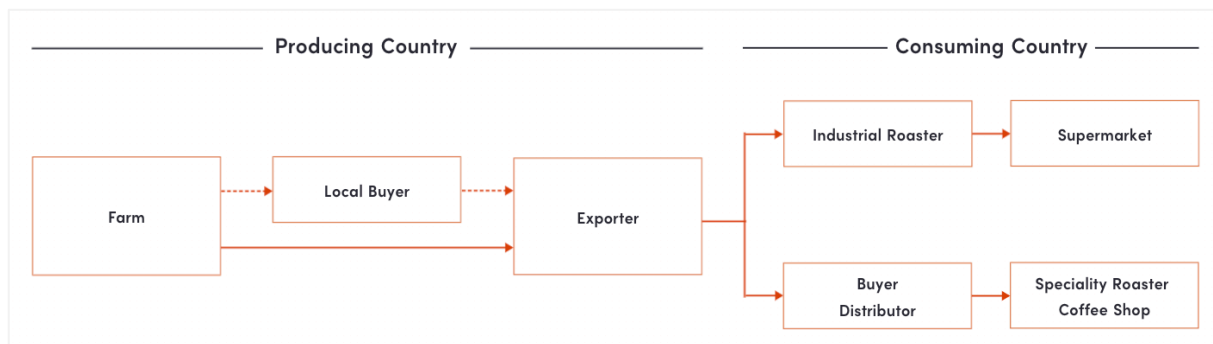
***Logistics Providers:*** Furthermore, there might be additional stakeholders for storage, distribution and logistics, if these services are not covered by the bottler. However, an integrated approach where a single partner can manage multiple stages of the process may be beneficial.

***Retailers:*** Retailers play an important role in offering our product directly to consumers. These might include supermarkets, health food stores, and specialty beverage shops. Retailers not only provide shelf space but also contribute to consumer education and promoting the product's benefits.

In the first two stages of the value chain, sourcing and product development, we already made significant milestones, which will be further detailed in the following chapters. However, it is important to note, that our stakeholder ecosystem extends beyond the value chain. For a holistic overview the inner system including internal stakeholders as well as the outer system, which covers external stakeholders that are not directly part of the value chain need to be considered too (See Appendix B).

#### **4.9 Sourcing: Raw Material Provider**

Understanding the value chain of Cascara begins at its source and starts with the coffee plant and the farmers in the countries of origin. During our visits to coffee farms in Mexico and Guatemala, we observed that Cascara's availability is closely tied to the coffee harvesting process. Despite its abundance, most farms overlook Cascara due to limited knowledge, infrastructure and market demand. However, some innovative cooperatives and farms are beginning to see its potential, adopting diverse approaches to sourcing. The underlying process of how Cascara is sourced can be seen in Figure 16 below.



**Figure 16: Supply Chain of Sourcing Cascara**

Based on our field research, we have dived deeper into the model and identified three different primary sourcing models: *Direct Sourcing*, *Indirect Sourcing*, and a *Hybrid Partnership-based Model* (See Chapter 6). Each presents unique opportunities and challenges, which are presented in the following.

***Direct Sourcing:*** This model involves working directly with coffee farmers to source Cascara. It provides full control over quality and ethical practices but requires significant investment in infrastructure, training, and relationship building. Farmers need support to develop the necessary processes for hygienic drying, storage, and preparation for export. Despite these challenges, direct sourcing can foster strong partnerships and ensure that farmers receive a fair share of the profits.

***Indirect Sourcing:*** Sourcing Cascara through importers offers a lower entry barrier. These entities have already established supply chains and handle the complexities of export logistics. However, this model often lacks transparency, and the origins of Cascara may not align with sustainability and ethical sourcing goals. Additionally, farmers may continue to receive lower profits, extending economic challenges.

***Hybrid Model:*** This approach blends the benefits of direct and indirect sourcing by working with ethically aligned intermediaries such as cooperatives or companies like *ThisSideUp*. These organizations offer a middle ground, providing the infrastructure and market access of indirect

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sourcing while maintaining high sustainability and ethical standards. They invest in farm development, support regenerative agriculture and ensure fair pricing.

***Sourcing Challenges:*** The journey of Cascara from farm to market involves critical steps in processing and logistics. Proper drying is necessary to prevent microbial contamination and spoilage. Farmers must invest in drying beds, climate-controlled storage, and careful quality control measures. The delicate nature of Cascara poses challenges in maintaining its integrity during transportation, especially over long distances from remote farms to export hubs. Additionally, there are more logistical challenges that include the high cost of container shipping, often intensified by fluctuating global shipping rates and inadequate transportation infrastructure in producing regions. Regarding regulations and compliance, the EFSA approval for Cascara infusions highlights its potential but also imposes significant documentation and traceability requirements. Farms must ensure that their Cascara meets these standards and upcoming regulations like the EU's deforestation law. This will further necessitate sustainable land-use practices and comprehensive documentation, adding complexity but also promoting environmental conservation (European Union 2023).

#### **4.10 Prototype Development**

Our initial prototyping phase was a critical step in moving from concept to practical development of our CBB. Through a series of structured prototypes, we built and refined our product recipe. Each prototype was guided by specific hypotheses and adjusted based on internal feedback, survey responses, and systematic improvements. The Table in Appendix C provides an overview of the prototyping process by summarizing goals, hypotheses, key modifications, final recipes, results, learnings, improvements and pictures for each prototype (P1–P4). The following sections refers, but also expands on this table, detailing our prototyping progression and the insights gained with each iteration.

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***P1 - Entrepreneurial Bootcamp:*** Prototype 1 (P1) marked our first foundational recipe of our CBB and was evaluated at the NOVA entrepreneurial bootcamp. We hypothesized that a hot-brewed Cascara base combined with a natural sweetener and acidifier would deliver the refreshing and distinctive taste. We experimented with various natural sweeteners and acidifiers, testing them internally and finalized the recipe with agave syrup and lime. Initial feedback was positive regarding the drink's unique taste, but it lacked the expected refreshment due to a slight bitterness. We also identified the need for structured data for measuring taste and guiding recipe adjustments. Without a data-driven approach, achieving consistent progress would be challenging (See Appendix C, P1).

***P2 - Internal Class Tasting:*** Informed by P1's learnings, P2 was designed to increase refreshment by adding carbonation and switching to a cold-brew method. Additionally, we standardized ingredient ratios and implemented a tasting survey to collect measurable feedback. This version was tested in an internal class tasting with mentors and 33 survey respondents. The P2 recipe included cold-brewed Cascara, carbonated water, agave syrup, and lime. Survey feedback achieved an overall rating of 7.48 out of 10, indicating general satisfaction with the unique taste. However, feedback also highlighted a lack of intensity and insufficient carbonation. Respondents suggested that increasing sweetness could further enhance the flavor experience. These results guided further improvements in P3.

***P3 - Prototyping Fund Final Showcase:*** Incorporating lessons from P2, P3 focused on increasing both intensity and carbonation. Additionally, we recognized the impact of drinking experience on taste perception. We aimed to enhance this aspect by serving the beverage in prototype glass bottles. P3 was presented at our first NOVA Prototyping Fund Final Showcase, where it was tested by attendees and evaluated through 60 survey responses. Our hypotheses were that boosting sweetness and carbonation would result in a more intense, refreshing flavor, and that glass bottles would elevate the overall drinking experience.

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The final recipe retained cold-brewed Cascara, carbonated water, agave syrup, and lime, with increased levels of sweetness and carbonation. Survey results showed an overall taste rating of 7.82 out of 10, reflecting enhanced positive feedback on the overall taste. However, respondents noted a slightly watery impression, likely due to increased carbonated water usage, and suggested further potential for sweetness enhancement. Glass bottles were well-received, confirming their positive impact on the drinking experience. These insights indicated a need for further adjustments to intensify flavor without increasing dilution, leading to the experimental approach adopted in P4.

***P4 - Internal Testing Sessions:*** Learnings from P3 showed that simply intensifying the recipe components did not achieve the desired flavor depth, with ongoing feedback on insufficient intensity. This realization motivated us to revisit the recipe's foundation. In P4, we adopted a more structured approach, testing various sweeteners and adding secondary flavoring aromas to boost intensity and complexity. Internal blind tastings guided us to a refined recipe using cold-brewed Cascara, carbonated water, stevia, lime, and hibiscus (See Appendix C, P4). This approach improved both the intensity and complexity of the flavor profile.

The continuous development of our prototype, based on structured feedback, was crucial in significantly improving the recipe. However, through ongoing research and expert interviews, we recognized that focusing solely on incremental flavor adjustments was too narrow. The beverage of the future combines joy with functionality/health (Werner, personal communication, 2024). Ultimately, our product and hence the recipe must deliver on this dual mission. Achieving this requires a more structured approach to recipe development, supported by robust data collection. At the same time, broader experimentation with additional functional ingredients is essential to find the right balance between taste and health benefits. This balance needs to be met to ensure alignment with consumer preferences, market development and our

brand values. Further understanding and development of our CBB will be elaborated upon in chapter 7.

## 5 Overview of the Impact Business Model Canvas

As a foundational framework, the Impact Business Model Canvas (IBMC) synthesizes our collective research and provides us with a bird's-eye view of what we have achieved so far (See Figure 17). It provides a structured representation of how various elements of our business model interconnect to support our two-sided value proposition: empowering coffee farmers by transforming Cascara into a valuable commodity and offering consumers a sustainable, health-conscious beverage.

<b>Problem Statement</b> The traditional coffee value chain overlooks Cascara, treating it as waste, which results in missed opportunities for economic, social, and environmental impact.				
<b>Mission Statement</b> We promise to create a community, where everybody wins.				
<b>Key Partners</b> 1. Coffee Farmers & Cooperatives 2. Importers & Exporters 3. Prototyping Labs 4. Beverage Producers (Bottlers) 5. Logistics Providers 6. Retailers 7. Customers	<b>Key Activities</b> 1. Build Sourcing Partnerships 2. Develop the Product 3. Build a Brand 4. Go-to-Market 5. Secure Financial Viability  <b>Key Resources</b> 1. Raw Material Cascara 2. Recipe & Dev. Expertise 3. Partnerships with Coffee farmers 4. Brand & Community	<b>Value Proposition</b> <i>"We transform Cascara, the often-overlooked coffee cherry, into a healthy and energizing beverage empowering traditional coffee farmers financially, embracing a circular economy approach by minimizing organic waste."</i>	<b>Stakeholder Relationships</b> 1. Inner System: Keep satisfied 2. Regional System: Manage closely 3. Outer System: Keep informed  <b>Channels</b> 1. On-trade / Off-trade 2. E-commerce 3. Events / Fairs	<b>Stakeholder Segments</b> 1. Inner System 2. Regional System 3. Outer System
<b>Cost Structure</b> 1. Non-financial Costs 2. Financial Costs: CapEx & OpEx			<b>Revenue Streams</b> 1. Bottle Sales	
<b>Intended Impact</b> 1. SDG 8: Promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. 2. SDG 12: Ensuring sustainable consumption and production patterns. 3. SDG 17: Strengthening the means of implementation and revitalizing the global partnership for sustainable development.				

Figure 17: Overview of the Impact Business Model Canvas

To deliver the value proposition in a real-world context, it is crucial to identify and prioritize the key activities within the IBMC (Cuofano 2024; Innovation Within 2024). A deep understanding of these activities will enable the transition from the theoretical foundation to

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actionable and practical tasks. Accordingly, the individual *Field Labs* will focus on the following defined key activities:

***Build Sourcing Partnerships:*** As the first critical first step in our value chain, sourcing lays the groundwork for everything that comes after. In the beverage industry, strategic sourcing decisions are particularly critical as they influence product quality, supply chain sustainability, and the ability to meet consumer expectations for ethically produced goods (McKinsey and Company 2023). This pivotal decision on a sourcing model and the origin of our Cascara directly impacts our capacity to achieve both commercial viability and mission-driven objectives. Through a detailed exploration of Cascara processing and a comprehensive evaluation of sourcing models, we aim to identify an approach that maximizes ecological and social impact while ensuring operational feasibility.

***Develop the Product:*** Product Development marks the critical transition from our concept to a real-world product. This requires a foundational understanding of non-alcoholic beverage development. Building on this knowledge, this individual part aims to transform our raw Cascara into a replicable beverage. Through expert-guided, iterative recipe refinements and data-driven consumer tastings of our kitchen prototype, this chapter examines this process. This detailed exploration not only refines the product but also ensures it aligns with consumer expectations. Ultimately, it guides the way to an operationally feasible and scalable product.

***Build a Brand:*** While the product embodies our functional value, the brand is essential in conveying our purpose and connecting emotionally with consumers. This field lab focuses on translating our internal identity - shaped by shared values, purpose, and vision - into a tangible branding and design strategy. Guided by expert insights and iterative testing, it examines the process of designing a brand that reflects who we are while appealing to our target group. This work lays the foundation for a consistent and impactful brand presence.

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***Go-to-Market:*** The development of a GTM strategy is important for ensuring the successful market entry of our product, particularly in a competitive and trend-driven landscape such as the beverage market. Early adopters, as seen as trendsetters, play a critical role in fostering organic growth by influencing broader consumer behaviors. This chapter addresses how to precisely identify early adopters and locate and engage these trendsetting individuals. By focusing on a hyperlocal approach, this field lab examines how specific sales channels and marketing activities can catalyze brand awareness.

***Secure Financial Viability:*** Finally, securing the financial viability of the business is essential to ensuring long-term success. For early-stage startups, the lack of historical data and high uncertainty require detailed financial forecasting to understand potential financial commitments. This involves analyzing the costs of strategic decisions to clarify the cost structure and evaluating revenue potential to estimate growth opportunities. By integrating cost and revenue insights into a financial model, this individual field lab aims to identify key financial performance indicators, determine funding needs and assess whether the business is financially viable.

These activities not only reflect our strategic priorities but also reveal knowledge gaps that we address individually in this work project. Each team member's focus area is linked to the broader goals outlined in the IBMC, ensuring that our efforts remain interconnected while addressing unique challenges. This structure enables us to contribute specialized insights that enhance the overall feasibility and viability of our business model.

All in all, the IBMC not only acts as a strategic framework but also as a bridge between our collaborative efforts and the targeted research needed to operationalize our venture. The next chapters will dive into each of the discussed components, exploring their potential and addressing the knowledge gaps we need to fill to ensure practical progress.

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## Part II: Individual Part

### 6 Individual Part: Financial Strategy (Luis Warkentin)

#### 6.1 Introduction

This chapter focuses on the financial strategy of our Cascara-based beverage (CBB) business, with the primary objective of designing a sustainable and realistic financial framework that matches the project's value proposition. It adopts a structured and data-driven approach to evaluate the long-term financial viability, while ensuring the project's intended impact is achieved. This analysis aims to bridge insights from the group part and related individual contributions, such as sourcing, product development, and go-to-market (GTM) strategy, into a financial perspective. The goal is to understand the key financial metrics that emerge from the venture's business objectives. The research draws upon the principles of the Impact Business Model Canvas, focusing on cost and revenue dynamics as critical determinants of economic viability. The central knowledge gap guiding this analysis is: *What are the critical factors influencing the economic viability of a CBB startup, with a focus on cost structures, revenue potential, and their implications on funding needs?*

This question underlines the necessity of evaluating cost drivers alongside revenue potential to accurately determine financing requirements and identify the most suitable funding sources. Building on the theoretical framework established by Bill Aulet in *Disciplined Entrepreneurship* and further developed into a hands-on, actionable guide by Paul Cheek in *Disciplined Entrepreneurship: Startup Tactics*, this analysis begins by estimating cost drivers to understand gross profit margins and unit economics. It then identifies diverse revenue streams, emphasizing their role in scaling the business. Finally, funding needs are assessed to explore financing strategies aligned with the specific capital requirements identified. By addressing these aspects, this financial analysis offers a comprehensive roadmap for achieving

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profitability and supporting the venture's strategic goals, such as the financial empowerment of small-scale coffee farmers.

## 6.2 Theoretical Framework

This section reviews relevant literature to inform the development of a financial model tailored to the needs of an impact-driven startup. Despite sharing common goals such as forecasting financial performance, measuring outcomes, and communicating results to stakeholders, entrepreneurial finance fundamentally differs from financial strategies of established organizations. The main difference originates from the lack of historical data in early-stage startups. Consequently, startups face greater uncertainty and must rely on assumptions. Therefore, developing a financial plan as a tool to realistically represent the future and reduce uncertainties is essential (Cheek 2024). The primary goal of financial planning is to guide a pathway to profitability while ensuring liquidity is maintained. Moreover, entrepreneurial finance for impact startups involves additional complexity, as it seeks to align financial viability with broader social or environmental objectives. This dual focus underscores the need for a robust and adaptive financial model that balances profitability with measurable impact.

The approach outlined by Cheek (2024), in *Disciplined Entrepreneurship: Startup Tactics*, which is specifically tailored to early-stage startups serves as the guiding framework to understand how to develop a financial model for an impact start-up. According to Cheek (2024), the financial planning process begins with revenue planning. This involves establishing initial assumptions, such as the number of customers, the quantity of products customers are likely to purchase, and the price they are willing to pay to calculate potential revenues. Research underscores the importance of capturing value through well-designed revenue models, particularly in competitive industries like beverages (Chesbrough and Rosenbloom 2002).

Once the number of products required to meet customer demand is determined, the cost of goods sold (COGS) are calculated, as outlined by Cheek (2024). Cost optimization is a critical success factor for early-stage ventures, enabling businesses to balance affordability with profitability (Hirsch and Walz 2019). Managing these costs effectively is crucial for achieving financial sustainability and remaining competitive, particularly in markets characterized by narrow profit margins such as the beverage industry (Long, Looijen and Blok 2018).

Additionally, Cheek (2024) emphasizes that to develop a comprehensive financial plan, other essential elements must be considered, including operational expenses (OpEx), capital expenses (CapEx), and a hiring plan. These elements are integrated into a financial model to calculate the break-even point and outline the path to profitability and measurable impact. Finally, the financial model serves as a base for forecasting funding requirements, assessing financial risks, and justifying capital needs to potential investors (Rogers 2020).

### **6.3 Methodology**

The methodology applied in this section combines both primary and additional secondary research to build a comprehensive, data-driven foundation for the financial analysis of a CBB business. To establish an initial understanding of financial dynamics in the beverage industry, desk research on entrepreneurial finance for early-stage impact startups was conducted.

Primary research played a critical role in generating insights directly relevant to the project, addressing the limitations of secondary research. Qualitative interviews with experts across the value chain, such as Cascara producers, service providers, potential customers, competitors, and industry specialists, provided key insights into the beverage industry and contributed to realistic cost estimates and the validation of assumptions. Additionally, a survey conducted during the final prototyping fund showcase assessed the target group's willingness to pay, offering essential insights into consumer behavior. These findings informed the 3C Model by

Ohmae (1982), which evaluates pricing through the lenses of customers, costs, and competition to guide adaptive pricing strategies (Helmold 2022). This model ensures pricing aligns with demand dynamics, covers production costs, and incorporates market positioning to remain competitive. Research highlights that these three factors significantly influence pricing decisions, underscoring the model's practical relevance for achieving company objectives in dynamic industries (Mohammed and Sadeq 2022). This holistic approach makes the 3C Pricing Model a valuable tool for creating a pricing strategy that is both maintainable and responsive to market realities.

The findings from both research approaches are systematically integrated into a financial model, to provide a structured and actionable overview. This forecast is designed as a dynamic, iterative document, capable of adapting to strategic decisions and evaluating their financial implications. However, since the 3C Model uses costs as the foundation for pricing strategies, the analysis begins with cost structures before addressing revenue potential.

## **6.4 Cost Structure Analysis**

The following cost analysis examines the CapEx and OpEx derived from the value chain, encompassing raw material sourcing, product development and distribution (See Chapter 4.8). To achieve a complete understanding of all costs, it is crucial to establish the underlying assumptions that form the strategic foundation for financial outcomes. A key step in this process is determining which activities will be performed in-house and which will be outsourced, as this distinction significantly impacts the allocation and classification of costs.

### **6.4.1 Capital Expenses**

Capital expenses represent a critical component for early-stage manufacturing startups. Excessive upfront investments in fixed assets can hinder the ability to adapt to market changes or navigate unexpected challenges (Boston Consulting Group 2014). Preserving liquidity in

favor of operational expenses and ensuring financial flexibility therefore requires minimizing capital tied up in assets.

As outlined in the product development chapter, there are two options for outsourcing the product development (See Chapter 7.6). From a financial perspective, and aligned with the asset-light approach, outsourcing product development in the early stages is a logical choice. This strategic choice reduces the need for upfront investments in physical infrastructure, instead distributing costs across two stages of the development process. The first stage involves iterative flavor refinement to achieve the desired taste profile, accounting for approximately 25% of the total investment. Upon finalizing the recipe, the second stage involves the purchase of the intellectual property (IP), representing the remaining 75% of the expenditure (Fischer, personal communication, 2024). The total investment for this process is estimated to be up to €10,000, depending on the number of iterations required. This approach not only supports financial flexibility but also ensures a high-quality product foundation as outlined in the product development chapter.

#### **6.4.2 Operational Expenses**

Operating expenses are the second pillar of the cost structure. These expenses encompass four core areas: personal expenses, general and administrative (G&A) expenses, research and development (R&D), and sales and marketing (S&M). However, since R&D is outsourced during the initial stages, and its integration into in-house operations remains uncertain, it will not be accounted for in the current analysis. In the following the underlying assumptions of each cost category will be explained ultimately leading to an overview in Table 4 below with a more detailed version in the appendix (See Appendix AT).

***Personal Expenses:*** As a team of five founders, we have agreed that a gross monthly income of €1,500 per person, is the minimum required to fully focus on the business while keeping

personal expenses as low as possible. Over the subsequent years, the aim is to incrementally increase the founders' salaries as business performance allows, targeting a gross monthly salary range of €2,500 per person moving up to €5,000 from year 3 onwards. During the first couple years no additional hires are anticipated, while marketing and sales positions are planned later as scaling requires. This approach is underlined by findings indicating that beverage startups can operate without hiring additional staff during their first years, if outsourcing is done early. (Widmayer, personal communication, 2024).

**General and Administrative Expenses:** G&A expenses cover essential operational activities, such as legal and accounting services, office expenses, IT subscriptions, and insurance. Excluding rent, these costs are projected to remain modest, starting with a monthly budget of €500 and increasing steadily as the team expands. A significant change from year one to year two is the addition of office rent.

Table 3: Operational Expenses

<b>OpEx</b>	€	<b>(184.564)</b>	<b>(564.834)</b>	<b>(1.123.191)</b>	<b>(1.382.725)</b>	<b>(1.853.548)</b>
COGS	€	(54.769)	(338.552)	(793.485)	(935.957)	(1.299.782)
TEAM	€	(108.000)	(180.000)	(271.000)	(364.100)	(452.400)
G&A	€	(7.225)	(25.800)	(29.670)	(38.700)	(40.880)
S&M	€	(14.570)	(20.482)	(29.036)	(43.968)	(60.486)
<b>EBITDA</b>	€	<b>(138.887)</b>	<b>(105.329)</b>	<b>83.100</b>	<b>372.171</b>	<b>510.858</b>
<i>Margin</i>	%	<i>(304,06%)</i>	<i>(22,92%)</i>	<i>6,89%</i>	<i>21,21%</i>	<i>21,61%</i>

**Sales and Marketing:** The GTM strategy prioritizes organic growth through community-building initiatives, complemented by a focused budget for paid advertising in key target regions. Event marketing expenses are estimated at €500 per event, with an additional €30 allocated per new signed e-commerce customer for social media campaigns designed to enhance brand engagement and reach the target audience. Total S&M costs are expected to increase steadily to support market penetration and scaling efforts.

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### 6.4.3 Cost of Goods Sold

COGS represent a significant portion of the business's total expenses, directly impacting unit economics and gross profit. For this venture, COGS includes costs related to raw materials, production, bottling, and logistics.

As outlined in the sourcing section, this analysis assumes that the primary raw material, Cascara, will be procured from an intermediary such as *ThisSideUp*, a supplier committed to sustainable practices and fair trade. Their Cascara is priced at €11.67 per kilogram, with €7.06 per kilogram going directly to the coffee farmers of Colombia Argote (*ThisSideUp* 2024). Based on our value proposition we want to ensure fair compensation of coffee farmers, which is why we do not intend to lower these costs. Over the long term, alternative sourcing methods may offer varying cost structures, but with this option, approximately 60% of our raw material costs directly contribute to the livelihoods of farmers.

Additional product-related costs include bottles, labels, and boxes. For smaller batch sizes, our findings indicate reliance on new glass bottle retailers. The most cost-effective glass bottle meeting our criteria is priced at approximately €0.19 per unit (Maßing, personal communication, 2024). However, it was noted that glass production costs are closely tied to volatile energy prices, showing a potential risk. For larger production volumes starting at 50,000 bottles, procurement from bottle sorting centers - facilities that collect and redistribute used bottles into the recycling system - becomes feasible (Humann, personal communication, 2024). This option is expected to offer greater price stability, cost savings and a lower carbon footprint. Boxes to accommodate the bottles, typically holding 24 units each, are estimated at €3 per box, translating to approximately €0.125 per bottle (Maßing, personal communication, 2024).

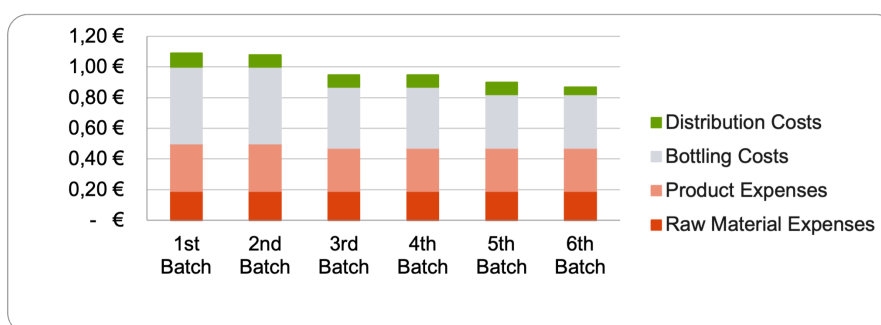
Labels contribute minimally to overall costs and are included in the bottling manufacturer's service package. Bottling itself constitutes a significant portion of the estimated COGS, with

initial costs at €0.40 per bottle, potentially decreasing to €0.30 per bottle as production volumes increase (Humann, personal communication, 2024).

Logistics, encompassing shipping and handling, are calculated based on shipments on pallets, with an average cost of €300 per pallet. Each pallet accommodates 4,000 bottles (Steiner, personal communication, 2024). Notably, logistics costs are influenced by scaling, as pricing is very dependent on the volume. Consequently, smaller batch sizes incur significantly higher logistics costs per bottle compared to larger volumes. Storage costs, typically incurred for larger production quantities, are not anticipated for small batches at this stage. However, as production scales, the need to rent additional storage space will arise.

The initial production batch is planned for 10,000 bottles, a quantity mostly determined by minimum order requirements. Further our production assumptions include maintaining a minimum stock enough to cover six months of sales, with an additional 10% buffer to accommodate unforeseen demand fluctuations. Batch sizes are rounded to the nearest 10,000 bottles to enhance production efficiency and align with supplier and logistical requirements.

At this scale, the estimated COGS per bottle is €1.10 for the first batch, decreasing to €0.87 for subsequent batches as economies of scale are realized (See Figure 49).



**Figure 18: Cost of Goods Sold**

These cost reductions are driven by several factors, including increased production volumes, quantity discounts from suppliers, and improved operational efficiencies. Such savings

emphasize the importance of scaling production to optimize overall cost structures and financial performance.

## **6.5 Revenue Analysis**

### **6.5.1 Revenue Streams**

Based on the established GTM strategy, the CBB business operates through three primary revenue streams: B2B, e-commerce, and direct-to-consumer (D2C) sales at events. The B2B channel forms the cornerstone of the sales strategy, initially targeting cafés, restaurants, bars, sports studios, and convenience stores, with plans to expand into retail stores during later stages. As pointed out in chapter 9, leveraging diverse sales channels to balance market reach and operational efficiency is a critical factor for early-stage beverage ventures (Tanamal et al. 2024).

### **6.5.2 Pricing Strategy**

First the baseline of the pricing strategy will be established, by analyzing the first element of the 3C Pricing Model: costs. This element is particularly fundamental as the COGS remain consistent across all sales channels. The COGS identified earlier are €1.10 per bottle for the first production batch of 10,000 bottles, with an expected reduction to €0.87 in subsequent batches as economies of scale are achieved. These values provide the foundation for pricing decisions, ensuring they cover production costs.

The next step is analyzing price structure of our direct competitors in the market. To establish a pricing strategy that is competitive and aligned with industry standards, I compared the online stores and websites of our direct competitors (See Chapter 4.6). Our analysis revealed that 0.33L bottles are priced between €2.35 and €3.50 across various online stores, with an average

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of € 2.80 (See Appendix AU). This price range serves as a benchmark helping us position our product strategically within the competitive landscape.

Finally, to determine the optimal price for all consumer segments, each sales channel must be analyzed separately. This ensures that pricing strategies are tailored to reflect channel-specific willingness to pay, as consumer expectations and price sensitivity vary by category.

For B2B sales, insights from interviews with specialty coffee places, indicate a willingness to pay ranging between €1.20 and €1.50 per bottle (Langemann, personal communication, 2024).

Taking into consideration, that these prices align with what B2B customers typically pay for other refreshing drinks and cover COGS, a price of €1.50 per bottle is considered reasonable for this customer segment.

For the e-commerce channel, direct-to-consumer sales require careful consideration of factors such as shipping costs, discounts for bulk purchases, and higher price sensitivity among consumers. A consumer survey (N = 36) revealed an average willingness to pay of €2.83 per bottle (See Appendix AV). Factoring in discounts and competitor pricing, a weighted average price of €2.50 per 0.33L bottle can be anticipated as a reasonable for our online shop, ensuring a balance between consumer affordability and profitability.

For D2C sales at events, pricing leverages the context of events where perceived value and willingness to pay are typically higher. Market data indicate an average price of €7.57 per liter for off-premises consumption of refreshing beverages, corresponding to approximately €2.52 per 0.33L bottle (Statista Market Insights 2024). This aligns with the willingness to pay reported in the consumer survey and adequately covers COGS. Accordingly, a price of €2.50 per bottle is recommended for this sales channel as well.

By applying the 3C Pricing Model across all sales channels, we can balance profitability with competitive positioning and consumer expectations, ensuring a robust framework for sustained

growth. A Summary of all prices and the respective gross profit margin based on the COGS of the first batch can be found in the table below (See Table 5).

**Table 4: Gross Profit Margin Overview**

<b>Sales Channel</b>	<b>Price per Bottle</b>	<b>Gross Profit</b>	<b>Gross Profit Margin</b>
B2B	1.50 €	0.40 €	27%
E-Commerce	2.50 €	1.40 €	56%
Events	2.50 €	1.40 €	56%

### 6.5.3 Sales Projections

This section projects revenues for our CBB business over the next five years, reflecting simplified yet realistic assumptions based on established revenue streams and pricing strategy. Customer growth, bottle sales, and revenue potential are highlighted, with a detailed summary of assumptions provided in the appendix (See Appendix AW).

Sales are set to begin in June 2025 through B2B and e-commerce channels, with seasonal fluctuations impacting average sales per customer. B2B efforts will target cafés and restaurants first, expand to sports studios in 2025, and scale to convenience stores and universities in Berlin by 2026. Entry into smaller supermarkets is projected for 2026. B2B sales are expected to provide stable and predictable revenue due to long decision cycles but low churn rates.

E-commerce sales are likely to see an initial surge from our personal network but will remain a modest portion of total revenues, since buying beverages online is not very common (Statista Market Insights 2024). However, loyal customers valuing convenience are expected to provide a stable base.

No revenues are expected from events in the first year, as bottles will be sponsored to build brand visibility and attract early adopters. From 2026, events will contribute modestly during summer months, primarily to increase awareness and engage with target audiences.

Table 5: 5-year Sales Forecast

		2025 FY (F)	2026 FY (F)	2027 FY (F)	2028 FY (F)	2029 FY (F)
<b>Financial metrics</b>						
<b>Revenue</b>	€	<b>45.677</b>	<b>459.505</b>	<b>1.206.292</b>	<b>1.754.896</b>	<b>2.364.406</b>
B2B sales	€	37.344	423.026	1.109.252	1.568.981	2.065.505
<i>Growth</i>	%		1032,77%	162,22%	41,44%	31,65%
E-Commerce	€	8.333	23.039	80.236	162.516	271.899
<i>Growth</i>	%		176,49%	248,26%	102,55%	67,31%
Events	€	0	13.440	16.800	23.400	27.000
<i>Growth</i>	%		-	25,00%	39,29%	15,38%
<b>Gross Profit</b>	€	<b>(9.092)</b>	<b>120.953</b>	<b>412.806</b>	<b>818.939</b>	<b>1.064.624</b>
<i>Margin</i>	%	(19,91%)	26,32%	34,22%	46,67%	45,03%
<b>Customer metrics</b>						
B2B Customers	#	78	322	495	647	803
E-Commerce Customers	#	278	1.046	2.383	5.092	9.623
Event Customers	#	1.900	2.800	3.500	5.850	6.750
<b>Customers</b>	#	<b>2.256</b>	<b>4.168</b>	<b>6.378</b>	<b>11.589</b>	<b>17.177</b>
<i>Growth</i>	%		84,76%	53,04%	81,70%	48,22%
Bottles sold	#	31.877	296.609	778.315	1.120.353	1.496.563
<i>Growth</i>	%	-	830,47%	162,40%	43,95%	33,58%
<b>Impact metrics</b>						
Amount of Cascara	kg	820	5.576	14.596	17.220	24.600
<b>Revenue for farmer</b>	€	<b>5.789</b>	<b>39.367</b>	<b>103.048</b>	<b>121.573</b>	<b>173.676</b>

An analysis of the data in Table 6 reveals several critical insights. The venture offers significant growth potential, especially through B2B sales. Despite this opportunity, achieving the projected scale poses challenges. High sales volumes are required to generate substantial turnover, particularly given the low margins at the beginning.

In the initial stage, the gross profit margin is modest, starting at around 26 percent in year two, leaving limited room to cover operational expenses and achieve profitability. Since COGS are closely tied to production volumes, they provide flexibility, as these costs do not arise if growth slows down. On the other hand, operational expenses such as personnel costs are more persistent regardless of production levels, posing a significant risk to liquidity during periods of slower growth. With the prospect of gross profit margins rising above 45 percent in the

coming years, the importance to achieve more profitable unit economics through economies of scale becomes evident. Should this not occur, and gross profit margins remain relatively low, the financial viability of the business would be at significant risk without growth.

Another observation is that the sourcing model ensures revenues for coffee farmers from day one, as these payments are already embedded within the COGS. This outcome confirms the effectiveness of the intended Triple Bottom Line, established as part of the sourcing framework (See Chapter 6.2). If the projected scale is achieved, the potential to create significant positive value for coffee farmers becomes evident, reinforcing the social impact goals of the business.

## **6.6 Funding Strategy**

### **6.6.1 Capital Requirements**

Following the cost analysis and revenue projections, a comprehensive profit & loss statement and cash flow statement were developed, detailed in Appendix AX and AY. Together, these statements illustrate the path to profitability and based on the projected ending balances, the funding necessary to secure the runway was calculated.

An analysis of the P&L reveals that the annual result for the first operational year is projected at a loss of almost €140,000. More than two-thirds of this loss is attributed to personnel costs. Production costs amount to roughly €55,000, which can almost be fully covered by revenues. In the second year, the business is expected to incur another loss of around €105,000. By the third year (2027), the P&L shows a positive EBITDA, marking a significant milestone toward achieving financial profitability and enabling long-term growth.

As outlined in the P&L, the liquidity gap of nearly €250,000 must be addressed to secure the runway for the first two years. While EBITDA turns positive in 2027, a closer examination of the cash flow reveals significant liquidity challenges during production periods. To produce nearly 400,000 bottles in the first half of 2027, a total upfront cost of approximately €350,000

is required. Although this amount is recovered over the following months through sales, the funds must be advanced beforehand. As the company lacks reserves to cover such production volumes, each production cycle represents a negative figure in the cash flow statement. Even in the fifth year, the cash balance is insufficient to fully finance production outright, despite projections for an annual surplus of nearly half a million euros.

This temporary mismatch between costs and revenues highlights the critical role of working capital management, particularly during production periods. For this estimation, a six-month sales cycle was assumed. However, in practice, this period could extend further. This mismatch imposes the greatest financial strain on the business, as it underscores how the unit economics, while highly profitable in the long term, are heavily influenced by the timing of cash flows.

### **6.6.2 Sources of Funding**

To secure the required runway and facilitate long-term growth, I aim to explore various funding options aligned with its sustainability-focused objectives. These include crowdfunding, grants and subsidies, equity financing such as business angels and venture capital, and debt financing.

**Crowdfunding:** Crowdfunding provides an option to raise funds while engaging potential consumers and building brand awareness. Platforms like Kickstarter and Indiegogo allow businesses to showcase their sustainability mission, attracting supporters who prioritize ethical and environmental initiatives. Research indicates that crowdfunding not only provides access to capital but also validates market demand for products (Agrawal, Catalini, and Goldfarb 2015). The ability to connect directly with socially responsible individuals enhances the appeal of crowdfunding for our project.

**Grants and Subsidies:** Government-backed grants and subsidies provide valuable early-stage support. In Germany, the *EXIST-Gründerstipendium* funds living expenses, coaching, and materials for innovative ideas from students (Federal Ministry for Economic Affairs and Energy

2024). Similarly, the *Gründerstipendium.NRW* offers €1,200 per month for up to a year, along with coaching (Ministry of Economic Affairs, Industry, Climate Action, and Energy of the State of North Rhine-Westphalia 2024). These programs are particularly useful for minimizing personnel costs in the first year.

**Equity Financing:** Business angels are common for early-stage funding, providing both capital and mentorship. Venture capital, on the other hand, is better suited for scaling operations, particularly for expanding distribution to supermarkets and retail chains. However, venture capital firms typically target high-growth businesses and require a clear exit strategy, such as acquisition or IPO, to attract interest (Gompers and Lerner 2016). Increasingly, investors are drawn to ventures that demonstrate innovation, scalability, and a commitment to sustainability (Kerr, Lerner, and Schoar 2014). The intended impact of our venture, with its vision of supporting small-scale coffee farmers and promoting ethical sourcing, aligns strongly with the priorities of socially conscious investors like AENU and Planet A Ventures. These firms focus on funding startups that successfully integrate profitability with measurable environmental and social benefits, positioning them as ideal partners for ventures like ours.

**Debt Financing:** Debt financing provides a less dilutive option for funding the venture. While traditional bank loans may be difficult to secure in the early stages due to limited collateral and higher risks, they could become a cost-effective funding source in later stages when financing production cycles become more predictable and repayment timelines are clear. Research highlights the importance of balancing equity and debt to maintain financial flexibility while minimizing the cost of capital (Hackbarth, Hennessy and Leland 2014).

### **6.6.3 Financial Risk Assessment**

The primary financial risks identified are market demand uncertainties and cost structure vulnerabilities. Market demand for CBBs is still emerging, as discussions with competitors

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have highlighted that Cascara's lack of recognition is a challenge to achieve mass market acceptance (Schadewald, personal communication, 2024). Failure to meet projected sales targets could endanger cash flow and overall financial viability. Additionally, the inability to minimize COGS represents a worst-case scenario, where high production costs compromise unit economics and risk the profitability of our venture. Dependencies on external suppliers or inefficiencies in production processes could further affect these issues.

## **6.7 Conclusion**

The financial analysis underscores the viability of the CBB business, with profitability achievable, while supporting the venture's strategic goals and impact. As operations scale, economies of scale offer the potential for consistent improvements in gross profit margins. Nevertheless, significant risks remain, particularly those related to market demand uncertainties and the management of high COGS, emphasizing the need for an adaptive financial strategy.

It is crucial to acknowledge the limitations of this analysis, which relies on assumptions to reflect reality. While these assumptions aim to be realistic, they cannot fully predict the complexities of the future. Despite these constraints, this financial forecast provides a clear understanding of what it will take to launch the venture. Importantly, it allows for the development of a targeted funding strategy tailored to the capital requirements of each phase.

In the launch phase, a combination of grants and subsidies to cover personnel expenses, alongside crowdfunding to finance the initial production batches, emerges as a pragmatic approach. As the business grows, other scenarios become viable. For example, impact equity financing could facilitate expansion into new markets or product lines. However, equity-based financing carries implications beyond the financial, potentially influencing the company's growth trajectory and its commitment to social impact. For this venture, maintaining impact

and sustainability are central objectives. In this context, attracting impact investors could prove feasible.

As the business stabilizes, debt financing through government-backed sustainability loans or grants offers a cost-effective method for addressing the cyclical funding needs associated with production schedules.

In summary, the financial strategy aligns closely with the business's broader strategic goals, highlighting that social impact and profitability are not mutually exclusive. From an economic perspective, achieving the financial viability of the CBB business is not without its challenges, but it remains a realistic and achievable venture.

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## Part III: Group Part

### 7 Discussion

Now that we have presented our deep dives into the key activities of our CBB business, it is time to take a step back and adopt a bird's-eye perspective. This broader view allows us to evaluate how our vision is translated into practice. The core premise of this work project was to explore the potential of transforming Cascara from a previously underutilized by-product into a valuable and sustainable ingredient for beverages. All while laying the groundwork for an impactful and profitable business. In general, the findings from our market research, expert interviews, the field trip to Central America, and consumer tastings strongly indicate that both feasibility and market potential are fundamentally present. However, as we transition from concept to implementation, we must match our ambitious impact vision with the practical constraints of real-world execution.

Through our value chain analysis, we gained a critical insight: achieving the highest levels of transparency, control, and measurable impact would ideally require direct management of every part of our value chain: from coffee farmers to the end consumer. However, the detailed examination of the value chain, through our individual field labs, has revealed that achieving such a level of control is far more complex than initially anticipated. One clear example of this challenge lies in product development. While our team brings strong expertise in Sales, Marketing, Branding, and Finance, we lack the specific technical skills required for sourcing and beverage development. The absence of a professional beverage technologist has revealed significant barriers in our ability to develop a high-quality product entirely in-house. Attempting to execute product development without addressing this skills gap would lead to inefficiencies and jeopardize the overall feasibility of our business model. This highlights the

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need to carefully assess outsourcing, where external expertise can complement our internal capabilities.

To ensure that our outsourcing decisions align with our core values, we must focus on a methodology rooted in ethical alignment, transparency, and measurable impact. This involves prioritizing partners whose practices are consistent with our mission of ecological and social sustainability. Rather than creating a rigid decision framework, we rely on a values-driven approach: selecting partners who demonstrate a commitment to fair labor practices, environmental responsibility, and the ability to track and measure the impact of their operations. By fostering open communication and mutual accountability, we can integrate external expertise into our value chain without compromising our social mission. A practical example of this approach is our adoption of a hybrid sourcing model. This model balances operational efficiency with impact orientation by partnering with intermediaries who share our values. These partnerships allow us to maintain transparency and control over key sourcing activities while leveraging the expertise and resources of trusted collaborators. Through this model, we demonstrate how outsourcing, when aligned with our mission, can enhance both scalability and impact without risking mission drift.

Despite these strengths, certain limitations remain. For example, while we aim to close the product lifecycle by reintegrating Cascara waste into a circular economy, this remains an area requiring further research. Concepts such as downcycling Cascara into biogas, fertilizers, or animal feed hold potential but lie outside the scope of this work. Future research will be necessary to evaluate these opportunities and establish a more robust circular economy framework for Cascara.

In conclusion, our journey started with a vision centered on creating both environmental impact – by upcycling Cascara – and social impact – by supporting coffee farmers through diversified income streams. However, the transition from this idealistic vision to practical implementation

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unveiled significant challenges. Our individual analyses highlighted that achieving impact depends on market demand and financial viability. Without a stable foundation, no lasting impact can be created. This realization shifted the focus toward emphasizing consumer benefits, prioritizing health, fun, and enjoyment in product and brand development. However, by fostering close partnerships we believe that we can realize our company's promise: to create a community where everyone wins and where Cascara becomes a driver of positive ecological and social change.

## **8 Future Outlook: Growing with Purpose**

While the journey so far has required pragmatic decisions, our idealistic vision remains at the core of our mission. We have demonstrated that our vision, bridging environmental and social impact, is achievable, but its full realization lies in future steps. Moving forward, we will expand our efforts to directly benefit coffee farmers, growing our impact incrementally and sustainably.

In the upcoming coffee harvest season, we plan to visit coffee-growing regions to gain a deeper understanding of the lives, challenges, and opportunities faced by farmers. Operationally, our immediate focus lies in finalizing product development and collaborating with a contract bottler to produce the first batch of our beverage using our own financial resources. Having a tangible product in hand will allow us to collect further, hands-on feedback, learning from insights, iterate, and refine our product. This process will help us build on the proof of concept and evaluate the feasibility of our venture under real-world conditions.

These practical steps align closely with the broader findings of this work project, which highlight the emergence of a new market category centered around Cascara and its potential to generate economic, social, and environmental impact. However, achieving this impact depends

on generating strong market demand. Only with such demand can large-scale sourcing become economically viable, enabling us to contribute meaningfully to the targeted SDGs.

Since the Cascara industry is still in its early stages, the current demand is not yet at scale. This presents a main challenge but also an opportunity for the future. By entering the market now, we have the chance to shape the path of this emerging industry. As value-driven pioneers, we aim to guide the industry with a strong focus on sustainability and impact, ensuring these principles remain at the forefront of its development. By positioning ourselves as a trusted leader, we can create the demand needed to unlock Cascara's full potential, both economically and socially. When people hear about the coffee cherry, we envision that their first thought will turn to our brand and our Cascara drink, setting the standard as the most recognized product in the Cascara market.

This commitment to thoughtful growth reflects our intention to become a *Zebra*, not a *Unicorn* (Rahardjo 2023). Rather than pursuing rapid, unsustainable growth, we aim to prioritize sustainability and community-building from the ground up, connecting coffee farmers to end consumers through shared values. This long-term approach is not a compromise but an opportunity to create lasting value, both socially and economically.

In summary, our entrepreneurial journey has revealed the ambiguity and complexity of creating an impact-driven venture. Balancing idealism and reality requires navigating difficult decisions while remaining true to the company's purpose and values. This challenge is both demanding and exciting, offering the potential to contribute positively to society. As the Cascara Collective, we see this as more than a business opportunity, it is a chance to redefine how entrepreneurship can align with purpose.

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## List of Abbreviations

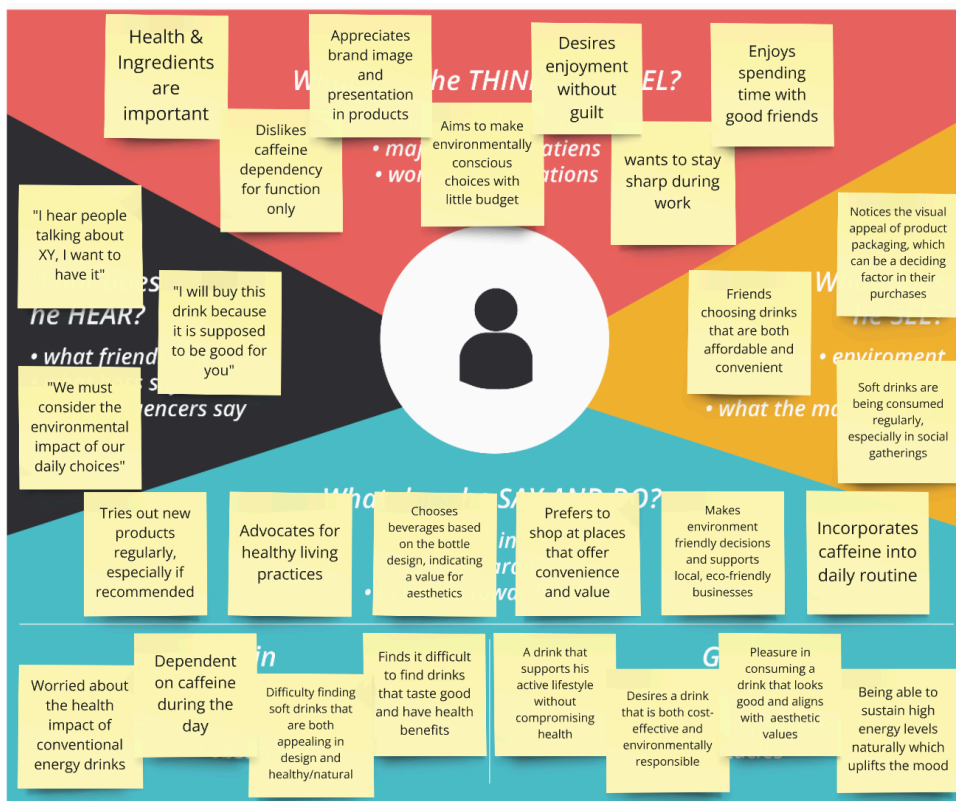
B2B	Business-to-Business
B2C	Business-to-Consumer
CAGR	Compound Annual Growth Rate
CBB	Cascara-based beverage
EFSA	European Food Safety Authority
GTM	Go-to-Market
IBMC	Impact Business Model Canvas
MB	Mood Board
MVBB	Minimum Viable Brand Book
NAB	Non Alcoholic Beverage
SAM	Serviceable Available Market
SDGs	Sustainable Development Goals
SOM	Serviceable Obtainable Market
TAM	Total Addressable Market
TUM	Technical University Munich
VP	Value Proposition
KG	Knowledge Gap
KPI	Key Performance Indicators
COGS	Cost of Goods Sold
OpEx	Operational Expenses
CapEx	Capital Expenses
IP	Intellectual Property
VC	Venture Capital
IPO	Initial Public Offering

## Appendix

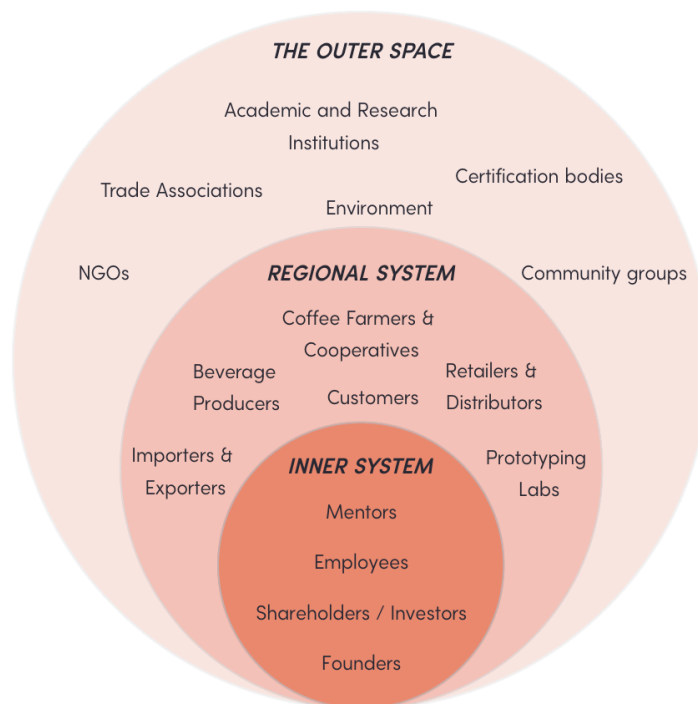
### General Part:

#### Appendix A: *Customer Exploration (upper) and Empathy Map (lower)*

<p><b>Who is our customer / user / stakeholder ?</b> Be specific: for a person - age, origin, job, interests for a company - size, industry, purpose</p> <p>Germany, England &amp; 18-30 years</p> <p>mostly academic background</p> <p>Students or young professionals with 2-5 years of work experience</p>	<p><b>What are his likes and dislikes ?</b> Related to the general character of the person / stakeholder</p> <p>Likes: healthy lifestyle, sports, being in nature, outdoors, mindfulness</p> <p>Likes: time with friends, good food &amp; drinks, music &amp; party, caffeine &amp; specialty coffee</p> <p>Dislikes: industrialized consumption, getting bored, sugar</p>
<p><b>Jobs to be done &amp; challenges</b> Functional / social / emotional / supporting needs in a specific situation e.g. I need fast transport / good reputation / security / help to... Quotes, that could be typical for this person</p> <p>Finding a healthy alternative for caffeinated drinks</p> <p>Establishing a work-life balance</p> <p>Caffeine is wanted for function or pleasure</p> <p>Coffee caffeine rush is followed by a energy down</p>	<p><b>What we don't know</b> Assumptions, black spots Why / when is something a challenge / a good experience...?</p> <p>What's the caffeine effect of cascara (compared to coffee)?</p> <p>What ingredients are perceived as healthy and delicious?</p> <p>How healthy is Cascara for the body?</p> <p>Price sensitivity</p> <p>What are the specific dietary preferences and restrictions?</p>
<p><b>Existing solutions</b> Any kind of solution that could help to fulfill the needs</p> <p>Coffee (Caffeine)</p> <p>Mate &amp; Energy drinks (Taurin &amp; Guarana)</p> <p>Green tea (Teenin)</p> <p>Soft Drinks</p>	<p><b>THIS WOULD BE GAME CHANGING!</b> Empathize with your customer / user / stakeholder What would be the perfect solution, situation or experience?</p> <p>Natural Alternative for Caffeinated Beverages (Soft drinks &amp; Energy Drinks)</p> <p>High accessibility in sports clubs, bars, supermarkets etc</p> <p>Caffeinated beverage with a better reputation than energy drinks or mate</p> <p>Not being "dependent" on coffee anymore</p>



Appendix B: Stakeholder Ecosystem



Appendix C: Prototype Testing

	P1	P2	P3	P4
<b>Goal</b>	Develop a foundational recipe for a refreshing, organic, and healthy beverage using Cascara as the core ingredient	Create a more refreshing taste by incorporating carbonation and using a cold-brew method	Enhance drink intensity through increased sweetness and carbonation, and improve the drinking experience with prototype glass bottles	Challenge and refine the foundational recipe by experimenting with new sweeteners and adding a secondary flavoring agent to enhance intensity
<b>Hypotheses</b>	H1: A hot-brewed Cascara base with natural sweetener and acidifier will deliver a refreshing and unique taste experience H2: Cold-brewing Cascara will produce a smoother, less bitter flavor profile	H1: Adding carbonation will enhance the refreshment quality of the beverage H2: Cold-brewing Cascara will produce a smoother, less bitter flavor profile	H1: Increasing sweetness and carbonation will create a more intense and refreshing beverage H2: Serving in glass bottles will enhance the drinking experience	H1: Adding a secondary flavoring agent will increase intensity without overpowering the original Cascara flavor. H2: Using alternative sweeteners can achieve desired sweetness levels without compromising flavor
<b>Key Modifications</b>	N/A	KM1: Switched to a cold-brew method to reduce bitterness and create a smoother flavor KM2: Added carbonation to enhance the beverage's refreshment quality	KM1: Increased the amount of agave syrup to boost sweetness, aiming to achieve a more intense flavor. KM2: Increased carbonation to further enhance refreshment and reduce perceived bitterness KM3: Introduced glass bottles to improve the drinking experience	KM1: Added and experimented with various secondary flavoring agents (selected hibiscus) to enhance intensity without overblending Cascara's natural flavor KM2: Tested multiple natural sweeteners (selected stevia) to achieve balanced sweetness
<b>Final Recipe</b>	Base Ingredient (B1): Hot-brewed Cascara Sweetener (S1): Agave syrup Acidifier (A1): Lime juice Second Flavoring Agent (SFA1): N/A	B1: Cold-brewed Cascara B1Z: Carbonated water (CO2) S1: Agave syrup A1: Lime juice SFA1: N/A	B1: Cold-brew Cascara B1Z: Carbonated water (CO2) S1: Increased agave syrup A1: Increased lime SFA1: N/A	B1: Cold-brew Cascara B1Z: Carbonated water (CO2) S1: Stevia A1: Lime SFA1: Hibiscus
<b>Results / Learnings</b>	Learning 1 (L1): Positive feedback on unique taste but lacked expected refreshment; slightly bitter. L2: No structured data for measuring taste or building recipe	L1: Overall taste was perceived as good and unique L2: Beverage lacked sufficient carbonation. L3: Beverage lacked intensity, potentially due to insufficient sweetness. Data: 33 respondents rated the overall taste 7/10 out of 10	L1: Sweetness was perceived as good with upward potential. L2: Carbonation was improved but still left a slightly watery impression L3: Glass bottles received highly positive feedback for the drinking experience Data: 60 respondents rated the overall taste 7/10 out of 10	L1: Improved intensity and complexity of flavor profile L2: Identified the need for a more structured, data-driven approach to ingredient selection
<b>Improvements</b>	Improvement 1 (I1): Use cold-brewed Cascara to reduce bitterness I2: Add and enhance floral/fruity notes I3: Implement survey usage to ground taste experience on data	I1: Increase intensity by enhancing sweetness and carbonation I2: Recognize that drinking experience significantly shapes taste perception	I1: Further improve intensity by challenging and expanding the foundational recipe despite positive feedback I2: Continue using glass bottles to enhance the overall drinking experience	I1: Adopt a more systematic, data-driven process to refine ingredient choices I2: Expand focus beyond taste to include functionality, ensuring alignment with the goal of creating a natural and healthy beverage



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## Appendix D: Interview List

Nr.	Interviewee	Company	Field of Expertise
1	R. Saltman	Nova SBE	Startup Mentor
2	N. Habib	Nova SBE	Entrepreneurship
3	S. Adler	Nova SBE	Startup Mentor
4	K. Schadwald	Cascaritas	Cascara Beverage Startup Founder
5	Dr. R. Nagel	ProGua e.V.	Coffee Non-profit Organization & Cooperative
6	Dr. R. Werner	TUM Venture Lab	Food, Agro & Biotech Startup Incubation
7	F. Peters	Biohack Spirit	Sales & Marketing
8	K. Stadelmeyer	ADM	Cascara Research
9	H. Kessler	TXE Extraction Services	Process Engineer
10	Dr. S. Schwarz	Coffee Consulate	Applied Coffee Science & Research
11	A. Schloesinger	HPC AG	Cascara Research
12	B. Rizvanovic	Madan Parque	Business Development
13	J. Casaca Lemos	JCLLTD, Quinta Flamingos	Design Strategy
14	S. Subramanian	OFl	Coffee Trader
15	D. Andrea	La Voz	Coffee Farm & Cooperative
16	M. Hernandez	La Azotea	Coffee Farm
17	T. Reher	Shangri-La	Coffee Farm & Cooperative
18	L. Edelmann	Finca Hamburgo	Coffee Farm & Cooperative
19	L. Clerkx	This Side Up Coffees	Coffee & Cascara Import
20	V. Montgomery	Martin et Karczinski	Visual Design & Strategy
21	F. Haas	Blossom Design	Visual Design & UX/UI Design
22	D. Albert	Monospace Design	Brand Identity Strategy
23	E. Ayaz	ATOLYE	Strategic Design Consultancy
24	I. Lampreia	Morais Leitao	Legal Consultancy
25	L. Kunzmann	Kara Limo	Cascara Beverage Startup Founder
26	S. Kollmannsberger	TUM Venture LAB	Beverage Technologist
27	R. Jentsch	TUM Venture LAB	Beverage Technologist
28	S. Petchmune	TUM Venture LAB	Beverage Technologist
29	D. Ullrich	Kattlenburg	Sales & Marketing
30	L. Huber	Mono Tea	Sales & Marketing
31	J. Groseker	J's Lemonade	Sales & Marketing
32	J. Balumuena	JM Blickwinkel	Sales & Marketing
33	C. Iwanski	ROY Kombucha	Sales & Marketing
34	B. Bohm	Cans	Sales & Marketing
35	Anonymous	Anonymous	Head of Marketing
36	Manuel Fischer	Beverage Boutique	Recipe Development
37	Julius Widmayer	Panda Nutrition GmbH	Beverage StartUp
38	Daniel Maßing	EUROGLAS Verpackungsgesellschaft m.b.H.	Bottle Manufacturer
39	Thomas Humann	Friedrich Lutvogt GmbH & Co. KG	Bottling Services
40	Holger Steiner	Lagenser Fruchtsäfte Koch Getränke GmbH	Bottling Services
41	Christian Langer	HALBSTARK Langemann & Neifer GbR	Specialty Coffee

## Individual Field Lab – Financial Strategy (Luis Warkentin)

### Appendix AT: Detailed Overview Operational Expenses

OpEx		2025 FY (F)	2026 FY (F)	2027 FY (F)	2028 FY (F)	2029 FY (F)
<b>Personnel expenses</b>						
Salary	€	-90.000	-150.000	-225.000	-301.750	-377.000
Expenditures	€	-18.000	-30.000	-45.000	-60.350	-75.400
New hire expenses	€	0	0	-1.000	-2.000	0
<b>Total personnel ex.</b>	<b>€</b>	<b>-108.000</b>	<b>-180.000</b>	<b>-271.000</b>	<b>-364.100</b>	<b>-452.400</b>
<i>Percentage of total</i>	<i>%</i>	<i>83%</i>	<i>80%</i>	<i>82%</i>	<i>81%</i>	<i>82%</i>
<b>G&amp;A</b>						
Legal & Accounting	€	-2.875	-3.000	-3.450	-4.500	-4.400
IT & SaaS Subscriptions	€	-1.650	-2.100	-2.415	-3.150	-3.360
Office	€	0	-18.000	-20.700	-27.000	-28.800
Tele and communication	€	-1.200	-1.200	-1.380	-1.800	-1.920
Insurance	€	-1.500	-1.500	-1.725	-2.250	-2.400
<b>Total G&amp;A</b>	<b>€</b>	<b>-7.225</b>	<b>-25.800</b>	<b>-29.670</b>	<b>-38.700</b>	<b>-40.880</b>
<i>Percentage of total</i>	<i>%</i>	<i>6%</i>	<i>11%</i>	<i>9%</i>	<i>9%</i>	<i>7%</i>
<b>S&amp;M</b>						
Social media	€	-5.070	-6.482	-11.536	-24.468	-37.986
Press	€	0	0	0	0	0
Events	€	-9.500	-14.000	-17.500	-19.500	-22.500
<b>Total S&amp;M</b>	<b>€</b>	<b>-14.570</b>	<b>-20.482</b>	<b>-29.036</b>	<b>-43.968</b>	<b>-60.486</b>
<i>Percentage of total</i>	<i>%</i>	<i>11%</i>	<i>9%</i>	<i>9%</i>	<i>10%</i>	<i>11%</i>
<b>Total OpEx</b>	<b>€</b>	<b>-129.795</b>	<b>-226.282</b>	<b>-329.706</b>	<b>-446.768</b>	<b>-553.766</b>

### Appendix AU: Competitor Pricing

Competitor	Price	Bottles	Price per Bottle	Price per liter
Kasoda	30,84 €	12	2,57 €	7,79 €
	15,42 €	6	2,57 €	7,79 €
	7,71 €	3	2,57 €	7,79 €
	16,95 €	6	2,83 €	8,56 €
Kara Limo			2,32 €	7,03 €
Cascaritas	44,99 €	24	1,87 €	5,68 €
	24,99 €	12	2,08 €	6,31 €
	13,99 €	6	2,33 €	7,07 €
	8,99 €	3	3,00 €	9,08 €
Kaska	21,00 €	6	3,50 €	10,61 €
<b>Average</b>			<b>2,80 €</b>	<b>8,50 €</b>

### Appendix AV: Survey Results

	<b>Submissions</b>	<b>Mean</b>
	1	1,50 €
	5	2,00 €
	10	2,50 €
	1	2,79 €
	12	3,00 €
	3	3,50 €
	4	4,00 €
<b>Total:</b>	<b>36</b>	<b>Average: 2,80 €</b>

## Appendix AW: Sales Projections

		2025 FY (F)	2026 FY (F)	2027 FY (F)	2028 FY (F)	2029 FY (F)
<b>B2B Sales</b>						
New signed customer	#	88	347	406	471	553
<i>Cafe</i>	#	40	84	84	96	108
<i>Restaurant</i>	#	40	93	96	108	120
<i>Sports Studios</i>	#	8	32	36	48	60
<i>Convenience Store</i>	#	-	135	180	204	240
<i>Universities</i>	#	-	3	10	15	25
Monthly churn	%	5%	5%	5%	5%	5%
Churn of customer	#	10	109	241	333	417
<b>Total of customers</b>	#	<b>78</b>	<b>316</b>	<b>481</b>	<b>619</b>	<b>756</b>
Bottles per customer	#	120	150	180	180	180
<b>Total of bottles</b>	#	<b>24.896</b>	<b>272.027</b>	<b>676.929</b>	<b>920.549</b>	<b>1.147.799</b>
<b>B2B Sales - RETAIL</b>						
New signed customer	#	-	6	12	21	33
Monthly churn	%	3%	3%	3%	3%	3%
Churn of customer	#	-	0	3	7	13
<b>Total of customers</b>	#	<b>-</b>	<b>6</b>	<b>14</b>	<b>28</b>	<b>48</b>
Bottles per customer	#	120	150	180	180	180
<b>Total of bottles</b>	#	<b>-</b>	<b>9.990</b>	<b>62.572</b>	<b>125.438</b>	<b>229.204</b>
<b>Financial metrics</b>						
Price per bottle	€					
<b>Total Revenue</b>	€	<b>37.344</b>	<b>423.026</b>	<b>1.109.252</b>	<b>1.568.981</b>	<b>2.065.505</b>
<i>Growth</i>	%		1033 %	162 %	41 %	32 %
<b>Total COGS</b>	€	<b>27.271</b>	<b>308.919</b>	<b>810.041</b>	<b>1.145.762</b>	<b>1.508.353</b>
<b>Total Gross Profit</b>	€	<b>10.073</b>	<b>114.108</b>	<b>299.211</b>	<b>423.219</b>	<b>557.152</b>

		2025 FY (F)	2026 FY (F)	2027 FY (F)	2028 FY (F)	2029 FY (F)
<b>Event Sales</b>						
Number of Events	#	19	28	35	39	45
Customer per event	#					
<b>Total of customers</b>	#	<b>1.900</b>	<b>2.800</b>	<b>3.500</b>	<b>5.850</b>	<b>6.750</b>
Bottles per event	#	192	192	192	240	240
<b>Total of bottles</b>	#	<b>3.648</b>	<b>3.648</b>	<b>3.648</b>	<b>3.648</b>	<b>3.840</b>

<b>Financial metrics</b>						
Price per bottle	€					
<b>Total Revenue</b>	€	<b>-</b>	<b>13.440</b>	<b>16.800</b>	<b>23.400</b>	<b>27.000</b>
<i>Growth</i>	%			25 %	39 %	15 %
<b>Total COGS</b>	€	<b>3.996</b>	<b>5.889</b>	<b>7.361</b>	<b>10.253</b>	<b>11.830</b>
<b>Total Gross Profit</b>	€	<b>- 3.996</b>	<b>7.551</b>	<b>9.439</b>	<b>13.147</b>	<b>15.170</b>

		2025 FY (F)	2026 FY (F)	2027 FY (F)	2028 FY (F)	2029 FY (F)
<b>E-Commerce Sales</b>						
New signed customer	#	169	216	385	816	1.266
Monthly churn	%	25%	25%	25%	25%	25%
Churn of customer	#	130	184	318	631	1.088
<b>Total customers</b>	#	<b>278</b>	<b>1.046</b>	<b>2.383</b>	<b>5.092</b>	<b>9.623</b>
Bottles per customer	#	6	12	24	24	24
<b>Total number of bottles</b>	#	<b>3.333</b>	<b>3.808</b>	<b>4.272</b>	<b>4.755</b>	<b>5.286</b>

<b>Financial metrics</b>						
Price per bottle	€					
<b>Total Revenue</b>	€	<b>8.333</b>	<b>23.039</b>	<b>80.236</b>	<b>162.516</b>	<b>271.899</b>
<i>Growth</i>	%		176 %	248 %	103 %	67 %
<b>Total Costs of Goods Sold</b>	€	<b>3.651</b>	<b>10.095</b>	<b>35.156</b>	<b>71.207</b>	<b>119.134</b>
<b>Total Gross Profit</b>	€	<b>4.682</b>	<b>12.944</b>	<b>45.080</b>	<b>91.309</b>	<b>152.765</b>

## Appendix AX: Profit and Loss Statement

		2025 FY (F)	2026 FY (F)	2027 FY (F)	2028 FY (F)	2029 FY (F)
<b>Profit &amp; Loss Statement</b>						
B2B Bottle sales revenue	€	37.344	423.026	1.109.252	1.568.981	2.065.505
<i>percentage of revenue</i>	%	82%	92%	92%	89%	87%
E-Commerce revenue	€	8.333	23.039	80.236	162.516	271.899
<i>percentage of revenue</i>	%	18%	5%	7%	9%	11%
Events revenue	€	0	13.440	16.800	23.400	27.000
<i>percentage of revenue</i>	%	0%	3%	1%	1%	1%
<b>Total revenue</b>	<b>€</b>	<b>45.677</b>	<b>459.505</b>	<b>1.206.287</b>	<b>1.754.896</b>	<b>2.364.405</b>
<i>MoM growth</i>	%	(72,8) %	906,0%	162,5%	45,5%	34,7%
Cost of Goods Sold		54.769	338.552	793.485	935.957	1.299.782
<b>Gross Profit</b>	<b>€</b>	<b>(9.092)</b>	<b>120.953</b>	<b>412.802</b>	<b>818.939</b>	<b>1.064.623</b>
<i>Gross Profit margin</i>	%	(19,9) %	26,3%	34,2%	46,7%	45,0%
<b>Operational Expenses</b>						
Personal expenses	€	(108.000)	(180.000)	(271.000)	(364.100)	(452.400)
G&A	€	(7.225)	(25.800)	(29.670)	(38.700)	(40.880)
S&M	€	(14.570)	(20.482)	(29.036)	(43.968)	(60.486)
<b>Total OpEx</b>	<b>€</b>	<b>(184.564)</b>	<b>(564.834)</b>	<b>(1.123.191)</b>	<b>(1.382.725)</b>	<b>(1.853.548)</b>
<b>EBITDA</b>	<b>€</b>	<b>(138.887)</b>	<b>(105.329)</b>	<b>83.096</b>	<b>372.171</b>	<b>510.856</b>
<i>EBIT margin</i>	%	(304%)	(23%)	7%	21%	22%
Interest payment / income	€	-	-	-	-	-
Taxes	€	-	-	-	-	-
<b>Net income</b>	<b>€</b>	<b>(138.887)</b>	<b>(105.329)</b>	<b>83.096</b>	<b>372.171</b>	<b>510.856</b>
<i>Net income margin</i>	%	(304) %	(23) %	7%	21%	22%

## Appendix AY: Cashflow Statement

		2025 FY (F)	2026 FY (F)	2027 FY (F)	2028 FY (F)	2029 FY (F)
<b>Cashflow Statement</b>						
Net income	€	(138.887)	(105.329)	83.096	372.171	510.856
<b>Cash from operating activities</b>	€	<b>(138.887)</b>	<b>(105.329)</b>	<b>83.096</b>	<b>372.171</b>	<b>510.856</b>
Capital expenses	€	(10.000)	0	0	0	0
<b>Cash from investing activities</b>	€	<b>(10.000)</b>	-	-	-	-
+ Increase of debt	€	0	0	0	0	0
+ Increase of equity	€	0	0	0	0	0
<b>Cash from financing activities</b>	€	-	-	-	-	-
<b>Total change in cash</b>	€	<b>(148.887)</b>	<b>(105.329)</b>	<b>83.096</b>	<b>372.171</b>	<b>510.856</b>
Beginning balance	€	0	-148.887	-254.216	-171.120	201.051
<b>End balance</b>	€	<b>-148.887</b>	<b>-254.216</b>	<b>-171.120</b>	<b>201.051</b>	<b>711.907</b>