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FINANCIAL IMPLICATIONS OF PRODUCT CHANNEL SCENARIOS: A PRODUCTION OF AN EXCEL TOOL FOR OCEANO FRESCO

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Abstract

This work addresses market entry decision making by management under significant uncertainty in a real business case. It was developed in close collaboration with a Portuguese early-stage, food technology company. In the context of its market entry plans for 2021, the company's management is challenged to find a product channel mix that best serves its financial situation and objectives. In this context, I built an extensive Excel-based finance tool that enables the management of the company to plan product channel scenarios and to observe their implications on profits, cash flows, company valuation, and market shares.

Key words: Management accounting, Financial modelling, Market entry strategy, Startup

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1 Introduction

The fascination of turning an idea into a product or service of high demand and value to society and its creators drives many entrepreneurs. However, data indicates that successful commercialization and value creation are not at all guaranteed at the outset (Hall and Woodward 2010). Especially in the early years of a startup, the likelihood of failure is significant. Specifically, early-stage companies' choices about the form of market entry seem to represent a critical strategic decision for success (Burgel and Murray 2000, Horn, Lovallo and Viguerie 2005, Camerer and Lovallo 1999). Challenged by high uncertainty and complexity, managerial decision making can be effectively guided by planning techniques. Here, scenario analysis can help to showcase "possible futures" (Schoemaker 1991, 549-550) and thus improve strategic decision-making (Goodwin and Wright 2001, Schoemaker 1991).

Oceano Fresco S.A. (OF), an early-stage Portuguese food technology company that operates in the clam market space, represents a practical example for this. To realize first sales in October 2021, the company's management needs to define its market entry strategy in terms of the geographic market choice, the product channel mix, and the degree of integration of product distribution. The implications that choices between different product channel scenarios have on company profits, cash flows and valuation are special objects of interest. In this context, when company management expressed interest in a tool that addressed this problem, I committed to this practical and high-impact case for my field lab.

The defined scope of the project includes the production of an Excel tool (see appendices 1-19) that enables the company's management to produce financial outputs for product channel scenarios that reflect all key business parameters. The relevant product channels are the sale of immature clams to farmers (B2B), the sale of grown clams to customers including hotels, restaurants, and cafes (B2C Horeca) and retail customers including supermarket chains (B2C Retail). The markets of primary interest are Iberia (B2B) and Portugal (B2C). As outputs, the

Excel tool produces an income statement (P&L) and a cash flow statement (CF) forecast FY2020-2030, an indicative discounted cash flow analysis (DCF) as well as an overview of OF's effective market shares in the premium and total clam market. To meet the requirements of constant business uncertainty and changing business conditions, the tool includes flexible data inputs that provide the user with the possibility to seamlessly enter and change key assumptions. In fact, filling in and reviewing the tool's inputs remains a work in progress for the management.

To provide the reader with an overview of the structure of this report, the main chapters are briefly described in this paragraph. In the following chapter *Company*, OF is introduced in the sections *Company description*, *Company mission* and *Strategy*. Subsequently, the chapter *Data* summarizes all relevant data sources in the sections *Business plan*, *Commercial strategy paper* and *Consulting report*. The chapter *Structure and methodology* which contains the sections *Inputs*, *Engines*, and *Outputs*, provides descriptions of the tool's set up and theoretical concepts. The benefits for the company's management and factors that represent limitations of the tool's power are analyzed in the chapters *Results* and *Limitations* respectively. Finally, the results of this work are summarized in the chapter *Conclusion*.

2 Company

In this section the company itself, its mission and its strategy are introduced. The information presented originates from the company's website, shared company documents and meetings with the management.

2.1 Company description

OF is a Portuguese food technology start-up that operates in the clam market. The company aims to become the leading developer and producer of high-value clam varieties. Clams are a

natural protein source with a low ecological footprint due to their non-chemical feed and low pollution outputs. Thus, compared to other major protein sources such as livestock, clams are significantly more sustainable while representing a nutritious food alternative. The core of OF's innovation is the application of scientific selection and breeding methodologies to the large-scale production of native European clam species which have both high nutritional and high market value. Also disruptive is the company's business model which, uniquely in the industry, includes the control of all the steps in the clam production value chain and assumes significant, long-term investments before generating the first revenues. The company follows a science-based approach which includes the use of modern genetics techniques, digital monitoring and control of aquaculture processes in a Bio Marine Center (including hatchery, laboratories, and offices), and the operation of an open-sea grow-out program in offshore sites. Currently, the company has 14 employees and is headquartered in Nazaré, Portugal (Oceano Fresco 2020).

2.2 Company mission

OF aims to become a European and global reference player in the introduction of innovative shellfish varieties with high nutritional and market value. Intending to provide consumers with an environment-friendly, tasty and nutritious food, the company is targeting the disruption of the bivalve market (Oceano Fresco 2020).

2.3 Strategy

Overall, OF aims to capitalize on a premiumization opportunity in the European clam market. While this market is presently dominated by low-value, invading clam species from Asian countries (e.g. Vietnam) that cost c. €5/kg at the farm gate, depletion of natural populations and partial disregard have caused a supply gap for high-value European species. This business opportunity will be captured by focusing on the clam species *R. decussatus* (RD) and *V.*

corrugata (VC). Both are native to Europe, have become harder to find for consumers, and are perceived as high-value species with prices starting from c. €15/kg. at the farm gate.

To become a leading player in the long-term, the company focuses on vertical integration and R&D. Production and supply will be organized in-house which enables OF to control most of the value chain, contrary to virtually all other players in the industry worldwide. Also, OF will innovate in the bivalve breeding and production cycle - by systematically modernizing and professionalizing processes, the company aims to capture significant cost advantages and thus improve competitiveness. By following this strategy OF can create significant barriers to market entry and thereby generate the prospect of little competition in the mid- to long-term.

Strategically, the choice of product channels through which the company markets its products is important. The products sold through them differ in terms of the clam species, the growth stage, and the form (see appendix 20). The B2B channel considers selling seed and semi-adults to farmers that are focusing on the production of adult clams. Here, OF plans to sell RD semi-adults as well as VC seed and semi-adults. The channel has the potential to create strong sales and earnings performance, for the following reasons. Firstly, the significant market size promises an opportunity to capture market share. Secondly, this stream promises attractive margins even at market prices due to yearly cost improvements realized by economies of scale and decreasing mortality rate effects. Thirdly, B2B presents a lower risk profile and less capital investment needs than the B2C business. The B2C product channel is divided in B2C Horeca and B2C Retail. While both promise a high potential for sales and profitability, they involve a higher risk due to critical market entry choices for the geographical expansion and the go-to-market strategies. The B2C Horeca channel includes the sale of VC adults to customers including hotels, restaurants, and cafes. This channel is characterized by the out-of-home consumption of the end-consumer. Here, the company needs to understand which go-to-market strategy is most favorable in terms of profitability effects. OF is currently considering Cash &

carry, Direct or Indirect. Cash & carry includes wholesalers that offer large varieties of consumer goods to retailers, restaurateurs, large consumers, and other professional users. Direct comprises direct sales to Horeca customers and Indirect refers to sales to intermediary distributors. Between these strategies, there will be differences in prices as well as packaging and logistics costs which can significantly affect the profitability of the business. The B2C Retail channel considers the sale of VC adults to retail customers (e.g. supermarkets). It is characterized by the in-home consumption of the end-consumer. Here, the product can be sold in bulk or packaged form (Oceano Fresco 2020).

3 Data

To kick off the project, I was given access to the current business plan, a commercial information deck and a consulting report that focuses on the commercial opportunity of clams in Europe. Additionally, weekly calls with the company's management served as a complementary opportunity to foster my understanding of the business, discuss doubts, and develop a more detailed idea of the scope of the project. Regular participants in these calls were Nuno Arantes-Oliveira (chairman, co-supervisor), Bernardo Ferreira de Carvalho (CEO, founder) and Frederico Reis (CMO).

3.1 Business plan

OF compiled a preliminary, Excel-based business plan that showcases revenue and CF planning FY2020-2030. It represents an overview of the composition of revenues, costs, capital expenditures (capex) and financing. This document provided me with an idea of critical factors of the clam business such as survival rates and grow-out phases. As defined in collaboration with the company's management, the new tool aggregates existing cost, capex, and financing items from the business plan to reduce complexity while aiming to reflect the core business

operations. For costs, the new tool summarizes all cost positions in the categories COGS, media/customer promotion, freight & transport, management, SG&A, R&D, and depreciation. Also, the detailed capex computations from the business plan are aggregated as input variables in the new tool. This simplification accounts for its scope which does not include the reflection of all production details but a high-level, strategic perspective. For financing, the key categories debt and equity financing are reflected in the new tool.

However, while this business plan is a static planning document, the new tool produces input-based scenarios. Hence, projections from the new tool will not match with the current business plan.

3.2 Commercial strategy paper

This data source contains an overview of strategic considerations. It represents a systematic description of the strategic rationale of producing premium clams, sales channels and commercialization strategies including value creation models for B2B and B2C. This document facilitated my understanding of the business opportunity, the considerations of value creation and OF's strategic positioning.

3.3 Consulting report

During its market validation phase, OF mandated a consultancy firm to evaluate the market opportunity in Europe. Titled "Definition, construction and implementation of Oceano Fresco's offer in the European market", the report clusters European countries according to their market potential. In the first part, the report compiles country profiles that include a scorecard that clusters countries into high-, medium- and low-potential regions.

In the second part, the potential for premium clams is analyzed per country. The consumption figures provide a quantitative indication of the size of the total and premium clam market per country. In terms of total clam consumption, it shows that Italy, Spain, and Portugal are the

largest markets with premium shares of 9%, 15% and 32% respectively. Also, figures indicate that France, Norway, and the Netherlands have the highest consumption of premium clams relative to total consumption with premium shares of 100%, 77% and 64% respectively (see appendix 21).

4 Structure and methodology

The tool is divided into 3 main sections: inputs, engines, and outputs (see appendix 22). In the paragraphs that follow, this structure is described and explained in more detail.

4.1 Inputs

Inputs reflect market data, internal controlling data, management assumptions and scientific ratios that the user enters manually into provided input cells. This section provides the flexibility to change core assumptions which is essential for management to observe different product channel scenarios. In the following paragraphs, each input sheet is described briefly.

4.1.1 Cockpit

In this input sheet (see appendices 2.1-2.4), the user can control all key assumptions and adjust the setting of the tool. Additionally, the provided output summary on the right side showcases all key outputs.

The *Key scenario* section represents the main inputs for the product channel scenarios. Here, the user can enter the geographic market per channel and the channel allocation per channel. The following geographic markets can be chosen: Italy, Spain, Portugal, Denmark, France, UK, Netherlands, Germany, Switzerland, Belgium, Sweden, Austria, Norway, Finland, Mediterranean/non-EU, Japan & Korea, China, Rest, Iberia and Total. Iberia represents the combination of the Portuguese and Spanish market space. Total represents the combination of all markets. The differentiation between Spain and Portugal and Iberia was requested by

company's management due to the significant likelihood that Iberia becomes the object of market entry. For example, OF might identify the target regions Iberia for its B2B channel and Portugal for both B2C channels. In this case, by including Iberia the analysis of this specific scenario becomes feasible.

The entered values in each channel allocation represent the weighting of each product channel in the respective scenario. The weights (allocation keys) equal the share on the production capacity of seed that each channel obtains. For example, a channel allocation scenario with 20% for B2B, 40% for B2C Horeca and 40% for B2C Retail assumes that 20% of the total seed production capacity is allocated to the B2B while both B2C Horeca and B2C Retail obtain 40% of the total seed production capacity respectively. The linkage of product channel allocation to production capacity enables the management to learn both how favorable different channel scenarios are and how their production capacity must be allocated.

In the *Key ratio* section, the user can enter information such as volume unit (kg. or 1000#), market survival rates, OF survival rates, individuals per weight unit ratios (#/kg and 1000#/kg), the split between RD and VC in B2B production and the product mix of different growth stages per channel.

In the *P&L and CF specifics* section, user inputs include go-to-market mixes for the B2C Horeca and B2C Retail channels, payment terms per channel and other assumptions (% of depreciation on PP&E, corporate tax rate, % maintenance capex on PP&E). The choice of the respective go-to-market strategies is a critical component of OF's strategy mainly due to their implications on company cost (e.g. packaging). For B2C Horeca, the user can choose an allocation between Cash & carry, Direct and Indirect. For B2C Retail, the categories are packaged and bulk. The payment terms per channel can be set at 0, 30, 60 or 90 days. 0 days assume immediate cash payment while the other options represent credit sales.

In the *Valuation* section, the user can input the WACC assumption and the perpetuity growth for the DCF analysis.

4.1.2 Market volumes and volume growth

This sheet (see appendix 3.1-3.2) includes input cells for premium market volumes per region FY2020, the share of RD on premium volumes, volume growth figures per region and monthly volume allocations for both VC and RD. All information is feeding the market volume engine where the market volumes are computed over the time series. The tool assumes that the premium market consists of the species RD and VC. Thus, the share of VC in the total premium market equals 100% less the RD share.

4.1.3 B2C volume splits

Volumes that are sold to B2C customers are split into Horeca (out-of-home) and Retail (in-home). Thus, this sheet (see appendix 4) includes the respective input cells for the shares between these channels. This data feed the sales section of the respective sheets in the P&L engine.

4.1.4 Indicative market shares

This sheet (see appendix 5) includes indicative market shares per region for adults for both RD and VC. They represent management estimates that determine market output potentials in the sales sections in the P&L engine sheets.

4.1.5 Market prices

This sheet (see appendix 6) includes the prices at which OF assumes to sell their products per channel and go-to-market strategy. Here, the user must manually enter price estimates along the time series. This set up provides the opportunity to account for price alterations. For

example, if the RD and VC volumes increase at a higher rate than the demand, market prices are likely to decline assuming price increases do not origin from a monopoly. Also, inflationary effects can positively impact market prices. From this sheet, entered data feeds the sales section of the respective sheets in the P&L engine.

4.1.6 COGS

This sheet (see appendix 7) includes input cells for costs of goods sold (COGS) for both species RD and VC. They are broken down into the three growth stages: seeds, semi-adults, and adults. Following the approach of Drury (2012), COGS consist of prime costs which are directly related to the production of the product. They include direct material and direct labor costs.

Direct materials are defined as materials that are directly linked to the production of a specific product. For example, expenses for the procurement of materials to produce RD seeds would fall into this category. Direct labor defines labor costs that can be linked to a specific product. For example, the costs of working hours of OF employees that supervise the growth of RD seeds can be classified as direct labor costs. All production costs that are indirectly linked to the product such as indirect material and labor as well as indirect manufacturing expenses (e.g. electricity expenses for BioMarine center) are classified as production overhead (Drury 1992). The entered data feeds the sales sections in the P&L engine sheets.

4.1.7 Other costs

This sheet (see appendix 8) includes all relevant non-production costs that are divided in variable and fixed costs. Variable costs are usually linked to revenues or units sold. In this case, they include media & customer promotion (direct), packaging and freight & transportation costs. Although, the former is a function of revenue from a logical standpoint. Company's management wanted to enter absolute values per channel into its input cells instead of using

percentage of sales of t+1 for example. Other costs are entered on a €/kg basis and automatically converted into €/1000# by applying weight ratios.

Fixed costs are entered as absolute values. They include the items R&D, management and SG&A including indirect sales/marketing, general & administration as well as digital platforms. This data feeds the sales sections in the P&L engine sheets.

4.1.8 Production capacity and capital expenditures

In this sheet (see appendix 9), input cells are provided for production capacity and the cost of expansion capex. For production capacity, the user can enter the assumptions for yearly seed production capacity in absolute values. In this tool, seed production is assumed to be the deciding measure for total production capacity. Production capacities for semi-adults and adults are derived by incrementally applying survival rates to the quantities of seed that are not sold as seed.

The tool links changes in production capacity to growth capex. The user can enter costs of additional capacity for seeds, semi-adults, and adults manually. Expansion capex costs for semi-adults and adults are assumed to be equal since both growth stages are grown in the same offshore farms. Since both grow on lanterns, increasing the number of lanterns will results in equal costs for both growth stages. This data feeds the *Capacity, PP&E & Capex* sheet in the CF engine.

4.1.9 Assets and liabilities

Generally, this sheet (see appendix 10) serves the function to feed the tool with opening balance sheet positions. They are necessary to compute cash flows from changes in working capital and financing as well as derive depreciation which is assumed to be linked to PP&E. Opening balance sheet positions for cash, trade receivables, PP&E, equity and debt represent FY2019

figures. These balance sheet positions are rolled forward reflecting periodical changes along the time series.

Trade receivables can be assumed to be 0 FY2019A since the company has not started sales operations at this point. Along the time series, no inputs are required since trade receivables will be calculated later in the CF engine. For liabilities, financing in- and outflows can be manually entered for the time series. Financing includes equity financing through venture capital or founder's capital and debt. For debt financing, it is assumed that debt can be raised once a year in December. This assumption is important for the monthly structure FY2020-2022 to work properly with the yearly repayment period. This data feeds the *Financing* sheet in the CF engine.

4.2 Engines

There are three engines included in the model: for the P&L, the CF, and the market. Sheets in this section perform computations with data from the input section. The function of the engines is to produce results that can subsequently feed the outputs.

4.2.1 Engine - P&L

This engine computes and summarizes P&L items for the respective channels. It consists of three sheets for B2B (see appendices 11.1-11.3), B2C Horeca (see appendices 12.1-12.3) and B2C Retail (see appendices 13.1-13.3).

Sales: This item is computed by combining a bottom-up, business driven with a top-down, market driven approach. Firstly, depending on the product relevant for the respective channel, market volumes and OF's indicative market shares are used to obtain a market output potential.

$$Market\ output\ potential = Market\ volume * Indicative\ market\ share$$

Formula 1: Market output potential

However, from a business perspective it becomes clear that OF's output is constrained by its production capacity. Therefore, respective production capacities per product are linked into the sales section to oppose the market potential. Subsequently, sold volumes can never exceed production capacity but match or fall short of it. For example, if the market potential is below the production capacity, the market perspective determines the volumes that are sold. After the volumes available for sale are determined, sales are computed by multiplying volumes with market prices that are sourced from the *Market prices* input sheet.

COGS: All prime costs are computed as a function of sold volumes of the respective product. This reflects the assumption that the company can sell all produced products. The production overhead reflects the costs that are indirectly related to the product. Hence, production overhead costs are linked to the provided production capacity per product. For example, in case the market potential is below the production capacity the tool also accounts for costs arising due to unused production capacity.

Variable costs - media/customer promotion: This item captures promotion efforts that are directly targeting the customer. Since the values are entered as absolute values, they are directly linked into the respective income statement engine sheet. Yearly input values FY2020-2022 are equally allocated for every month. Direct promotion activities are expected to be mainly relevant for the B2C channels. Due to the indirect contact to the end-consumer in the B2B channel, expenses for OF production promotion are expected to be negligible.

Variable costs - packaging: This item captures expenses from in-house packaging activities. It is expected to mainly concern the B2C channels. For B2B, packaging costs are assumed to be negligible since products are sold in large, bulk quantities without significant packaging. Products sold via B2C require different forms of product packaging. In the B2C Retail channel packaging costs per unit are differentiated between packaged and bulk. For B2C Horeca, a differentiation between the three go-to-market strategies is required. For example, when selling

adults VC clams indirectly to Horeca customers, packaging is likely to be outsourced to the distribution partner which implies that packaging costs will be different compared to another strategy, e.g. cash & carry. Depending on management knowledge and insights, these differences must be accounted for in the *Other costs* input sheet.

Variable costs - freight & transportation: This item captures logistic expenses occurring from the transport of OF's products to customers. Following the same logic than packaging costs, the cost per unit depends on the chosen product type and go-to-market strategy. For example, while selling via the B2B channel the company might realize that transportation for seed is more expensive per unit than for semi-adults. In this case, the user of the tool can change cost assumptions in the *Other costs* input sheet to ensure that correct assumptions are feeding the P&L engine.

Fixed costs - management: This item includes expenses for the compensation of board members. It is assumed to be independent from the company's sales and thus classified as fixed costs. Since inputs are entered on a FY basis, costs are equally allocated monthly FY2020-2022. Additionally, fixed costs are allocated per channel with the capacity allocation key. Although, later consolidation will undo this step, it provides a clear separation of costs per channel.

Fixed costs - selling, general and administration: This item consolidates costs with indirect sales and marketing, general and administration, as well as digital platforms. For simplicity reasons, they occur independently from sales and thus are considered as fixed costs. The calculation of this position in the P&L engines follows the logic as for all fixed costs.

Fixed costs - R&D: This item includes all expenses that are related to OF's research and development operations. Expenses for scientific advisors, selection and farming methods R&D and mixed breeding are captured in this item. It is important to note that OF focuses its R&D activities only on RD. Since this species is sold via B2B, the R&D costs are only allocated to this channel.

Depreciation: Following common practice, this item is computed as a percentage of PP&E (McKinsey & Company 2015). It is allocated per product channel according to the allocation key. The PP&E position and the percentage of PP&E are linked from the CF engine and input section respectively.

4.2.2 Engine - CF

The CF engine comprises sheets that compute the cash flow relevant items working capital, capex, and financing.

Working capital (see appendix 14): Calculating changes in working capital items year over year (YOY) is essential to obtain FCF as it represents a source or use of cash flow (Rosenbaum and Pearl 2009). As a basis, relevant balance sheet items need to be projected. For OF's business operations, trade receivables (TR) are the only relevant working capital item. Inventories are assumed to be and remain zero because produced clams are not stockpiled but sold after a few days after their harvest. This also applies to trade payables. Due to the companies own breeding program seed procurement from suppliers is negligible.

TR will arise in OF's operations since a significant share of sales is assumed to be on credit. They must reflect differences in payment terms among product channels and go-to-market strategies.

Whereas working capital forecasts typically include projections of current assets and current liabilities on the basis of historic ratios, there is no financial data from previous years in this case (Rosenbaum and Pearl 2009, 122). Hence, this tool follows a different approach for each of the two different time periods within the forecasting period:

1. FY2020-2022: monthly ending values are rolled over as beginning values of next month.
2. FY2023-2030: yearly averages are calculated based on payment terms.

FY2020-2022, TR are computed by rolling the position from month to month meaning that the ending position of one month becomes the opening position of the following. The opening

position grows by sales generated in the respective period and is potentially reduced when the company obtains the cash payment. The timing of the cash inflow depends on the payment terms assumed for the specific channel or go-to-market strategy. Payment terms are assumed to equal the ratio days sales outstanding (DSO) (Rosenbaum and Pearl 2009, 122).

$$Ending\ TR = Opening\ TR + Period\ Sales - Cash\ Inflow\ from\ Sales$$

Formula 2: TR FY2020-2022

Since the model shifts from a monthly to a yearly structure FY2023-FY2030, a change of computation is required since rolling the position from year to year is not possible with payment terms reflecting 0, 30, 60 or 90 days. Therefore, yearly averages for TR are computed by adjusting the DSO formula.

$$Annual\ TR = \frac{Period\ Sales}{365} * DSO$$

Source(s): Rosenbaum and Pearl (2009, 122)

Formula 3: TR FY2023-2030

The application of these two approaches comes at the cost of some imprecision and inconsistency. In the first method, the cyclicality of OF's sales and payments is captured precisely since the timing of actual cash payment by the customers can be shown. For the period after FY2022, the yearly averages do not reflect the cyclicality.

Capacity, PP&E, and Capex (see appendix 15): Clearly, determining capex is essential to obtain cash flows from investing activities and FCF. As it is capitalized on the balance sheet as PP&E, both items are linked which must be considered in the forecasting process. Regarding the forecasting method, professionals usually forecast PP&E as a percentage of sales to subsequently obtain capex by applying the following formula:

$$Capital\ expenditures = PP\&E_1 - PP\&E_0 + Depreciation_1$$

Source(s): McKinsey & Company (2015, 246)

Formula 4: Capital expenditures

However, this tool follows a different approach as it calculates required capex from the capacity input and subsequently projects PP&E along the time series. Thus, capex and PP&E become a function of production capacity. This method accounts for the fact that the company's management can plan OF's production capacity better than capex and PP&E.

Thus, firstly the total production capacities per channel for all relevant species and growth stages are calculated. Seed production capacities available for every product channel are computed with the respective allocation keys. From here, capacities for larger growth stages – semi-adult and adult – are derived by applying OF survival rates to quantities that are available to grow larger.

Secondly, changes in the production capacities are translated into capex by multiplying them with the required investment to obtain additional production capacity of 1000# of the respective growth stages. Subsequently, PP&E is calculated by adding the capex of the previous year to and subtracting depreciation of the same year from the PP&E position. The time delay accounts for the time gap between the materialization from investments to actual PP&E (e.g. the construction of an additional Bio Marine Center).

Lastly, depreciation is calculated by applying a percentage of total PP&E as entered in the *Cockpit* input sheet to PP&E.

Financing (see appendices 16.1-16.2): To obtain all relevant financing cash flows, the financing sheet includes both a debt and an equity schedule. The debt schedule computes debt outstanding as a function of raised debt and debt repayments and concludes with the cost of debt in form of interest. While the raised debt, the repayment period and interest costs are sourced from the input section, repayments are computed following the assumption of straight

and continuous repayments. For example, if OF raises €100.000 of debt in December 2021 at a repayment period of 4 years, the tool assumes yearly repayments of €25.000 FY2022-2025. After repayments are computed, debt outstanding simply represents the difference between raised debt and debt repayments as well as the basis to determine interest expenses.

The equity schedule reflects the VC and founder's capital positions and their changes due to capital in- and outflows. Changes of these positions are sourced from the input section.

4.2.3 Engine - Market

This section includes market volumes of the total and the premium adult clam market per region FY2020-2030 in both units, kg. and 1000#. The premium market is assumed to consist of the species RD and VC and represents a fraction of the total market. Data on adults FY2020 is sourced from the *Market volumes and volume growth* input sheet. If entered and updated correctly, this data should represent the actual status quo of market intelligence. For future years, market volumes are forecasted by applying growth rates from the same input sheet. The smaller semi-adult and seed growth stages are calculated by applying market survival rates. This represents a workaround since no market data for semi-adult and seed volumes are available.

4.3 Outputs

This section describes the outputs of this tool which comprise the P&L and CF forecasts, the indicative DCF as well as the effective market share overview. They represent the core results of this tool and are the basis for managerial decision making.

4.3.1 Income and cash flow statement forecasts

This output comprises one sheet that captures both the P&L forecast (see appendix 17.1) and the cash flow statement forecast (see appendix 17.2).

The former projects OF's sales and expenses FY2020-2030. The length of the forecasting period was specifically requested by management. Overall, the structure of P&L follows financial theory by including key metrics such as gross profit, EBITDA, EBIT and EBT and net income as the "bottom line" (DeMarzo and Berk 2017, 62) of the P&L. Furthermore, gross, EBITDA and EBIT margins are included to effectively track company's operating performance (DeMarzo and Berk 2017). While the data is mostly provided by the P&L engine, depreciation and the tax rates are linked from the CF engine and the input section respectively.

The cash flow statement forecast projects the amount of cash OF will generate and where it will be allocated periodically. While, the income statement gives insights about OF's profitability, projecting actual cash flows provides management and investors with essential information about the uses and sources of cash flows. As common practice, the statement is divided into operating, investing and financing activities (DeMarzo and Berk 2017, Proctor 2010).

4.3.2 Indicative DCF

This output comprises one sheet (see appendix 18) that captures valuation effects of chosen channel scenarios. Overall, financial professionals can apply market- and multiple-based valuation methods including comparable company analyses (CCA) and precedent transaction analyses (PTA) as well as intrinsic, fundamentals-driven valuation methods including the DCF (Rosenbaum and Pearl 2009, McKinsey & Company 2015, Pignataro 2013). Often applied by analysts as a quick and convenient approach that reflects actual market conditions such as growth, risk, and overall sentiment, CCA and PTA show significant disadvantages for this project.

Firstly, OF management lacks information regarding potential comparable companies and precedent transactions. As a startup that operates in a niche of the food market, information regarding comparable, publicly listed companies as well as recent M&A transactions would likely prove to be insufficient.

Secondly, applying market-multiples would ignore most of OF's projected performance and cash flows. By focusing on prevailing or past market data and thus avoiding assumptions about future financial performance, performing CCA and PTA would ignore OF's value creation potential in the mid- and long-term (Rosenbaum and Pearl 2009, McKinsey & Company 2015). Against this background, this tool utilized the DCF method to showcase valuation effects of different channel scenarios. Unlevered free cash flows (UFCF) – FCF that are available to all shareholders – are discounted at the weighted average costs of capital (WACC) to obtain the enterprise value. Following common practice, UFCF are calculated by this formula:

$$UFCF = EBIT - Taxes + Depreciation - Capex\ (+-)Changes\ in\ Trade\ receivables$$

Source(s): DeMarzo (2017, 281-282); Pignataro (2013, 292); Rosenbaum and Pearl (2009, 115)

Formula 5: Unlevered free cash flow

The DCF provides OF management with respective indicative intrinsic scenario valuations. While it serves as a valuation benchmark to evaluate scenarios, it is important to note that this valuation shows clear limitations in precision. There are two main factors that cause this lack of precision. Firstly, the tool relies on an assumed WACC to discount FCFs. Due to the lack of actual financials, manually calculating the WACC would have added significant complexity and no additional value to solving the business problem.

Secondly, by using a manually entered value for the FCF's growth rate for perpetuity, the tool deviates from common practice. Hence, in theory the forecasting period should be long enough to ensure that the growth rate reflects a steady state which shows constant growth rates of FCF in the year where the growing perpetuity formula is applied (McKinsey & Company 2015, DeMarzo and Berk 2017). However, due to the nature of the project which includes a fixed forecasting period as well as different channel scenarios, the production of steady states for each scenario is neither feasible nor would it serve the scope of this project. Thus, manually

entering an input value as a proxy represents a valid approach since applying it to all scenarios still produces comparable results, ceteris paribus.

4.3.3 Effective market shares

This output comprises one sheet (see appendix 19) that captures OF's effective volume market shares in the total and premium clam market. The figures are calculated by showing the relation of adult volumes sold by OF and total volumes of adults in the respective premium and total clam market. Since this analysis focuses solely on sales of adult clams, it is sufficient to target the region chosen for the B2C channels. This analysis provides the management with insights regarding the actual volume-based market share in both, the total clam market as well as the premium sub-market. This helps the company to quantify its chosen strategy for internal as well as external communication. Also, in case the total and premium market show different growth dynamics, this analysis allows to observe if the company output is growing less, equal, or more in relation to the respective market.

5 Results

Consistent with the defined scope of the project, the presented tool can simulate different business cases and showcase their financial implications if it is fed with robust data. Yet, since management has not finalized filling and reviewing input data, it is the qualitative problem-solving power, rather than any quantitative results, that will be discussed in this work. Thus, the value of the tool to company's management can be showcased by discussing how it can produce answers to the following questions.

How do different sales channel scenarios influence company sales, earnings, margins, and cash flows? The tool allows the user to change the weighting of the relevant sales channels and subsequently observe its effects on the P&L and cash flow forecast. For example, management

finds that Horeca customers and Retail customers in Portugal have similar demand for high value OF products while farmers in the same market show little interest in OF seeds and semi-adults. Thus, it aims to compare two scenarios, a) 40% B2C Horeca, 40% B2C Retail and 20% B2B and b) 45% Horeca, 45% B2C Retail and 10% B2B. After the values are entered in each of the two excel tool versions, differences in sales, earnings, margins, and cash flows can be analyzed.

However, there are prerequisites for this procedure to produce reasonable and comparable results. Firstly, all input sheets should be reviewed and filled with realistic values. Secondly, all input values should remain constant for both scenarios except for the channel allocation in the key scenario section of the *Cockpit* tab.

How do different sales channel scenarios influence FCF generation and company valuation? Assuming the same case, the free cash flow map as well as the DCF provide the user with the values for the respective scenario. Clearly, scenarios that produce higher FCF and obtain a higher company valuation are favorable and should be prioritized over other scenarios. The user should note that both the FCF growth rate for perpetuity and the WACC assumptions should be kept constant for the tool to produce comparable results.

How do different sales channel scenarios translate into effective market shares? Assuming the same case, the user can obtain volume-based market shares for both the total and premium clam market. Company management requested this analysis as a mean to quantify OF's growth in relation to the market which is an important argument in the communication with potential investors for instance.

Keeping other variables fixed, how do changes in single main business parameters (e.g. prices, COGS, production capacities) influence company performance and valuation (all outputs)? Besides the comparison of product channel scenarios – the main scope of the project – the tool can help estimating effects that changes of single business parameters have on the company's

performance and valuation. For example, assuming the company's management has specified a sales channel mix for its market entry and aims to find optimal product pricing, the user can utilize the flexible input section. She can input one pricing scenario, save it as a new tool version and compare it with another pricing scenario. This procedure is feasible for all parameters represented in the input section.

How can the company's management decision making include continuously changing business and market data? In terms of data input, the tool provides flexibility to continuously update business and market assumptions. This meets the requirement of managing and growing business operations of an early stage company. By continuously including new insights and data into the tool, the degree of uncertainty in which the company's management operates can be incrementally reduced and the results of the outputs significantly improve as they better reflect business reality.

6 Limitations

In this section, the factors that limit the scope of this work are mentioned to enable the reader to better evaluate the conclusions drawn from results of this work.

As it is typical for early-stage companies, OF does not have a track record of financial performance. Therefore, the outputs produced in this tool are mainly based on management assumptions rather than historic indications. Often these assumptions are object to uncertainty and thus might be changed in the future. Consequently, the quantitative results produced are unlikely to precisely reflect the future. Therefore, the informative value lies more in the direction rather than in the precise quantitative figures of the results.

Also, due to a lack of data and the scope of the project the tool relies on simplifications. For example, while WACC is usually calculated in all its components, for this project it wouldn't have increased the informative power of the results. It would have taken more assumptions to

correctly calculate it. While this might have enabled following a correct procedure to obtain a low-quality proxy for WACC, it would have also increased the size and complexity of the tool. Using the short-cut to enter a proxy value in the input section, accepts the simplification for a better usability.

7 Conclusion

The objective of this work was to compile a structured, Excel-based tool to support OF's management in strategic decision making. Given robust inputs, this tool is positioned to provide solutions to the company's market entry problems which include the evaluation of the implications of product channel scenarios on P&L and CF performance, the company's valuation, as well as effective market shares. Ceteris paribus, by changing the allocation inputs for the product channels, users can build scenarios that can be compared subsequently. Also, this tool can be used to observe implications of other business parameters and serve as a controlling and planning tool that contains key business parameters with up-to-date data.

Over its course, this practical project included significant challenges. Firstly, to be of practical use this tool needed to effectively balance usability and complexity while facing significant shortages of information. Therefore, simplifications and deviations from common financial practice were occasionally deployed as devices of problem-solving. Secondly, understanding the main drivers and characteristics of this business as well as compiling the Excel file was exceptionally laborious. The close collaboration with OF's management in form of several meetings and frequent email correspondence was greatly helpful and essential for the success of this project.

To conclude, I am confident that this work will significantly support OF's managerial decision-making and contribute to a successful market entry strategy FY2021.

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List of Formulas

List of Abbreviations

B2B	Business-to-business
B2C	Business-to-consumer
Capex	Capital expenditures
CEO	Chief executive officer
CF	Cash flow statement
CMO	Chief marketing officer
COGS	Costs of goods sold
CCA	Comparable company analysis
DCF	Discounted cash flow method
FCF	Free cash flows
FY	Fiscal year
Horeca	Hotels, restaurants, and cafes
OF	Oceano Fresco S.A.
P&L	Profit and loss statement
PP&E	Property, plants and equipment
PTA	Precedent transaction analysis
R&D	Research and development
RD	Ruditapes decussatus (R. decussatus)
SG&A	Selling, general and administrative
TR	Trade receivables
UFCF	Unlevered free cash flow
VC	Venerupis corrugata (V. corrugata)
WACC	Weighted average costs of capital

Appendix

Working Project - Excel Tool

Student	Benedict P. Minkner
Supervisor	Marta Almeida
Co-Supervisor	Nuno Arantes Oliveira
Involved Managers	Bernardo Ferreira de Carvalho (CEO & founder), Frederico Reis (CMO)
Model Status	Final version

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Model content

Worksheet	Hyperlink	Function
Cover Sheet	Cover Sheet	Cover + model setting.
Cockpit	Cockpit	Identification and input of key model settings and overview over key model outputs.
Inputs	Inputs	Divider
Input market volumes + growth	Input market volumes + growth	Inputs for a) market volumes, b) volume growth and c) monthly volume allocation.
Input market prices	Input market prices	Inputs for market prices per channel and product.
Input B2C volume splits	Input B2C volume splits	Inputs for volume allocation of YC adults between relevant B2C channels.
Input indicative market shares	Input indicative market shares	Inputs for market share per region. Market shares are indicative and solely serve to obtain market potentials.
Input COGS	Input COGS	Inputs for COGS per product and channel.
Input other costs	Input other costs	Inputs for non-production related, other variable and fixed costs.
Input prod. capacity + capex	Input prod. capacity + capex	Inputs for production capacity and capex computations. Direct relation between both positions.
Input assets + liabilities	Input assets + liabilities	Inputs for main BS items including opening positions that serve as jumping basis.
Outputs	Outputs	Divider
P&L + CF Forecast	P&L + CF Forecast	P&L and CF Forecast (FY2020A-FY2030F).
Indicative DCF	Indicative DCF	Indicative valuation of future (unlevered-) FCFs.
Effective market shares	Effective market shares	Computations of effective market shares. Setting relation between actual sold volumes (after capacity constraint) and total market volume.
P&L engine	P&L engine	Divider
B2B	B2B	Channel specific P&L items.
B2C Horeca	B2C Horeca	Channel specific P&L items.
B2C Retail	B2C Retail	Channel specific P&L items.
(Placeholder)	(Placeholder)	Channel specific P&L items.
CF engine	CF engine	Divider
Working capital	Working capital	CF items relevant for all channels.
Capacity+PP&E+capex	Capacity+PP&E+capex	CF items relevant for all channels.
Financing	Financing	CF items relevant for all channels.
Market volumes	Market volumes	Divider
Premium	Premium	Computation of total premium market, RD and YC volumes for all three growth stage phases (seed, semi, adult). For RD and YC volumes, semi-adult and seed growth stages are computed by applying weight ratios and survival rates.
Total	Total	Computation of total market volumes (premium + standard clams) for all three growth stage phases (seed, semi, adult). Having input of adult volumes, other growth stages are computed by applying weight ratios and survival rates.
Time series	Time series	Time series set-up

Appendix 1: Cover Excel tool

Cockpit

Model Settings

Relevant channels

B2B
B2C Horeca
B2C Retail
[Placeholder]

Comment: If you change channel classifications, please change respective tab names! Classifications within tabs are changed automatically!

Key scenario

Geographic market

B2B	Iberia
B2C Horeca + B2C Retail	Portugal
[Placeholder]	Portugal

Channel allocation

B2B	33%
B2C Horeca	33%
B2C Retail	34%
[Placeholder]	0%

If additional B2C channel is applied, please adjust allocation of B2C volume splits (input tab). Currently the volume share for this channel is 0%.

Appendix 2.1: Cockpit key scenario (input and summary sheet)

Key ratios		
Volume unit	kg.	
Market survival rates		
Grow-out phase	50%	
Nursery phase	70%	
Individuals per weight unit – V.Corrugata	**#/kg**	**1000#/kg**
40mm	100	0.1
18-20mm	500	0.5
3-5mm	50000	50.0
Individuals per weight unit – R.Decussatus	**#/kg**	**1000#/kg**
40mm	165	0.2
18-20mm	600	0.6
3-5mm	60000	60.0
OF survival rates		
R.Decussatus		
Grow-out phase	70%	
Nursery phase	90%	
V.Corrugata		
Grow-out phase	50%	
Nursery phase	80%	
B2B production capacity- species split		
RD	40%	
VC	60%	
Product mix (Seeds, semi-adults, adults)		
B2B - RD seeds	0%	
B2B - RD semi-adults	100%	
B2B - VC seeds	10%	
B2B - VC semi-adults	100%	
B2C Horeca / B2C Retail - VC seeds	0%	
B2C Horeca / B2C Retail - VC semi-adults	0%	
[Placeholder] - VC seeds	0%	
[Placeholder] - VC semi-adults	0%	

Appendix 2.2: Cockpit key ratios (input and summary sheet)

P&L / CF specifics		
Go-to-market mix – B2C Horeca		
Cash & Carry	33%	
Direct	33%	
Indirect	34%	
Go-to-market mix – B2C Retail		
Bulk	50%	
Packaged	50%	
Go-to-market mix – [Placeholder]		
[A]	50%	
[B]	50%	
Payment terms (in days)		
B2B	30	
B2C Horeca		
Cash & Carry	30	
Direct	30	
Indirect	30	
B2C Retail	30	
[Placeholder]		
[A]	0	
[B]	0	
Other assumptions	Yearly	Monthly
% of Depreciation on PP&E	5%	0.4%
Corporate tax rate	25%	

Valuation	
DCF / Capital budgeting analysis	Yearly
Forward-looking return / WACC	20%
Perpetuity growth (FY2030 - perpetuity)	1%

Appendix 2.3: Cockpit P&L/CF specifics and valuation (input and summary sheet)

Output summary

Key Operating KPI's	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY	CAGR FY 2021-30	CAGR FY 2025-30
Sales	-	1,417,310	3,894,548	5,865,509	7,742,732	9,657,045	11,609,004	13,599,170	15,628,111	15,771,081	15,915,480	31%	11%
Gross profit	(1,295,159)	(95,792)	2,054,476	3,843,096	5,563,883	7,318,671	9,107,967	10,932,285	12,792,148	12,923,203	13,055,569	-273%	12%
EBITDA	(2,907,159)	(2,363,941)	(779,743)	1,032,684	2,224,429	3,439,720	4,678,911	5,942,356	7,230,417	7,321,180	7,412,850	-214%	17%
EBIT	(3,151,509)	(2,596,350)	(1,000,794)	817,575	2,020,075	3,245,584	4,494,481	5,767,148	7,063,970	7,163,054	7,262,631	-212%	17%
Operating CF	(2,133,720)	(1,730,629)	(546,357)	654,798	1,542,569	2,448,389	3,372,515	4,315,207	5,434,974	5,502,048	5,580,692	-214%	18%
Investing CF	-	-	-	0	0	0	0	0	0	0	0		
Financing CF	50,000	40,000	30,000	20,000	10,000	-	(10,000)	(20,000)	(30,000)	(40,000)	-	-100%	
Net CF	(2,083,720)	(1,690,629)	(516,357)	674,798	1,552,569	2,448,389	3,362,515	4,295,207	5,404,974	5,462,048	5,580,692	-214%	18%
(Unlevered-) FCF	(2,114,470)	(1,709,596)	(523,941)	680,398	1,568,569	2,474,389	3,398,115	4,340,007	5,458,574	5,524,048	5,602,692	-214%	18%

Margins											
Gross profit		-7%	53%	66%	72%	76%	78%	80%	82%	82%	82%
EBITDA		-167%	-20%	18%	29%	36%	40%	44%	46%	46%	47%
EBIT		-193%	-26%	14%	26%	34%	39%	42%	45%	45%	46%

Effective market shares											
OF market share - Premium	0%	1%	3%	4%	6%	8%	10%	12%	13%	13%	13%
OF market share - Total	0%	0%	1%	1%	2%	3%	3%	4%	4%	4%	4%

Key valuation figures (ending FY2	FY2020
Enterprise value	**9,807,866**
Forward EBITDA mulitple	-4.1x
Forward EBIT mulitple	-3.8x
Forward FCF multiple	-5.7x
Equity value	**9,257,866**

Appendix 2.4: Cockpit output summary (input and summary sheet)

Market volumes *Comment: This tab includes a) st*

Total premium in kg.	2020A FY
Italy	5,084,000
Spain	6,720,000
Portugal	4,890,000
Denmark	1,870,000
France	5,670,000
UK	913,000
Netherlandr	1,420,000
Germany	18,000
Suitzerland	0
Belgium	0
Sweden	9,000
Austria	0
Norway	20,000
Finland	0
Ireland	0
Mediterranean non-EU	0
Japan & Korea	0
China	0
Rest	0

Premium - shares RD *Comment: Based on this share, t*

Total premium in kg.	2020A FY
Italy	50%
Spain	50%
Portugal	50%
Denmark	50%
France	50%
UK	50%
Netherlandr	50%
Germany	50%
Suitzerland	50%
Belgium	50%
Sweden	50%
Austria	50%
Norway	50%
Finland	50%
Ireland	50%
Mediterranean non-EU	50%
Japan & Korea	50%
China	50%
Rest	50%

Appendix 3.1: Market volumes (input sheet)

Volume growth

RD in x	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Italy	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Spain	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Portugal	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Denmark	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
France	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
UK	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Netherlandr	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Germany	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Switzerland	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Belgium	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Sweden	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Austria	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Norway	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Finland	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Ireland	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Mediteranean-EU	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Japan & Korea	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
China	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Rest	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x

YC in x	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Italy	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Spain	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Portugal	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Denmark	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
France	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
UK	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Netherlandr	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Germany	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Switzerland	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Belgium	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Sweden	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Austria	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Norway	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Finland	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Ireland	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Mediteranean-EU	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Japan & Korea	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
China	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Rest	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x

Appendix 3.2: Market volume growth (input sheet)

Input - B2C Horeca + B2C Retail + [Placeholder] shares *Comment: Shows allocation of volumes between Horeca (out-of-home) and Retail (in-home). If adjustments needed, please enter adjustments*

B2C Horeca - share	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Italy	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Spain	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Portugal	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Denmark	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
France	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
UK	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Netherlandr	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Germany	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Suitzerland	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Belgium	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Sweden	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Awtria	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Narway	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Finland	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Ireland	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Mediteraneannan-EU	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Japan & Korea	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
China	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Rest	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Iberia	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Total	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%

B2C Retail - share	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Italy	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Spain	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Portugal	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Denmark	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
France	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
UK	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Netherlandr	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Germany	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Suitzerland	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Belgium	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Sweden	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Awtria	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Narway	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Finland	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Ireland	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Mediteraneannan-EU	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Japan & Korea	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
China	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Rest	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Iberia	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Total	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%

Appendix 4: B2C volume splits (input sheet)

Indicative market shares

Comment: This tab includes market shares per region for adults for both RD and VC. These market shares will be used as management

RD in %	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Italy	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Spain	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Portugal	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Denmark	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
France	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
UK	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Netherlandr	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Germany	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Suitzerland	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Belgium	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Sweden	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Austria	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Norway	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Finland	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Ireland	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Mediteraneannan-EU	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Japan & Korea	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
China	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Rest	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Iberia	0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%
Total	0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%

VC in %	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Italy	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Spain	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Portugal	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Denmark	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
France	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
UK	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Netherlandr	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Germany	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Suitzerland	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Belgium	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Sweden	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Austria	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Norway	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Finland	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Ireland	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Mediteraneannan-EU	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Japan & Korea	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
China	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Rest	0.00%	1.00%	3.00%	5.00%	7.00%	9.00%	11.00%	13.00%	15.00%	15.00%	15.00%
Iberia	0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%
Total	0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%

Appendix 5: Indicative market shares (input sheet)

Input market prices

Comment: Please enter market prices ***manually*** *in grey input cells. Monthly price variations are not considered. Thus, monthly prices equal FY price assumptions.*

		2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY	
B2B	**Iberia**												
Market price - RD semi-adultr	l/kg	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	1000$/kg
Market price - RD semi-adultr	l/1000$	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	0.6
Market price - VC semi-adultr	l/kg	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Market price - VC semi-adultr	l/1000$	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	0.5
Market price - VC seed	l/kg	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0	
Market price - VC seed	l/1000$	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	50.0
B2C Horeca - Cash & Carry	**Portugal**												
Market price - VC adultr	l/kg	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Market price - VC adultr	l/1000$	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	0.1
B2C Horeca - Direct	**Portugal**												
Market price - VC adultr	l/kg	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Market price - VC adultr	l/1000$	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	0.1
B2C Horeca - Indirect	**Portugal**												
Market price - VC adultr	l/kg	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Market price - VC adultr	l/1000$	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	0.1
B2C Retail - Bulk	**Portugal**												
Market price - VC adultr	l/kg	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Market price - VC adultr	l/1000$	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	0.1
B2C Retail - Packaged	**Portugal**												
Market price - VC adultr	l/kg	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Market price - VC adultr	l/1000$	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	0.1
[Placeholder] - [A]	**Portugal**												
Market price - VC adultr	l/kg	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Market price - VC adultr	l/1000$	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	0.1
[Placeholder] - [B]	**Portugal**												
Market price - VC adultr	l/kg	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Market price - VC adultr	l/1000$	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	0.1

Appendix6: Market prices (input sheet)

Input COGS *Comment: Differences in COGS (production costs) between both species (YC & RD) can occur. Thus, this set up allows to account for differences in e.g. cu*

		2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY	
COGS - RD													
Adultr													1000$/kg
Direct material	l/kg.	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
Direct labor	l/kg.	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
Production overhead	l/kg.	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
Direct material	l/1000$	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	0.2
Direct labor	l/1000$	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	0.2
Production overhead	l/1000$	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	0.2
Semi-adultr		2020A	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	1000$/kg
Direct material	l/kg.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
Direct labor	l/kg.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
Production overhead	l/kg.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
Direct material	l/1000$	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.6
Direct labor	l/1000$	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.6
Production overhead	l/1000$	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.6
Seedr													1000$/kg
Direct material	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Direct labor	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Production overhead	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Direct material	l/1000$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	60.0
Direct labor	l/1000$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	60.0
Production overhead	l/1000$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	60.0
COGS - YC													
Adultr													1000$/kg
Direct material	l/kg.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
Direct labor	l/kg.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
Production overhead	l/kg.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
Direct material	l/1000$	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	0.1
Direct labor	l/1000$	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	0.1
Production overhead	l/1000$	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	0.1
Semi-adultr													1000$/kg
Direct material	l/kg.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Direct labor	l/kg.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Production overhead	l/kg.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Direct material	l/1000$	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.5
Direct labor	l/1000$	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.5
Production overhead	l/1000$	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.5
Seedr													1000$/kg
Direct material	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Direct labor	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Production overhead	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Direct material	l/1000$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	50.0
Direct labor	l/1000$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	50.0
Production overhead	l/1000$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	50.0

Appendix 7: COGS (input sheet)

Variable costs		Comment: Media/customer promotion costs are entered in absolute terms per year. FY2020,2021,2022 costs are evenly allocated throughout the year (monthly perspective											
Media/customer promotion (direct)													
B2B	I	-	-	-	-	-	-	-	-	-	-	-	
B2C Horeca	I	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
B2C Retail	I	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
[Placeholder]	I	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
Packaging													1000$/kg
B2C Horeca													
Cash & Carry	l/kg.	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
Direct	l/kg.	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
Indirect	l/kg.	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
Cash & Carry	l/1000$	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	0.1
Direct	l/1000$	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	0.1
Indirect	l/1000$	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	0.1
B2C Retail													
Bulk	l/kg.	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
Packaged	l/kg.	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	
Bulk	l/1000$	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	0.1
Packaged	l/1000$	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.1
[Placeholder]													
[A]	l/kg.	2.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
[B]	l/kg.	2.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	
[A]	l/1000$	20.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	0.1
[B]	l/1000$	20.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.1
Freight & transportation costs													1000$/kg
B2B													
RD-Semi-adults	l/kg.	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
VC-Semi-adults	l/kg.	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
VC-Seeds	l/kg.	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
RD-Semi-adults	l/1000$	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.6
VC-Semi-adults	l/1000$	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.5
VC-Seeds	l/1000$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	50.0
B2C Horeca													
Cash & carry	l/kg.	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Direct	l/kg.	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
Indirect	l/kg.	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Cash & carry	l/1000$	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.1
Direct	l/1000$	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	0.1
Indirect	l/1000$	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.1
B2C Retail													
Adults	l/kg.	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
Adults	l/1000$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.1
[Placeholder]													
Adults	l/kg.	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
Adults	l/1000$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.1
Fixed costs													
Monthly allocation key													
		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Appendix 8: Other costs (input sheet)

Input prod. capacity + capex

		2020A Dec	2021P Dec	2022P Dec	2023P Dec	2024P Dec	2025P Dec	2026P Dec	2027P Dec	2028P Dec	2029P Dec	2030P Dec
		Comment: Production capacity serves as underlying variable for sales channel allocation. Seed production is assumed to be the deciding measure for total production capacity. Applying the sales channel allocation										
Production capacity												
Total production capacity - seed (RD&VC combined)	in 1000#	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
		Comment: Growth capex (investments in production facilities, e.g. hatcheries, off-shore farms) is accounted for on a yearly basis. Maintenance capex (ongoing expenditures to maintain business operations, e.g. rep										
Capex												
Growth capex												
Cost of additional capacity - seeds	€/1000#	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Cost of additional capacity - semi-adults/ adults	€/1000#	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0

Input prod. capacity + capex

		2020A Dec	2021P Dec	2022P Dec	2023P Dec	2024P Dec	2025P Dec	2026P Dec	2027P Dec	2028P Dec	2029P Dec	2030P Dec
		Comment: Production capacity serves as underlying variable for sales channel allocation. Seed production is assumed to be the deciding measure for total production capacity. Applying the sales channel allocati										
Production capacity												
Total production capacity - seed (RD&VC combined)	in 1000#	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
		Comment: Growth capex (investments in production facilities, e.g. hatcheries, off-shore farms) is accounted for on a yearly basis. Maintenance capex (ongoing expenditures to maintain business operations, e.g. re										
Capex												
Growth capex												
Cost of additional capacity - seeds	€/1000#	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Cost of additional capacity - semi-adults/ adults	€/1000#	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0

Appendix 9: Production capacity and capital expenditures (input sheet)

Input assets & liabilities *Comment: Debt financing is assumed to occur on a yearly basis. Thus, please notice that FY2020, 2021, 2022 inputs can be used for the respective december. This enables seamless summation later when*

		2019 FY	2020A Dec	2020A FY	2021P Dec	2021P FY	2022P Dec	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Assets																
Opening: cash		1,000,000.0														
Opening: trade receivables																
B2B		-														
B2C Horeca		-														
B2C Retail		-														
[Placeholder]		-														
Opening: PP&E		5,000,000.0														
Financing: opening balance + cashflows																
Equity																
Opening venture capital	I	2,000,000.0														
Influx: VC capital	I															
Outflux: VC capital (dividend or exit)	I															
Opening founder equity	I	500,000.0														
Influx: founder equity	I															
Outflux: founder equity (dividend)	I															
Debt																
Opening debt outstanding	I	500,000.0														
Influx: debt	I		100,000.0		100,000.0		100,000.0		100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0
Repayment period	Years	10.0		10.0		10.0		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Interest rate on outstanding debt																
				4%		4%		4%	4%	4%	4%	4%	4%	4%	4%	4%

Appendix 10: Assets and liabilities (input sheet)

B2B *Comment: This tab includes all P&L positions specific to the B2B channel. It includes sales, COGS + variable + fixed costs.*

		2019A FY	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Sales													
Market perspective													
Total market volume - RD semi-adults	kg.		3,192,750	3,227,870	3,260,149	3,292,750	3,325,678	3,358,935	3,392,524	3,426,449	3,460,714	3,495,321	3,530,274
Total market volume - VC semi-Adults	kg.		2,322,000	2,345,220	2,368,672	2,392,359	2,416,283	2,440,445	2,464,850	2,489,498	2,514,393	2,539,537	2,564,933
Total market volume - VC seeds	kg.		33,171	33,503	33,838	34,177	34,518	34,864	35,212	35,564	35,920	36,279	36,642
OF market share - RD	%		0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%
OF market share - VC	%		0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%
OF market share - VC	%		0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%
OF output potential - RD semi-adults	kg.		-	32,278.7	97,804.5	164,637.5	232,797.5	302,304.1	373,177.6	445,438.4	519,107.1	524,298.1	529,541.1
OF output potential - VC semi-adults	kg.		-	23,452.2	71,060.2	119,617.9	169,139.8	219,640.1	271,133.5	323,634.8	377,159.0	380,930.6	384,739.9
OF output potential - VC seeds	kg.		-	335.0	1,015.1	1,708.8	2,416.3	3,137.7	3,873.3	4,623.4	5,388.0	5,441.9	5,496.3
Prices - RD semi-adults	l/kg.		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Prices - VC semi-adults	l/kg.		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Prices - VC seeds	l/kg.		225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0
Production capacity constraint													
Production capacity - RD semi-adults	kg.		59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0
Production capacity - VC semi-adults	kg.		85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0
Production capacity - VC seeds	kg.		118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8
Sold volumes													
RD - semi-adults			-	32,278.7	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0
VC - semi-adults			-	23,452.2	71,060.2	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0
VC - seeds			-	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8
Sales - RD semi-adults	I		-	290,508	534,600	534,600	534,600	534,600	534,600	534,600	534,600	534,600	534,600
Sales - VC semi-adults	I		-	211,070	639,541	769,824	769,824	769,824	769,824	769,824	769,824	769,824	769,824
Sales - VC seeds	I		-	26,730	26,730	26,730	26,730	26,730	26,730	26,730	26,730	26,730	26,730
Total sales	I		**-**	**528,308.1**	**1,200,871.5**	**1,331,154.0**	**1,331,154.0**	**1,331,154.0**	**1,331,154.0**	**1,331,154.0**	**1,331,154.0**	**1,331,154.0**	**1,331,154.0**

Appendix 11.1: B2B sales (P&L engine sheet)

COGS												
Direct material - RD semi-adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Direct labor - RD semi-adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Production overhead - RD semi-adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Sold volumes - RD semi-adults	kg.	-	32,278.7	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0
Production capacity - RD semi-adults	kg.	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0
COGS - RD semi-adults	I	89,100	185,936	267,300	267,300	267,300	267,300	267,300	267,300	267,300	267,300	267,300
Direct material - VC semi-adults	l/kg.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Direct labor - VC semi-adults	l/kg.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Production overhead - VC semi-adults	l/kg.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sold volumes - VC semi-adults	kg.	-	23,452.2	71,060.2	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0
Production capacity - VC semi-adults	kg.											
COGS - VC semi-adults	I	-	46,904	142,120	171,072	171,072	171,072	171,072	171,072	171,072	171,072	171,072
Direct material - VC seeds	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Direct labor - VC seeds	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Production overhead - VC seeds	l/kg.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Sold volumes - VC seeds	kg.	-	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8
Production capacity - VC seeds	kg.	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8
COGS - VC seeds	I	59	178	178	178	178	178	178	178	178	178	178
Total COGS	I	**89,159.4**	**233,018.7**	**409,598.5**	**438,550.2**	**438,550.2**	**438,550.2**	**438,550.2**	**438,550.2**	**438,550.2**	**438,550.2**	**438,550.2**

Appendix 11.2: B2B COGS (P&L engine sheet)

Media/customer promotion												
Costs	l	-	-	-	-	-	-	-	-	-	-	-
Freight & transportation costs												
Cost per unit - RD semi-adults	l/kg.	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cost per unit - VC semi-adults		0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Cost per unit - seeds	l/kg.	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Sold volumes - RD semi-adults	kg.	-	32,278.7	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0
Sold volumes - VC semi-adults		-	23,452.2	71,060.2	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0
Sold volumes - seeds	kg.	-	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8
Freight & transportation costs - semi-adults	l	-	5,573	13,046	14,494	14,494	14,494	14,494	14,494	14,494	14,494	14,494
Freight & transportation costs - seeds	l	-	36	36	36	36	36	36	36	36	36	36
Total freight & transportation costs	l	-	**5,608.7**	**13,081.7**	**14,529.2**	**14,529.2**	**14,529.2**	**14,529.2**	**14,529.2**	**14,529.2**	**14,529.2**	**14,529.2**
Management												
Pre-allocation	l	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Allocation key	%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
Post-allocation	l	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**
SG&A												
Pre-allocation	l	250,000	450,000	400,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000
Allocation key	%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
Post-allocation	l	**82,500.0**	**148,500.0**	**132,000.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**
R&D												
Pre-allocation	l	446,000	646,000	746,000	746,000	746,000	746,000	746,000	746,000	746,001	746,002	746,003
Allocation key	%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Post-allocation	l	**446,000.0**	**646,000.0**	**746,000.0**	**746,000.0**	**746,000.0**	**746,000.0**	**746,000.0**	**746,000.0**	**746,001.0**	**746,002.0**	**746,003.0**
Depreciation												
PP&E	5,000,000.0	4,755,650.3	4,523,242.0	4,302,191.5	4,087,081.9	3,882,727.8	3,688,591.4	3,504,161.9	3,328,953.8	3,162,506.1	3,004,380.8	2,854,161.7
as % of PP&E					5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Pre-allocation - depreciation					215,109.6	204,354.1	194,136.4	184,429.6	175,208.1	166,447.7	158,125.3	150,219.0
Allocation key					33%	33%	33%	33%	33%	33%	33%	33%
Post-allocation		-	-	-	**70,986.2**	**67,436.9**	**64,065.0**	**60,861.8**	**57,818.7**	**54,927.7**	**52,181.4**	**49,572.3**

Appendix 11.3: B2B other costs (P&L engine sheet)

B2C Horeca		*Comment: This tab includes all P&L positions specific to the B2C Horeca channel. It includes sales, COGS + variable + fixed costs.*										
		2019A	2020A	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P
l		FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
Sales													
Market perspective													
Total market volume - VC adults	kg.		2,445,000	2,469,450	2,494,145	2,519,086	2,544,277	2,569,720	2,595,417	2,621,371	2,647,585	2,674,060	2,700,801
OF market share - VC	in %		0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%
Total OF volume - VC adults	kg.		-	24,694.5	74,824.3	125,954.3	178,099.4	231,274.8	285,495.8	340,778.2	397,137.7	401,109.1	405,120.2
Horeca share	in %		80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
OF Horeca output potential	kg.		-	19,756	59,859	100,763	142,480	185,020	228,397	272,623	317,710	320,887	324,096
Prices - Cash & carry	l/kg.		20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Prices - Direct	l/kg.		20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Prices - Indirect	l/kg.		20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Production capacity constraint													
Production capacity - VC adults	kg.		396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0
Sold volumes													
Volumes - Cash & carry	kg.		-	6,519	19,754	33,252	47,018	61,057	75,371	89,965	104,844	105,893	106,952
Volumes - Direct	kg.		-	6,519	19,754	33,252	47,018	61,057	75,371	89,965	104,844	105,893	106,952
Volumes - Indirect	kg.		-	6,717	20,352	34,260	48,443	62,907	77,655	92,692	108,021	109,102	110,193
Sales - Cash & carry	l		-	130,387.0	395,072.5	665,038.7	940,364.7	1,221,130.7	1,507,418.1	1,799,309.0	2,096,887.0	2,117,855.9	2,139,034.5
Sales - Direct	l		-	130,387.0	395,072.5	665,038.7	940,364.7	1,221,130.7	1,507,418.1	1,799,309.0	2,096,887.0	2,117,855.9	2,139,034.5
Sales - Indirect	l		-	134,338.1	407,044.4	685,191.4	968,860.6	1,258,134.7	1,553,097.4	1,853,833.5	2,160,429.1	2,182,033.4	2,203,853.7
Total sales	l		-	**395,112**	**1,197,189**	**2,015,269**	**2,849,590**	**3,700,396**	**4,567,934**	**5,452,452**	**6,354,203**	**6,417,745**	**6,481,923**

Appendix 12.1: B2C Horeca sales (P&L engine sheet)

COGS												
Direct material - VC adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Direct labor - VC adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Production overhead - VC adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Sold volumes - VC adults	kg.	-	19,755.6	59,859.5	100,763.4	142,479.5	185,019.8	228,396.7	272,622.6	317,710.2	320,887.3	324,096.1
Production capacity - VC adults	kg.	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0
Total COGS	l	**594,000.0**	**653,266.8**	**773,578.4**	**896,290.3**	**1,021,438.5**	**1,149,059.4**	**1,279,190.0**	**1,411,867.7**	**1,547,130.5**	**1,556,661.8**	**1,566,288.4**

Appendix 12.2: B2C Horeca COGS (P&L engine sheet)

Media/customer promotion												
Costs		100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0
Packaging costs												
Cost per unit - Cash & carry	l/kg.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cost per unit - Direct	l/kg.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cost per unit - Indirect	l/kg.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Sold volumes - Cash & carry	kg.	-	6,519.3	19,753.6	33,251.9	47,018.2	61,056.5	75,370.9	89,965.5	104,844.4	105,892.8	106,951.7
Sold volumes - Direct	kg.	-	6,519.3	19,753.6	33,251.9	47,018.2	61,056.5	75,370.9	89,965.5	104,844.4	105,892.8	106,951.7
Sold volumes - Indirect	kg.	-	6,716.9	20,352.2	34,259.6	48,443.0	62,906.7	77,654.9	92,691.7	108,021.5	109,101.7	110,192.7
Packaging costs - Cash & carry		-	19,558.0	59,260.9	99,755.8	141,054.7	183,169.6	226,112.7	269,896.4	314,533.1	317,678.4	320,855.2
Packaging costs - Direct		-	19,558.0	59,260.9	99,755.8	141,054.7	183,169.6	226,112.7	269,896.4	314,533.1	317,678.4	320,855.2
Packaging costs - Indirect		-	20,150.7	61,056.7	102,778.7	145,329.1	188,720.2	232,964.6	278,075.0	324,064.4	327,305.0	330,578.1
Total packaging costs	l	-	**59,266.8**	**179,578.4**	**302,290.3**	**427,438.5**	**555,059.4**	**685,190.0**	**817,867.7**	**953,130.5**	**962,661.8**	**972,288.4**

Freight & transportation costs												
Cost per unit - Cash & carry	l/kg.	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Cost per unit - Direct	l/kg.	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Cost per unit - Indirect	l/kg.	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sold volumes - Cash & carry	kg.	-	6,519.3	19,753.6	33,251.9	47,018.2	61,056.5	75,370.9	89,965.5	104,844.4	105,892.8	106,951.7
Sold volumes - Direct	kg.	-	6,519.3	19,753.6	33,251.9	47,018.2	61,056.5	75,370.9	89,965.5	104,844.4	105,892.8	106,951.7
Sold volumes - Indirect	kg.	-	6,716.9	20,352.2	34,259.6	48,443.0	62,906.7	77,654.9	92,691.7	108,021.5	109,101.7	110,192.7
Freight & transportation costs - Cash & carry		-	1,303.9	3,950.7	6,650.4	9,403.6	12,211.3	15,074.2	17,993.1	20,968.9	21,178.6	21,390.3
Freight & transportation costs - Direct		-	1,955.8	5,926.1	9,975.6	14,105.5	18,317.0	22,611.3	26,989.6	31,453.3	31,767.8	32,085.5
Freight & transportation costs - Indirect		-	335.8	1,017.6	1,713.0	2,422.2	3,145.3	3,882.7	4,634.6	5,401.1	5,455.1	5,509.6
Total freight & transportation costs	l	-	**3,595.5**	**10,894.4**	**18,338.9**	**25,931.3**	**33,673.6**	**41,568.2**	**49,617.3**	**57,823.2**	**58,401.5**	**58,985.5**

Management												
Pre-allocation	l	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Allocation key		33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
Post-allocation	l	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**	**7,260.0**
SG&A												
Pre-allocation	l	250,000	450,000	400,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000
Allocation key		33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
Post-allocation	l	**82,500.0**	**148,500.0**	**132,000.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**	**148,500.0**

Depreciation												
PP&E	5,000,000.0	4,755,650.3	4,523,242.0	4,302,191.5	4,087,081.9	3,882,727.8	3,688,591.4	3,504,161.9	3,328,953.8	3,162,506.1	3,004,380.8	2,854,161.7
as % of PP&E					5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Pre-allocation - depreciation					215,109.6	204,354.1	194,136.4	184,429.6	175,208.1	166,447.7	158,125.3	150,219.0
Allocation key					33%	33%	33%	33%	33%	33%	33%	33%
Post-allocation		-	-	-	**70,986.2**	**67,436.9**	**64,065.0**	**60,861.8**	**57,818.7**	**54,927.7**	**52,181.4**	**49,572.3**

Appendix 12.3: B2C Horeca other costs (P&L engine sheet)

B2C Retail

Comment: This tab includes all P&L positions specific to the B2C Retail channel. It includes sales, COGS + variable + fixed costs.

		2019A	2020A	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P
l		FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
Sales													
Market perspective													
Total market volume - VC adults	kg.	2,445,000	2,469,450	2,494,145	2,519,086	2,544,277	2,569,720	2,595,417	2,621,371	2,647,585	2,674,060	2,700,801
OF market share - VC	in %	0.0%	1.0%	3.0%	5.0%	7.0%	9.0%	11.0%	13.0%	15.0%	15.0%	15.0%
Total OF volume - VC adults	kg.	-	24,694.5	74,824.3	125,954.3	178,099.4	231,274.8	285,495.8	340,778.2	397,137.7	401,109.1	405,120.2
Retail share	in %	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
OF output potential for B2C Retail	kg.	-	4,938.9	14,964.9	25,190.9	35,619.9	46,255.0	57,099.2	68,155.6	79,427.5	80,221.8	81,024.0
Prices - bulk	l/kg.	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Prices - packaged	l/kg.	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Production capacity constraint													
Production capacity - VC adults	kg.	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0
Volumes sold - bulk	kg.	-	12,347.3	37,412.2	62,977.1	89,049.7	115,637.4	142,747.9	170,389.1	198,568.8	200,554.5	202,560.1
Volumes sold - packaged	kg.	-	12,347.3	37,412.2	62,977.1	89,049.7	115,637.4	142,747.9	170,389.1	198,568.8	200,554.5	202,560.1
Sales - bulk	l	-	246,945.0	748,243.4	1,259,543.0	1,780,993.8	2,312,747.6	2,854,958.4	3,407,782.2	3,971,377.0	4,011,090.7	4,051,201.6
Sales - packaged	l	-	246,945.0	748,243.4	1,259,543.0	1,780,993.8	2,312,747.6	2,854,958.4	3,407,782.2	3,971,377.0	4,011,090.7	4,051,201.6
Total sales	l	-	**493,890**	**1,496,487**	**2,519,086**	**3,561,988**	**4,625,495**	**5,709,917**	**6,815,564**	**7,942,754**	**8,022,181**	**8,102,403**

Appendix 13.1: B2C Retail sales (P&L engine sheet)

COGS												
Direct material - VC adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Direct labor - VC adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Production overhead - VC adults	l/kg.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Sold volumes - VC adults	kg.	-	4,938.9	14,964.9	25,190.9	35,619.9	46,255.0	57,099.2	68,155.6	79,427.5	80,221.8	81,024.0
Production capacity - VC adults	kg.	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0
Total COGS	l	**612,000.0**	**626,816.7**	**656,894.6**	**687,572.6**	**718,859.6**	**750,764.9**	**783,297.5**	**816,466.9**	**850,282.6**	**852,665.4**	**855,072.1**

Appendix 13.2: B2C Retail COGS (P&L engine sheet)

Media/customer promotion													
Costs	l	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0
Packaging costs													
Cost per unit - bulk	l/kg.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Cost per unit - Packaged	l/kg.	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Sold volumes - Bulk	kg.	-	12,347.3	37,412.2	62,977.1	89,049.7	115,637.4	142,747.9	170,389.1	198,568.8	200,554.5	202,560.1	
Sold volumes - Packaged	kg.	-	12,347.3	37,412.2	62,977.1	89,049.7	115,637.4	142,747.9	170,389.1	198,568.8	200,554.5	202,560.1	
Packaging costs - Bulk	l	-	61,736.3	187,060.8	314,885.7	445,248.4	578,186.9	713,739.6	851,945.6	992,844.2	1,002,772.7	1,012,800.4	
Packaging costs - Packaged	l	-	123,472.5	374,121.7	629,771.5	890,496.9	1,156,373.8	1,427,479.2	1,703,891.1	1,985,688.5	2,005,545.4	2,025,600.8	
Total packaging costs	l	-	**185,208.8**	**561,182.5**	**944,657.2**	########	########	**2,141,218.8**	########	########	**3,008,318.1**	**3,038,401.2**	
Freight & transportation costs													
Price per unit	l/kg.	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Sold volumes - Bulk/Packaged	kg.	-	24,694.5	74,824.3	125,954.3	178,099.4	231,274.8	285,495.8	340,778.2	397,137.7	401,109.1	405,120.2	
Total freight & transportation cos	l	-	**2,469.5**	**7,482.4**	**12,595.4**	**17,809.9**	**23,127.5**	**28,549.6**	**34,077.8**	**39,713.8**	**40,110.9**	**40,512.0**	
Management costs													
Pre-allocation	l	22,000.0	22,000.0	22,000.0	22,000.0	22,000.0	22,000.0	22,000.0	22,000.0	22,000.0	22,000.0	22,000.0	
Allocation key		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Post-allocation	l	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	**7,480.0**	
SG&A													
Pre-allocation	l	250,000.0	450,000.0	400,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	
Allocation key		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Post-allocation	l	**85,000.0**	**153,000.0**	**136,000.0**	**153,000.0**	**153,000.0**	**153,000.0**	**153,000.0**	**153,000.0**	**153,000.0**	**153,000.0**	**153,000.0**	
Depreciation													
PP&E	5,000,000.0	4,755,650.3	4,523,242.0	4,302,191.5	4,087,081.9	3,882,727.8	3,688,591.4	3,504,161.9	3,328,953.8	3,162,506.1	3,004,380.8	2,854,161.7	
as % of PP&E					5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
Pre-allocation - depreciation					215,109.6	204,354.1	194,136.4	184,429.6	175,208.1	166,447.7	158,125.3	150,219.0	
Allocation key					34%	34%	34%	34%	34%	34%	34%	34%	
Post-allocation		-	-	-	**73,137.3**	**69,480.4**	**66,006.4**	**62,706.1**	**59,570.8**	**56,592.2**	**53,762.6**	**51,074.5**	

Appendix 13.3: B2C Retail other costs (P&L engine sheet)

Working capital

	2020A	2020A	2020A	2020A	2020A	2020A	2020A	2020A	2020A	2020A	2020A	2020A	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P
l	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
Comment: Considering the characteristics of the business (no product stockpiling, no seed procurement), the single working capital position is trade receivables. FY2020,2021 and 2022 trade receivables are computed on a rolling basis due to the monthly structure. FY2023-2030																						
Trade receivables																						
B2B																						
Opening Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-										
Period sales	-	-	-	-	-	-	-	-	-	-	-	-			430,590.2	430,590.2	430,590.2	430,590.2	430,590.2	430,590.2	430,590.2	430,590.2
Period length	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0
DSO	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Change in Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-
Ending Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	2,227.5	4,455.0	34,045.2	34,045.2	34,045.2	34,045.2	34,045.2	34,045.2	34,045.2
B2C Horeca																						
Cash & Carry																						
Opening Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-										
Period sales	-	-	-	-	-	-	-	-	-	-	-	-			645,026.7	940,264.7	1,221,139.7	1,507,410.1	1,799,209.0	2,096,207.0	2,117,255.9	2,139,034.5
Period length	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0
DSO	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Change in Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-
Ending Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54,669.7	77,296.2	100,246.9	123,897.4	147,888.4	172,346.9	174,079.3	175,911.1
Direct																						
Opening Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-										
Period sales	-	-	-	-	-	-	-	-	-	-	-	-			645,026.7	940,264.7	1,221,139.7	1,507,410.1	1,799,209.0	2,096,207.0	2,117,255.9	2,139,034.5
Period length	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0
DSO	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Change in Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-
Ending Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54,669.7	77,296.2	100,246.9	123,897.4	147,888.4	172,346.9	174,079.3	175,911.1
Indirect																						
Opening Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-										
Period sales	-	-	-	-	-	-	-	-	-	-	-	-			645,191.4	940,360.6	1,221,134.7	1,507,407.4	1,803,033.5	2,100,429.1	2,102,023.4	2,203,093.7
Period length	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0
DSO	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Change in Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-
Ending Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96,317.1	79,432.4	103,460.2	127,651.0	152,349.9	177,849.5	176,245.2	181,538.7
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	165,630.5	234,212.9	304,142.2	378,446.4	451,946.7	522,243.3	527,419.9	532,760.0
B2C Retail																						
Opening Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-										
Period sales	-	-	-	-	-	-	-	-	-	-	-	-			2,519,005.9	3,541,987.5	4,625,495.2	5,709,916.9	6,815,944.4	7,942,753.9	8,022,111.5	8,102,493.3
Period length	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0
DSO	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			-	-	-	-	-	-	-	-
Change in Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-
Ending Trade receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207,040.2	292,764.1	380,177.7	469,280.2	560,102.4	652,329.1	659,357.4	665,951.0

Appendix 14: Working capital (CF engine sheet)

Capacity+PP&E+Capex												
I		2019A FY	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Production capacities												
Total production capacity (all channels)												
Total production capacity - seed	in 1000#		300000.0	300000.0	300000.0	300000.0	300000.0	300000.0	300000.0	300000.0	300000.0	300000.0	300000.0
Capacity allocation keys												
B2B	in %		33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
B2C Horeca	in %		33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
B2C Retail	in %		34%	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%
[Placeholder]	in %		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Capacity - B2B												
Total - seed	in 1000#		99,000.0	99,000.0	99,000.0	99,000.0	99,000.0	99,000.0	99,000.0	99,000.0	99,000.0	99,000.0	99,000.0
B2B species split - RD	in %		40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
B2B species split - YO	in %		60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
RD - seed or final product	in 1000#		-	-	-	-	-	-	-	-	-	-	-
RD - semi-adults or final product	in 1000#		35,640.0	35,640.0	35,640.0	35,640.0	35,640.0	35,640.0	35,640.0	35,640.0	35,640.0	35,640.0	35,640.0
RD - adults or final product	in 1000#		-	-	-	-	-	-	-	-	-	-	-
RD - seed or final product	in kg		-	-	-	-	-	-	-	-	-	-	-
RD - semi-adults or final product	in kg		59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0	59,400.0
RD - adults or final product	in kg		-	-	-	-	-	-	-	-	-	-	-
YO - seed or final product	in 1000#		5,940.0	5,940.0	5,940.0	5,940.0	5,940.0	5,940.0	5,940.0	5,940.0	5,940.0	5,940.0	5,940.0
YO - semi-adults or final product	in 1000#		42,768.0	42,768.0	42,768.0	42,768.0	42,768.0	42,768.0	42,768.0	42,768.0	42,768.0	42,768.0	42,768.0
YO - adults or final product	in 1000#		-	-	-	-	-	-	-	-	-	-	-
YO - seed or final product	in kg		118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8
YO - semi-adults or final product	in kg		85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0	85,536.0
YO - adults or final product	in kg		-	-	-	-	-	-	-	-	-	-	-
Capacity - B2C Horeca												
YO - adults or final product	in 1000#		39,600.0	39,600.0	39,600.0	39,600.0	39,600.0	39,600.0	39,600.0	39,600.0	39,600.0	39,600.0	39,600.0
YO - adults or final product	in kg		396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0	396,000.0
Capacity - B2C Retail												
YO - adults or final product	in 1000#		40,800.0	40,800.0	40,800.0	40,800.0	40,800.0	40,800.0	40,800.0	40,800.0	40,800.0	40,800.0	40,800.0
YO - adults or final product	in kg		408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0	408,000.0
		Comment: Growth capex (investments in production facilities, e.g. hatcheries, off-shore farms) is accounted for on a yearly basis.											
Capex												
Change in production capacity - seed (yearly)	in 1000#		-	-	-	-	-	-	-	-	-	-	-
Change in production capacity - semi-adults (yearly)	in 1000#		(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Cost of additional capacity - seed	kf1000#		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Cost of additional capacity - semi-adults	kf1000#		20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Capex - seed production	I		-	-	-	-	-	-	-	-	-	-	-
Capex - semi-adults/adults production	I		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capex	I		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total capex			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
		Comment: Based on an estimate for the PP&E position FY2019A, PP&E is forecasted based on growth capex triggered by capacity expansion and asset depreciation.											
PP&E + depreciation												
PP&E	I	5,000,000.0	4,755,650.3	4,523,242.0	4,302,191.5	4,087,086.9	3,882,727.8	3,688,591.4	3,504,161.9	3,329,953.8	3,162,506.1	3,004,380.8	2,854,161.7
% of total PP&E	%					5%	5%	5%	5%	5%	5%	5%	5%
Depreciation	I		-	-	-	215,109.6	204,354.1	194,136.4	184,429.6	175,208.1	166,447.7	158,125.3	150,219.0

Appendix 15: Capacity, PP&E and capex (CF engine sheet)

Financing		13	26	39	40	41	42	43	44	45	46	47
Raised debt	2019A FY	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
2019												
2020												
2021												
2022												
2023					100,000.0							
2024						100,000.0						
2025							100,000.0					
2026								100,000.0				
2027									100,000.0			
2028										100,000.0		
2029											100,000.0	
2030												100,000.0
Total raised debt	-	-	-	-	**100,000.0**	**100,000.0**	**100,000.0**	**100,000.0**	**100,000.0**	**100,000.0**	**100,000.0**	**100,000.0**

	2019A FY	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Repayment period	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Repayments	2019A FY	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
2019					(50,000.0)	(50,000.0)	(50,000.0)	(50,000.0)	(50,000.0)	(50,000.0)	(50,000.0)	-
2020					(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)
2021					(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)
2022					(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)
2023						(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)
2024							(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)
2025								(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)
2026									(10,000.0)	(10,000.0)	(10,000.0)	(10,000.0)
2027										(10,000.0)	(10,000.0)	(10,000.0)
2028											(10,000.0)	(10,000.0)
2029												(10,000.0)
2030												
Total debt repayment			-	-	**(80,000.0)**	**(90,000.0)**	**(100,000.0)**	**(110,000.0)**	**(120,000.0)**	**(130,000.0)**	**(140,000.0)**	**(100,000.0)**

Balance position: debt outstanding	2019A FY	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
2019	500,000.0	450,000.0	400,000.0	350,000.0	300,000.0	250,000.0	200,000.0	150,000.0	100,000.0	50,000.0	(0.0)	(0.0)
2020	-	100,000.0	90,000.0	80,000.0	70,000.0	60,000.0	50,000.0	40,000.0	30,000.0	20,000.0	10,000.0	0.0
2021	-	-	100,000.0	90,000.0	80,000.0	70,000.0	60,000.0	50,000.0	40,000.0	30,000.0	20,000.0	10,000.0
2022	-	-	-	100,000.0	90,000.0	80,000.0	70,000.0	60,000.0	50,000.0	40,000.0	30,000.0	20,000.0
2023	-	-	-	-	100,000.0	90,000.0	80,000.0	70,000.0	60,000.0	50,000.0	40,000.0	30,000.0
2024	-	-	-	-	-	100,000.0	90,000.0	80,000.0	70,000.0	60,000.0	50,000.0	40,000.0
2025	-	-	-	-	-	-	100,000.0	90,000.0	80,000.0	70,000.0	60,000.0	50,000.0
2026	-	-	-	-	-	-	-	100,000.0	90,000.0	80,000.0	70,000.0	60,000.0
2027	-	-	-	-	-	-	-	-	100,000.0	90,000.0	80,000.0	70,000.0
2028	-	-	-	-	-	-	-	-	-	100,000.0	90,000.0	80,000.0
2029	-	-	-	-	-	-	-	-	-	-	100,000.0	90,000.0
2030	-	-	-	-	-	-	-	-	-	-	-	100,000.0
Total debt outstanding	**500,000.0**	**550,000.0**	**590,000.0**	**620,000.0**	**640,000.0**	**650,000.0**	**650,000.0**	**640,000.0**	**620,000.0**	**590,000.0**	**550,000.0**	**550,000.0**

Appendix 16.1: Debt financing (CF engine sheet)

Balance position: Equity	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
VC capital											
Opening: VC capital	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0
Period inflow	-	-	-	-	-	-	-	-	-	-	-
Period outflow	-	-	-	-	-	-	-	-	-	-	-
Ending: VC Capital	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0
Founders capital											
Opening: founder equity	-	-	-	-	-	-	-	-	-	-	-
Period inflow	-	-	-	-	-	-	-	-	-	-	-
Period outflow	-	-	-	-	-	-	-	-	-	-	-
Ending: VC Capital	-	-	-	-	-	-	-	-	-	-	-
Total equity	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0	2,000,000.0

Appendix 16.2: Equity financing (CF engine sheet)

P&L + CF Forecast

P&L	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Sales - B2B	-	528,308	1,200,871	1,331,154	1,331,154	1,331,154	1,331,154	1,331,154	1,331,154	1,331,154	1,331,154
Sales - B2C Haroca	-	395,112	1,197,189	2,015,269	2,849,590	3,700,396	4,567,934	5,452,452	6,354,203	6,417,745	6,481,923
Sales - B2C Retail	-	493,890	1,496,487	2,519,086	3,561,988	4,625,495	5,709,917	6,815,564	7,942,754	8,022,181	8,102,403
Sales - [Placeholder]	-	-	-	-	-	-	-	-	-	-	-
Total sales	-	**1,417,310**	**3,894,548**	**5,865,509**	**7,742,732**	**9,657,045**	**11,609,004**	**13,599,170**	**15,628,111**	**15,771,081**	**15,915,480**
COGS - B2B	(89,159)	(233,019)	(409,599)	(438,550)	(438,550)	(438,550)	(438,550)	(438,550)	(438,550)	(438,550)	(438,550)
COGS - B2C Haroca	(594,000)	(653,267)	(773,578)	(896,290)	(1,021,439)	(1,149,059)	(1,279,190)	(1,411,868)	(1,547,130)	(1,556,662)	(1,566,288)
COGS - B2C Retail	(612,000)	(626,817)	(656,895)	(687,573)	(718,860)	(750,765)	(783,298)	(816,467)	(850,283)	(852,665)	(855,072)
COGS - [Placeholder]	-	-	-	-	-	-	-	-	-	-	-
Total cost of sales	(1,295,159)	(1,513,102)	(1,840,072)	(2,022,413)	(2,178,848)	(2,338,374)	(2,501,038)	(2,666,885)	(2,835,963)	(2,847,877)	(2,859,911)
Gross profit	**(1,295,159)**	**(95,792)**	**2,054,476**	**3,843,096**	**5,563,883**	**7,318,671**	**9,107,967**	**10,932,285**	**12,792,148**	**12,923,203**	**13,055,569**
Gross margin		-7%	53%	66%	72%	76%	78%	80%	82%	82%	82%
Media for customer promotion	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)
Packaging	(594,000)	(838,476)	(1,334,761)	(1,246,948)	(1,763,184)	(2,289,620)	(2,826,409)	(3,373,704)	(3,931,663)	(3,970,980)	(4,010,690)
Freight & transportation	-	(11,674)	(31,459)	(45,464)	(58,270)	(71,330)	(84,647)	(98,224)	(112,066)	(113,042)	(114,027)
Total variable costs	(894,000)	(1,150,149)	(1,666,219)	(1,592,411)	(2,121,454)	(2,660,950)	(3,211,056)	(3,771,929)	(4,343,729)	(4,384,021)	(4,424,716)
Management	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)
SG&A	(250,000)	(450,000)	(400,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)
R&D	(446,000)	(646,000)	(746,000)	(746,000)	(746,000)	(746,000)	(746,000)	(746,000)	(746,001)	(746,002)	(746,003)
Total fixed costs	(718,000)	(1,118,000)	(1,168,000)	(1,218,000)	(1,218,000)	(1,218,000)	(1,218,000)	(1,218,000)	(1,218,001)	(1,218,002)	(1,218,003)
EBITDA	**(2,907,159)**	**(2,363,941)**	**(779,743)**	**1,032,684**	**2,224,429**	**3,439,720**	**4,678,911**	**5,942,356**	**7,230,417**	**7,321,180**	**7,412,850**
EBITDA margin		-167%	-20%	18%	29%	36%	40%	44%	46%	46%	47%
Depreciation	(244,350)	(232,408)	(221,051)	(215,110)	(204,354)	(194,136)	(184,430)	(175,208)	(166,448)	(158,125)	(150,219)
EBIT	(3,151,509)	(2,596,350)	(1,000,794)	817,575	2,020,075	3,245,584	4,494,481	5,767,148	7,063,970	7,163,054	7,262,631
EBIT margin		-183%	-26%	14%	26%	34%	39%	42%	45%	45%	46%
Interest expense	(19,250)	(21,033)	(22,417)	(25,600)	(26,000)	(26,000)	(25,600)	(24,800)	(23,600)	(22,000)	(22,000)
EBT	(3,170,759)	(2,617,383)	(1,023,211)	791,975	1,994,075	3,219,584	4,468,881	5,742,348	7,040,370	7,141,054	7,240,631
Income taxes	792,690	654,346	255,803	(197,994)	(498,519)	(804,896)	(1,117,220)	(1,435,587)	(1,760,092)	(1,785,264)	(1,810,158)
Net income	**(2,378,069)**	**(1,963,037)**	**(767,408)**	**593,981**	**1,495,556**	**2,414,688**	**3,351,661**	**4,306,761**	**5,280,277**	**5,355,791**	**5,430,473**

Appendix 17.1: P&L forecast (output sheet)

CF	2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Net income	(2,378,069)	(1,963,037)	(767,408)	593,981	1,495,556	2,414,688	3,351,661	4,306,761	5,280,277	5,355,791	5,430,473
Depreciation	244,350	232,408	221,051	215,110	204,354	194,136	184,430	175,208	166,448	158,125	150,219
Change in trade receivables	-	-	-	(154,292)	(157,341)	(160,435)	(163,575)	(166,762)	(11,751)	(11,868)	-
Net cash in operating activities	**(2,133,720)**	**(1,730,629)**	**(546,357)**	**654,798**	**1,542,569**	**2,448,389**	**3,372,515**	**4,315,207**	**5,434,974**	**5,502,048**	**5,580,692**
Capex	-	-	-	0	0	0	0	0	0	0	0
Net cash from investing activities	-	-	-	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Debt issuance	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Debt pay-down / repayment	(50,000)	(60,000)	(70,000)	(80,000)	(90,000)	(100,000)	(110,000)	(120,000)	(120,000)	(140,000)	(100,000)
Increase VC capital	-	-	-	-	-	-	-	-	-	-	-
Dividends paid to or exit of VC funds	-	-	-	-	-	-	-	-	-	-	-
Increase founders capital	-	-	-	-	-	-	-	-	-	-	-
Dividends paid to or exit of founders	-	-	-	-	-	-	-	-	-	-	-
Net cash provided by financing activities	**50,000**	**40,000**	**30,000**	**20,000**	**10,000**	-	**(10,000)**	**(20,000)**	**(20,000)**	**(40,000)**	-
Net cash	(2,083,720)	(1,690,629)	(516,357)	674,798	1,552,569	2,448,389	3,362,515	4,295,207	5,414,974	5,462,048	5,580,692
Cash balance	(1,083,719.6)	(2,774,348.6)	(3,290,706.0)	(2,615,907.5)	(1,063,338.2)	1,385,051.3	4,747,566.5	9,042,773.5	14,447,747.5	19,909,795.3	25,490,487.4

Appendix 17.2: CF forecast (output sheet)

Indicative DCF

FCF Map		2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
EBIT	€	**(3,151,509)**	**(2,596,350)**	**(1,000,794)**	**817,575**	**2,020,075**	**3,245,584**	**4,494,481**	**5,767,148**	**7,063,970**	**7,163,054**	**7,262,631**
Income taxes	€	792,690	654,346	255,803	(197,994)	(498,519)	(804,896)	(1,117,220)	(1,435,587)	(1,760,092)	(1,785,264)	(1,810,158)
EBIAT	€	**(2,358,819)**	**(1,942,004)**	**(744,991)**	**619,581**	**1,521,556**	**2,440,688**	**3,377,261**	**4,331,561**	**5,303,877**	**5,377,791**	**5,452,473**
Depreciation	€	244,350	232,408	221,051	215,110	204,354	194,136	184,430	175,208	166,448	158,125	150,219
Capex	€	-	-	-	0	0	0	0	0	0	0	0
Change in trade receivables	€	-	-	-	(154,292)	(157,341)	(160,435)	(163,575)	(166,762)	(11,751)	(11,868)	-
(Unlevered-) FCF	€	**(2,114,470)**	**(1,709,596)**	**(523,941)**	**680,398**	**1,568,569**	**2,474,389**	**3,398,115**	**4,340,007**	**5,458,574**	**5,524,048**	**5,602,692**

Valuation (for ending FY2020)		2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
Period	Years		1	2	3	4	5	6	7	8	9	10
WACC	%		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Discount factors			0.83	0.69	0.58	0.48	0.40	0.33	0.28	0.23	0.19	0.16
FCF perpetuity growth	%											1%
PV FCF (Ending FY2020)	€		(1,424,663)	(363,848)	393,749	756,447	994,402	1,138,022	1,211,216	1,269,490	1,070,597	
Terminal value (growing perpetuity)	€											4,762,453
PV FCF including perpetuity	€		(1,424,663)	(363,848)	393,749	756,447	994,402	1,138,022	1,211,216	1,269,490	1,070,597	4,762,453
Enterprise value	€	**9,807,866**										
Debt outstanding	€	550,000										
Equity value	€	**9,257,866**										

Appendix 18: Indicative DCF (output sheet)

Effective market shares

		2020A FY	2021P FY	2022P FY	2023P FY	2024P FY	2025P FY	2026P FY	2027P FY	2028P FY	2029P FY	2030P FY
		Comment: This provides an overview of OF's effective market shares for premium and total/standard adults in the respective geographic market. Volumes										
Effective OF market shares (adults only!)	**Portugal**											
Volume sold - premium	kg.	-	44,450	134,684	226,718	320,579	416,295	513,893	613,401	714,848	721,996	729,216
Volume market - premium	kg.	4,890,000	4,941,345	4,990,758	5,040,666	5,091,073	5,141,983	5,193,403	5,245,337	5,297,791	5,350,769	5,404,276
Volume market - total	kg.	15,380,000	15,549,180	15,720,221	15,893,143	16,067,968	16,244,716	16,423,408	16,604,065	16,786,710	16,971,364	17,158,049
OF market share - Premium	**%**	**0.0%**	**0.9%**	**2.7%**	**4.5%**	**6.3%**	**8.1%**	**9.9%**	**11.7%**	**13.5%**	**13.5%**	**13.5%**
OF market share - Total	**%**	**0.0%**	**0.3%**	**0.9%**	**1.4%**	**2.0%**	**2.6%**	**3.1%**	**3.7%**	**4.3%**	**4.3%**	**4.2%**

Appendix 19: Effective market shares (output sheet)

Channel	Species	Growth stage	Form
B2B	RD	Semi-adult	Bulk
	VC	Semi-adult, seed	Bulk
B2C Horeca	VC	Adult	Bulk
B2C Retail	VC	Adult	Bulk, packaged

Appendix 20: Products per product channel

Consumption FY2020 (in kg.)	Total	Premium	Premium share
Italy	55,510,000	5,084,000	9%
Spain	45,800,000	6,720,000	15%
Portugal	15,380,000	4,890,000	32%
Denmark	8,140,000	1,870,000	23%
France	5,670,000	5,670,000	100%
UK	3,970,000	913,000	23%
Netherlands	2,210,000	1,420,000	64%
Germany	791,000	18,000	2%
Switzerland	529,000	-	0%
Belgium	398,000	-	0%
Sweden	104,000	9,000	9%
Austria	82,000	-	0%
Norway	26,000	20,000	77%
Finland	10,000	-	0%
Iberia	61,180,000	11,610,000	19%
Total	138,620,000	26,614,000	19%

Appendix 21: Clam consumption data for European countries and regions

Section	Description	Function
1. Inputs	Collection of sheets that include input cells for relevant data inputs.	Provision of essential data to feed the engines.
2.1 Engine - P&L	Sheets that include all relevant P&L items for the product channels.	Specific P&L calculations that feed directly into the output section.
2.2 Engine - CF	sheets that include all relevant cashflow items.	CF calculations that feed directly into the output section.
2.3 Engine - Market	Sheets that produce volumes of the total and premium clam market.	Production of figures needed to calculate market output potentials in P&L engines.
3. Outputs	Collection of sheets that include relevant outputs.	Production of key figures for scenario evaluation.

Appendix 22: Overview tool structure