









# **BUSINESS IDEA AND VALUE PROPOSITION**



Bio Appetito is a startup organization selling organic food based on mountain herbs, fruit and vegetables.

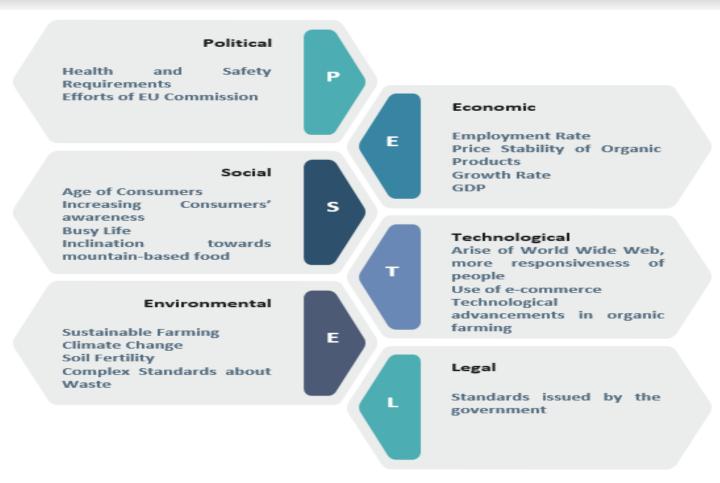
#### **VALUE PROPOSITION:**

- Raw materials are grown in the mountains of Trentino
- Our products are pure, organic, high-quality, and freshly grown
- Not only the products but also the process is eco-friendly
- Customized products to give consumers more value
- Pre-cooked mixtures needing a few minutes to prepare
- 100% Made In Italy Products
- Consumer engaging events in Laboratory





# **PESTEL ANALYSIS**







# **SWOT ANALYSIS**

#### **STRENGTHS**

- · Organic and Heathy Food Produced in the Mountains of Trentino
- · Pre-processed Products
- · Customization of products
- · Promoting Sustainable Environment
- · Made In Italy Strategy (High-Quality and High Standards)
- · Use of E-commerce
- · Activities in Laboratory and Farm

- · No Brand Reputation
- · Convincing Consumers on the Purity of the Product
- · Low Supply
- · Strict Standards
- · High Variety of Substitutes
- · Targeting International Market



- High Costs
- · High Prices
- · Farming in Mountains
- · Difficulties in Production and Preserving Quality



- · Stable Economy
- · Rise in Demand of Organic Food
- · High Employment Rate
- · Increased Consumer Awareness
- · Busy Life of Consumers
- · Demand of Food Based in Mountains
- · Efforts of EU Commission
- · Advancement in E-commerce







# **ANALYSIS OF COMPETITION**

#### Threat of New Entrants



Hard entry because of not enough suppliers, strict regulations and high costs

Low customer switching costs

#### **Bargaining Power of Suppliers**



Not enough farmers cultivating organic products, hence low supply as compared to demand

Raw materials bought from suppliers increase costs

# Competitive Rivalry



**Bargaining Power of Buyers** 

Increased awareness of customers towards healthy and organic eating and willingness to pay a little more Increased trust of consumers in organic mountain-based food

More stores introducing organic products
Local farmers sell fresh fruit and vegetables themselves
Less mountain-based products



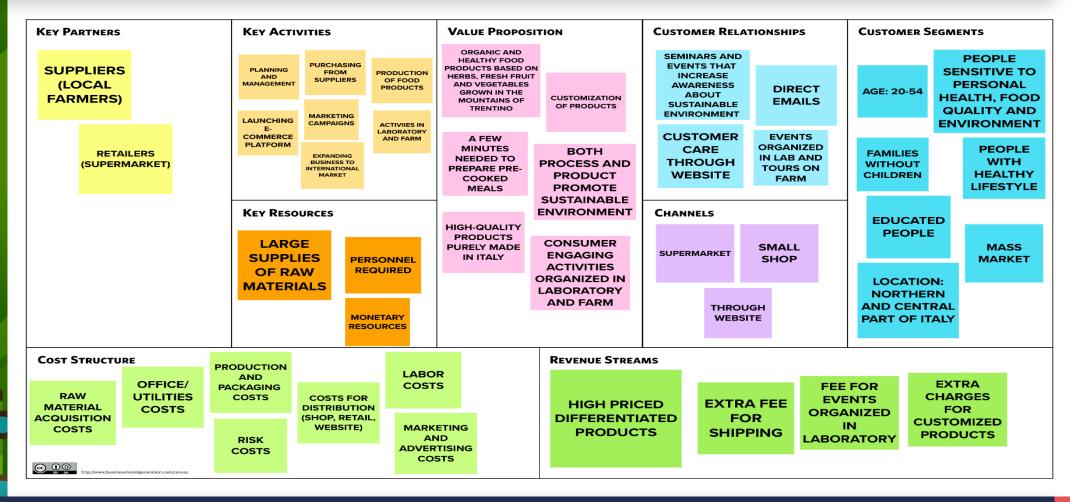
Threat of Substitute Products

Other companies offering similar inorganic products with low-quality, low price and quicker availability.





## **BUSINESS MODEL CANVAS**







#### **STRATEGY**

**BUSINESS STRATEGY:** BROAD DIFFERENTIATION STRATEGY which implies building a brand that is different in some way from its competitors. Our products as explained in the value proposition are unique because they are organic, high quality, eco friendly, grown in the mountainous regions of Trentino.

**CORPORATE STRATEGY:** By accepting GLOBALISATION as our reference strategic choice, we agree to offer our products and services not only in Italy but also in the rest of Europe through our e-commerce platform. Doing so will increase our profits and will enable us to generate more value for our consumers and ourselves. But all of this is planned to be done in the fifth year of our business, at least for now.



# **ORGANIZATIONAL STRUCTURE**

MACRO-ORGANIZATIONAL STRUCTURE: Functional Organizational Structure
MICRO-ORGANIZATIONAL STRUCTURE:

The managerial team in our business is:

- Leena Aizdi, as Project Manager
- Ludovica Cocchella, as Marketing Manager
- Matteo Castrignano, as Operations Manager
- Erica Dallatomasina, as Finance Manager

Other than the managerial team, we will have 1 quality control expert, 1 supervisor, 1 warehouse worker, 1 person as security guard and janitor and 1 person for maintenance





# **TOP RESPONSIBILITIES AND ACTIVITIES**

- Planning and Management
- Operations Management
- Marketing Management
- Finance Management





## **RISK ASSESSMENT AND MITIGATION**

- Not being able to acquire the require investment in order to sustain our business on the long term. We can lower down the effect of the risk by planning ahead and trying to create highly reliable projections. We might also need to put our own financial resources in order to start at a small scale.
- Not being able to manage effective communication between different departments. In order to mitigate this risk, weekly meetings should be arranged.
- Unpredictable environmental situations can affect the cultivation of ingredients used in our products, which can lead to possible shortage of supplies. The mitigation strategy to this risk is to adapt a smart purchase strategy of supplies throughout the year.
- A product-market unfit. It can be reduced by conducting proper market research and analysis and then formulating a robust well defined marketing strategy.





## **TOP RESPONSIBILITIES AND ACTIVITIES**

- Poor management of supply and demand chain. To mitigate supply and demand risks, effective resource management and efficient assessment of demand is required.
- Not being able to convince the consumer on the quality of the product. An effective marketing strategy for a start-up, should effectively address these concerns of the consumer. It could be done by conducting awareness campaigns and effective advertisement.
- Risk of not finding people with the skills needed to execute the project or the sudden unavailability of key people on the project. This risk can be mitigated by periodically searching people with required skills and managing their contacts for future use.





## **MARKET ANALYSIS**

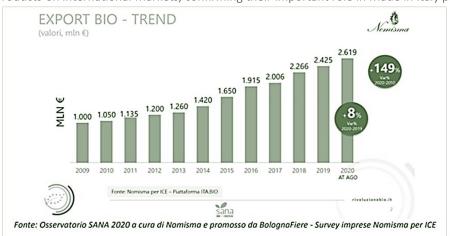
The sales of organic Italian products on the domestic market exceed € 4.3 billion in 2020. In particular, € 3.9 billion refer to domestic consumption (+ 7% compared to the same period of the previous year).

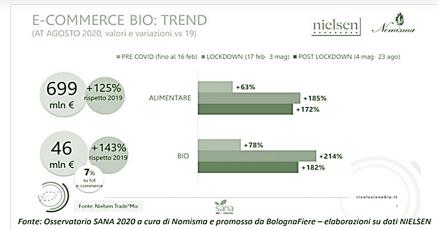
Domestic market confirms the positive trend favoured by the growing attention of Italian consumers toward green, local and sustainable product.

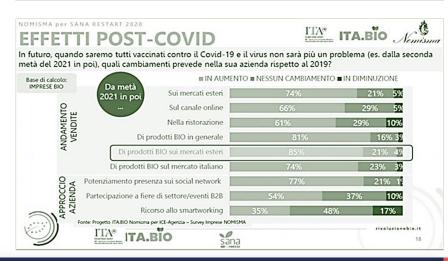
In 2020 it is registered an excellent performance in e-commerce in which organic sales (+143% compared to 2019) are higher than sales of food products in general (+125%).

The brightest channel in 2020 for purchasing organic food is still the supermarket (+11% compared to 2019) moreover this channel, unlike other, shows greater stability in the sales of organic products.

More than positive was the performance of organic exports: in 2019 the sales of Italian organic food products on international markets, confirming their important role in Made in Italy products.











## **MARKET SEGMENTATION**

# Consumer segmentation

Behavioural

Psychographic

Profile

Benefit sought: our future client by purchasing our food could eat healthier respecting

Purchase occasion: Self-buy.

Purchase behaviour: our future customers will have both brand loyal behaviour and brandswitching

age: heavy users Lifestyle: people who pay attention to the environment and want to have a healthy lifestyle. typically vegetarian or vegan.

people who are sensitive to the topic that regard the people who are aware about the importance of the quality of the food and want to check and pay attention in what they eat

Age: 20 – 54

Gender: Typically female people who
are
responsible
for purchasing
food for only
themselves of
for family
without

Social class high level of education.

Geographic: North and center of Italy





# **MARKET TARGETING**

- Mass Marketing through supermarket channel.
- Customized marketing through e-commerce channel.





# **MARKET POSITIONING**

We decided what position occupy in the target customer's mind taking into consideration three variables:

- The customers
- The competitors
- The company

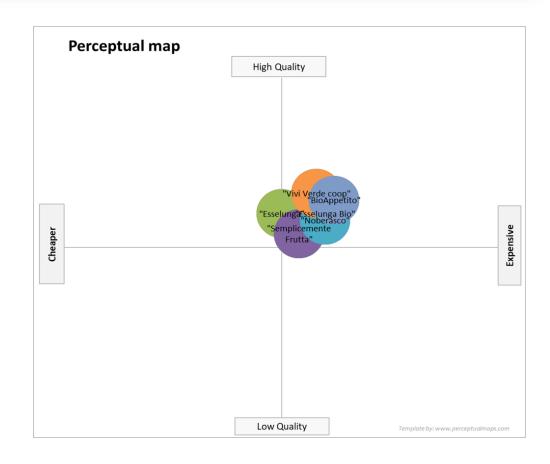
we can say that the positioning of our company is based on following features quality, ethical and benefits.





# **PERCEPTUAL MAP**

- This tool gives us a visual representation of consumer perceptions of our brand and its competitors.
- We conducted a marketing research where hypothetical consumers scores each brand on two attributes: price and quality.
- From this plot we can identify only one cluster and this means that all these brands, including us, are close rivals, as measured by consumers' perception.



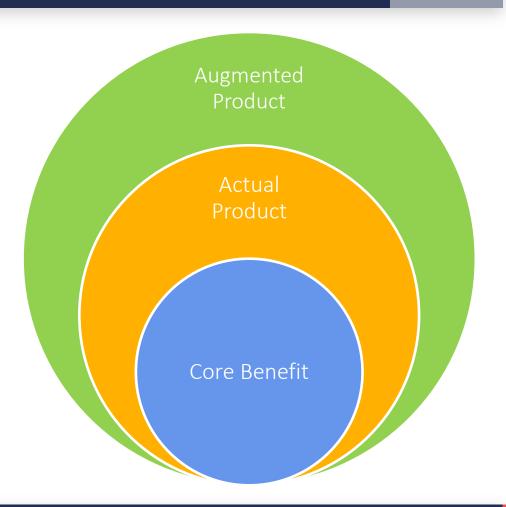




# PRODUCT POLICY/1

To understand fully both the nature of the product offering and how it can be distinguished from those of competitors, it is useful to think our products in terms of different levels of product.

- **Core Benefit:** offering food which is healthier and more ethical.
- Actual Product: high quality of food, ethical food, top-level certification, eco-friendly packaging
- Augmented product: Free shipping and fast delivery







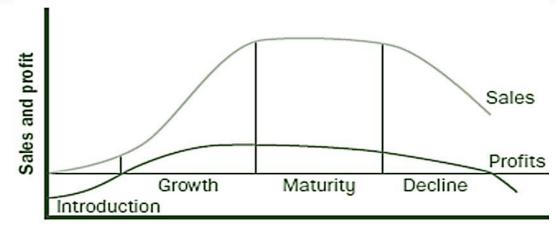
# PRODUCT POLICY/2

In addition to the physical product, we will offer an experience to our client which consist in tour visit inside our farm. With this service we give the possibility to our customer to see directly how we work, to discover how an organic farm works and to spend a day off in close contact with nature.





# PRODUCT POLICY/3



	Introduction	Growth	Maturity	Decline
Strategic marketing	Research and Build	Build	Hold	Find new advantages
objective				
Strategic focus	Let people know the	Expand market and	Product improvements	Exploring and develop
	company	Penetration		solution
Brand objective	Product awareness	Brand preference	Brand loyalty	Brand exploitation
Products	Basic	Differentiated	Differentiated	Rationalized
Promotion	Creating awareness	Raise awareness/repeat	Maintaining	Cut/eliminated
		purchasers	awareness/repeat purchase	
Price	high	Lower	Lowest	Rising





### **DISTRIBUTION**



Choice which compose our channel strategy:

- Channel selection: we chose to distribute our products both physically, through supermarket and small shop inside our farm, and digitally, through e-commerce
- **Distribution intensity**: firstly we focus our distribution only to the north and center of Italy because they are the geographical areas where there is a good percentage of people who buy organic food. After we want to expand our market to the rest of Italy and also outside of Italy adopting in this case an intensive distribution for arriving to as many people as possible.
- Channel integration: conventional marketing channels.





# **PRICING**

- The price has to be competitive but still allow us to make a reasonable profit.
- We are going to set our pricing by examining how much it cost us to produce the product and adding a fair price for the benefits that the customer will enjoy.
- Essentially, the price of a product is determined by adding a percentage of costs to the selling price to make a profit.





# **COMMUNICATION/1**

- **Advertising**: we are going to use Google AdWords, advertising on Instagram and Facebook. After that we will introduce advertising on YouTube and advertising on tv.
- **Sales promotion**: our company use sales promotion for increasing purchasing and for obtaining new costumers. The main promotion techniques that we are going to use are Money-off, Bonus packs and free goods.
  - **Public relations**: the company implements public relations as a way of addressing environmental issues through seminars, publications, advertising, experiences and guided tours into the farm.
  - **Direct Marketing**: we are going to use direct mail for communicating to our client, which are members, promotions offer to them. In this way we can improve brand preference.







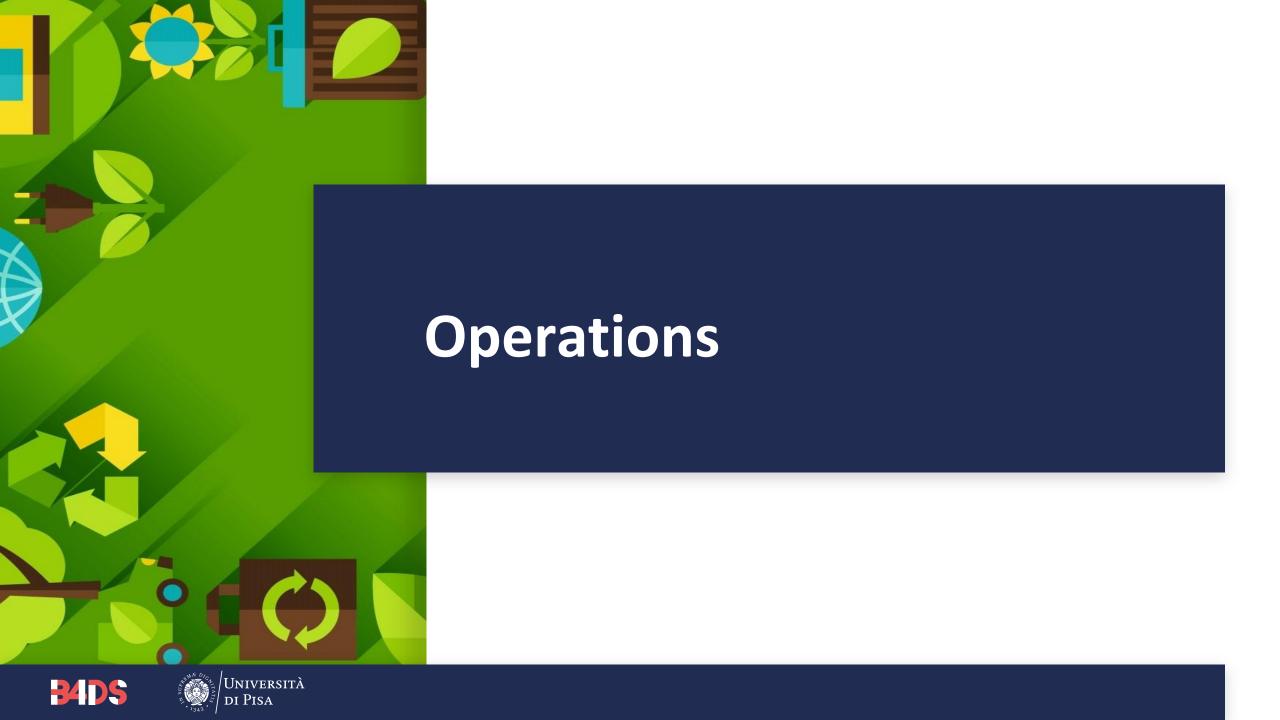
# **COMMUNICATION/2**

- The most important social networks offer basic measure by default so we are going to exploit built-in analytics tools of both Facebook and Instagram.
- For monitoring the performance of our e-commerce web site, we are going to use google Analytics. The latter will help us since it is already filled with the most common KPIs.









# **Aggregate planning**

Period	1	2	3	4	5	6	Total		
Forecast	100	150	200	320	350	200	1320		
Output									
Regular time	180	180	180	180	180	180	1080		
Overtime	-	-	20	80	120	20	240		
Subcontract	-	-	-	-	-	-	-		
Output - Forecast	80	30	0	(60)	(50)	0	0		
Inventory									
Beginning	0	80	110	110	50	0	-		
Ending	80	110	110	50	0	0	-		
Average	40	95	110	80	25	0	350		
Backlog	0	0	0	0	0	0	0		
Costs									
Output									
Regular	1800 €	1800€	1800 €	1800€	1800€	1800 €	10800 €		
Overtime	0 €	0€	300 €	525 €	450 €	300 €	1575 €		
Subcontract	-	-	-	-	-	-	-		
Hire/Lay off	-	-	-	540 €	1080€	-	1620 €		
Inventory	40 €	95€	110€	80€	25€	0€	350 €		
Back orders	0 €	0€	0 €	0 €	0 €	0 €	0 €		
Total	1840 €	1895€	2210 €	2945 €	3355€	2100 €	14.345 €		

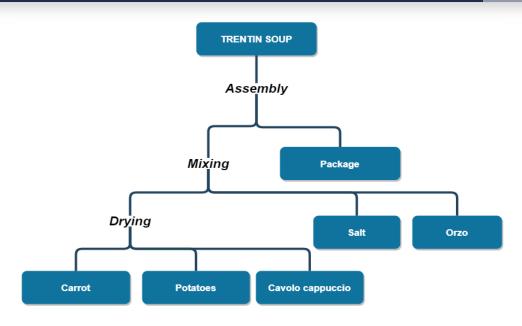
- Constant production
- Demand can change due to the seasonality
  - → Level capacity strategy
- Subcontracting is not expected, to keep production under control to ensure the quality of our products



# **Disagragate plannin and BOM**



Product	Quantity (Kg)
Herbal tea	10
Dried mushrooms	15
Dried fruits	25
Polenta with mushrooms	30
Risotto mushrooms	15
Risotto blueberries	15
Trentino soup	70
Total	180



- Constant production for each individual product.
- Allowed by raw materials dried can be stored even up to 12 months before packaging
- Once hermetically packed in a bag, can last up to 18 months







# Raw material required

Product	Quantity (Kg)
Dried cavolo cappuccino	9,5
Salt	1
Orzo	35
Dried carrots	10,5
Dried potatoes	14
Total	70

- Eight-week forecast, particularly for June and July
- The ATP index can change

## MPS Table

Start inventory: 43	June			July				
Forecast	9,5	9,5	9,5	9,5	15,5	15,5	15,5	15,5
Customer orders (committed)	10	8	10	8	8	17	11	12
Projected on-hand inventory	33	43	33	43	27,5	35,5	20	29,5
MPS		19,5		19,5		25		25
Available to promise inventory (uncommitted)	33	1,5		3,5		-3		14







# MPS Cavolo cappuccio

Start inventory: 18		Ju	ne			July	/	
Forecast	5	0	5	0	7	0	7	0
Customer orders (committed)	5	0	5	0	7	0	7	0
Projected on-hand inventory	25	25	32	32	37	37	42	42
MPS	12		12		12		12	
Available to promise inventory (uncommitted)	7		7		7		7	

- For each ingredients has been deployed a MPS to reflect, in proportion, the quantity needed to produce the main product
- In summer the production is much greater than the quantity needed so the ATP is always positive, and inventory grows up.



# **MRP**



- Quantities required for the month of June and July at fourth week.
- The week number one is referred to as the first week of June and so on.

# Trentino soup MRP

Week Number	1	2	3	4	5	6	7	8	9
Gross Requirements				39				62	
Scheduled Receipts									
Projected on hand	43	43	43	43	43	43	43	43	31
Net requirements				39				50	
Planned-order-receipt				39				50	
Planned-order release			39				50		

Orzo MRP

Week Number	1	2	3	4	5	6	7	8
Gross Requirements			19,5				25	
Scheduled Receipts								
Projected on hand								
Net requirements			19,5				25	
Planned-order-receipt			19,5				25	
Planned-order release		19,5				25		





Cavolo cappuccio MRP

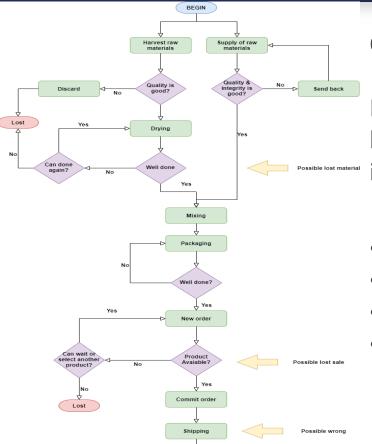
Week Number	1	2	3	4	5	6	7	8
Gross Requirements			10				14	
Scheduled Receipts								
Projected on hand	18	18	18	32	32	32	32	42
Net requirements			0				0	
Planned-order-receipt			24				24	
Planned-order release	24				24			

- The dried products are produced in large quantities thus feeding the stock.
- About raw materials that are purchased by our suppliers, they are found in the necessary quantities from time to time in order to reduce their storage in stock as much as possible



# **Process improvement**





Oriented to respect for the quality → Jidoka approach

In case our quality standards are not respected, the process stops leading to its repetition or even in rare cases at its complete interruption

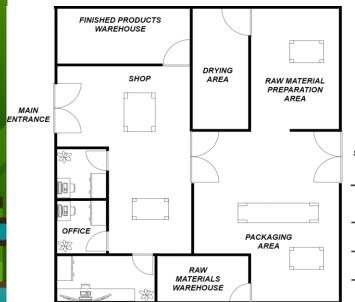
- Raw materials control → send back or discard
- Drying process → re-performed or loss of material
- New order → check whether it can be fulfilled or not
- Shipping → status on-time

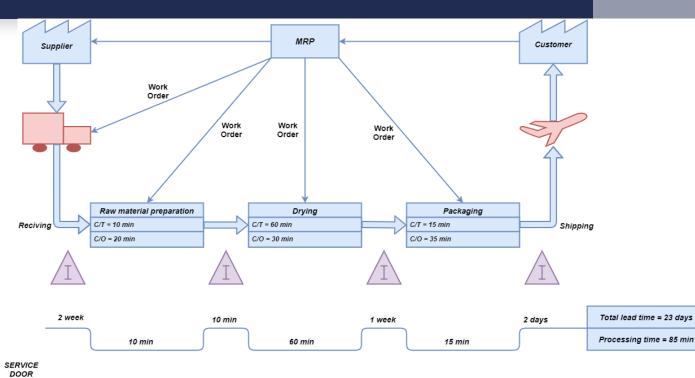


# **Operation plan**



Tack Time = 93 min per cycle



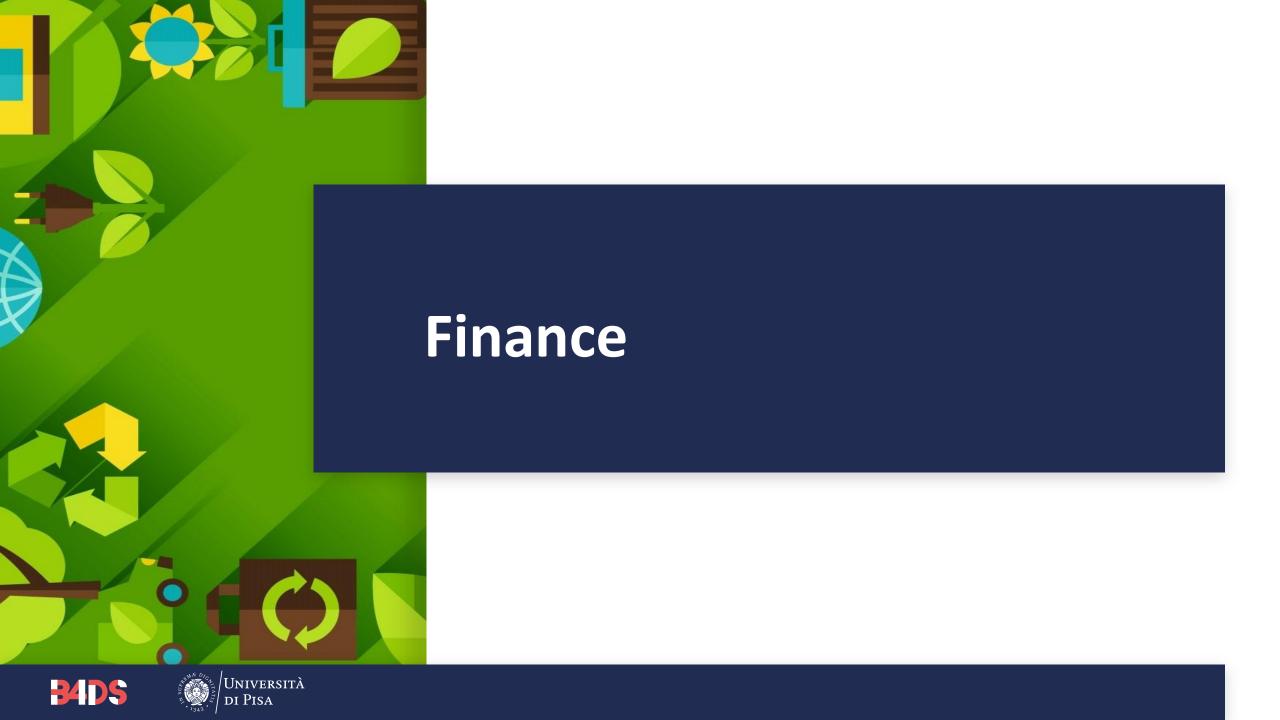


Three main areas, in each of them is performed a stage of our production:

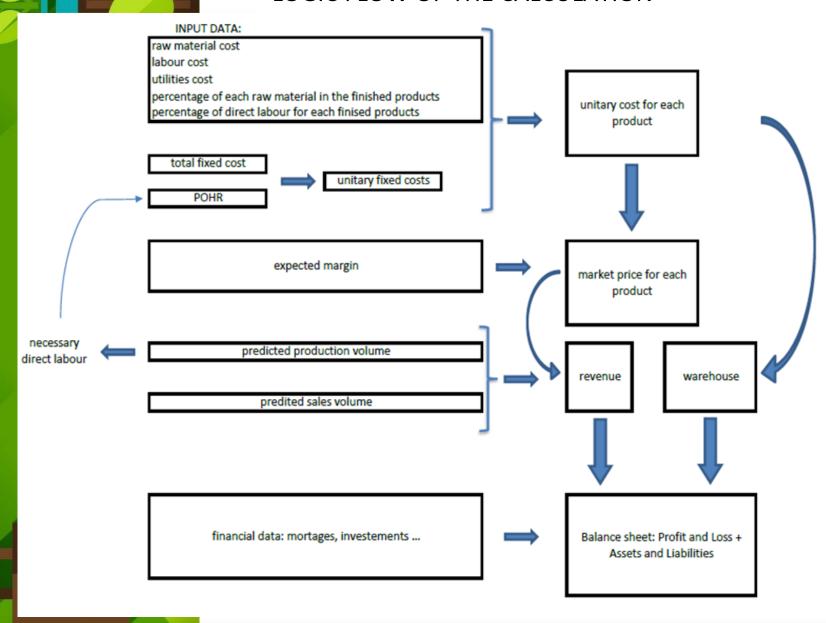
- Raw materials preparation area
- Drying area
- Packaging area







#### LOGIC FLOW OF THE CALCULATION







# **COST CLASSIFICATION**

#### **MANUFACTURING COSTS**

#### **Direct materials**

- raw materials
- packaging materials

#### Direct labour

Cost incurred for paying the production workers.

#### Manufacturing overhead

- Indirect labour
  - security guards and janitors
  - supervisor
  - quality control
  - wharehouse worker
- Factory utilities
- Depreciation on equipment
- Insurance on manufacturing facilities and facturing area

#### **NON-MANUFACTURING COSTS**

#### Selling costs

- Advertising
- Shipping
- Cost for contructing the web site and for its manteinance

#### Administrative costs

- Travel costs for securing suppliers and public relations costs
- General administration costs
- Cost for professional consultants





# FIXED COSTS FOR THE FIRST THREE YEARS

Start-up costs	Total cost
Licences and permits fees	1.000,00
Web site development	1.000,00
Administrative expenses and professional consultants	
(like registering the business and cost for legal support)	5.000,00
Production set up costs	2.000,00
Total	9.000,00

Fixed costs	Year 1	Year 2	Year 3
Rent for the building	5.000,00	5.000,00	5.000,00
Website hosting and support service	1.200,00	1.200,00	1.200,00
Advertising, marketing and market research	10.000,00	10.000,00	10.000,00
Travel costs for securing suppliers	2.000,00	2.000,00	2.000,00
General adminisration costs (1 person)	40.000,00	40.000,00	40.000,00
Cost for professional consultants	1.000,00	1.000,00	2.000,00
Research and development (1 person for year 2 and year 3)	-	30.000,00	30.000,00
Utilities (water, electricity, gas, internet, phone)	3.000,00	3.000,00	3.000,00
Insurance on manufacturing facilities and factory area	3.000,00	3.000,00	3.000,00
Quality control (1 person for year 1 and 2, 2 people for year 3)	40.000,00	40.000,00	80.000,00
Security guards and janitors (1 people, external agency)	25.000,00	25.000,00	25.000,00
Supervisor (1 person)	40.000,00	40.000,00	40.000,00
Warehouse workers (1 person)	30.000,00	30.000,00	30.000,00
Maintainance (1 person)	30.000,00	30.000,00	30.000,00
Total	230.200,00	260.200,00	301.200,00

Equipment	60.000,00
Depretiation in 3 years	20.000,00

Bank loan	200.000,00
Interest rate	1,2%





## CALCULATION OF TOTAL COST OF THE TRENTINO SOUP

1. Determine the variable cost per pack

	quantity	component quantity/kg finished product	unitary cost	cost/kg finished product	weight on the fina unitary cost
Dried cavolo cappuccio (kg)	9,5	0,14	5,60	0,77	24%
Dried carrots (kg)	10,5	0,15	3,12	0,47	15%
Dried potatoes (kg)	14	0,20	3,43	0,69	22%
Salt (kg)	0,5	0,01	0,01	0,00	0%
Orzo (kg)	35	0,50	1,00	0,50	16%
Electricity (kW/h)	1,5	0,02	0,30	0,01	0%
Labour (h)	2,32	0,033	17,00	0,57	18%
Packs (number of packs)	139	2,00	0,08	0,16	5%
final quantity obtained (kg)	69,5	1,00		3,16	
Variable cost per single pack				1,58	

2. Assign the fixed costs

$$POHR = \frac{\sum_{i} Fixed\_cost_{i}}{Total\_cost\_direct\_labour}$$

= 15,82 €/cost\_per\_labor\_hour



- production volume forecast (PV) (for Trentino Soup we assumed to produce 5000 packs, so 2500 kg)
- Direct labour hours (DLH) needed to produce the expected volume (2500 kg \* 0.033 h/kg = 83 h)
- Cost for direct labour hours

$$Cost_{DLH} = 83 \; h \; * 17 \frac{\epsilon}{h} = 1411 \; \epsilon$$

Assigned fixed cost for each pack of Trentino

$$Soup = \frac{(POHR * Cost_{DLH})}{PV} = 4,48 \in$$



3. Total production cost for each pack of Trentino Soup =

 $Assigned\ fixed\ cost + variable\ cost =$ 1,58 € + 4,48 € = 6,06 €





# TOTAL PRODUCTION COST FOR EACH PRODUCT

Finished	Direct cost/kg	Direct cost/pack	attributed fixed cost per kg	packaging (kg)	attributed fixed cost per pack	total production cost	market price
Trentino soup	3,16	1,58	8,97	0,50	4,48	6,06	6,67
Dried red fruits	6,52	0,65	44,83	0,10	4,48	5,13	5,65
Dried apples/pears	2,65	0,66	17,93	0,25	4,48	5,14	5,66
Mashrooms risotto	1,85	1,85	4,48	1,00	4,48	6,33	6,96
Mashrooms polenta	2,57	2,57	4,48	1,00	4,48	7,05	7,76
Bluberries risotto	1,77	1,77	4,48	1,00	4,48	6,25	6,88
Herbal tea	21,12	2,11	44,83	0,10	4,48	6,59	7,25
Dried mashrooms	60,47	5,45	43,03	0,15	6,45	11,91	13,10

## FORECAST ON PRODUCTION AND SALES VOLUMES FOR THE FIRST YEAR

	total production volume (packs)	total sales volume (packs)	production cost per pack	market price per pack	Total revenue	Packs in warehouse	Value of the warehouse
Trentino soup	5.000,00	3.500,00	6,06	6,67	23.347,59	1.500,00	9.096,46
Dried red fruits	5.000,00	3.500,00	5,13	5,65	19.766,63	1.500,00	7.701,28
Dried apples/pears	10.000,00	7.000,00	5,14	5,66	39.610,25	3.000,00	15.432,57
Mashrooms risotto	10.000,00	7.000,00	6,33	6,96	48.727,73	3.000,00	18.984,83
Mashrooms polenta	10.000,00	7.000,00	7,05	7,76	54.289,45	3.000,00	21.151,73
Bluberries risotto	8.000,00	5.600,00	6,25	6,88	38.528,93	2.400,00	15.011,27
Herbal tea	10.000,00	7.000,00	6,59	7,25	50.775,25	3.000,00	19.782,57
Dried mashrooms	250,00	175,00	11,91	13,10	2.291,91	75,00	892,95
	-	-			-	-	-
	58.250,00	40.775,00			277.337,75	17.475,00	108.053,67





## FORECAST ON PRODUCTION AND SALES VOLUMES FOR THE SECOND YEAR

	total production volume (packs)	total sales volume (packs)	production cost per pack	market price per pack	Total revenue	Packs in warehouse	Value of the warehouse
Trentino soup	10.000,00	9.000,00	5,43	5,98	53.796,82	2.500,00	13.585,06
Dried red fruits	10.000,00	9.000,00	4,50	4,95	44.588,63	2.500,00	11.259,76
Dried apples/pears	10.000,00	9.000,00	4,51	4,97	44.687,63	4.000,00	18.055,61
Mashrooms risotto	15.000,00	13.500,00	5,70	6,27	84.615,16	4.500,00	25.640,96
Mashrooms polent	10.000,00	9.000,00	6,42	7,06	63.560,88	4.000,00	25.681,16
Bluberries risotto	8.000,00	7.200,00	5,62	6,19	44.545,32	3.200,00	17.998,11
Herbal tea	10.000,00	9.000,00	5,96	6,56	59.042,63	4.000,00	23.855,61
Dried mashrooms	250,00	225,00	11,00	12,10	2.722,11	100,00	1.099,84
	73.250,00	65.925,00			397.559,18	24.800,00	137.176,10

## FORECAST ON PRODUCTION AND SALES VOLUMES FOR THE THIRD YEAR

	total production volume (packs)	total sales volume (packs)	production cost per pack	market price per pack	Total revenue	Packs in warehouse	Value of the warehouse
Trentino soup	10.000,00	9.500,00	5,99	6,89	65.472,54	3.000,00	16.581,51
Dried red fruits	10.000,00	9.500,00	5,06	5,82	55.310,98	3.000,00	13.791,15
Dried apples/pears	10.000,00	9.500,00	5,07	5,83	55.420,23	4.500,00	20.592,00
Mashrooms risotto	15.000,00	14.250,00	6,26	7,20	102.534,59	5.250,00	30.333,61
Mashrooms polent	10.000,00	9.500,00	6,98	8,03	76.247,53	4.500,00	29.170,75
Bluberries risotto	8.000,000	7.600,00	6,18	7,11	54.042,02	3.600,00	20.471,43
Herbal tea	10.000,00	9.500,00	6,52	7,50	71.261,48	4.500,00	27.117,00
Dried mashrooms	250,00	237,50	11,80	13,57	3.223,75	112,50	1.247,38
<u> </u>	73.250,00	69.587,50			483.513,11	28.462,50	159.304,85





# BALANCE SHEET FOR THE FIRST THREE YEARS

Income Statement			
Revenue	Year 1	Year 2	Year 3
Sales	277.337,75	397.559,18	483.513,11
Cost of Goods Sold			
Raw materials	83.437,33	98.279,92	98.279,92
Packaging	3.583,33	4.383,33	4.383,33
Labor	16.535,33	20.785,33	20.785,33
Utilities	2.545,43	2.848,88	2.848,88
Overhead	171.000,00	171.000,00	211.000,00
Total Cost of Goods Sold	277.101,43	297.297,47	337.297,47
Gross Profit	236,32	100.261,72	146.215,65
Operating Expenses			
Selling expenses	11.200,00	11.200,00	11.200,00
Administrative expenses	43.000,00	43.000,00	44.000,00
R&D	0,00	30.000,00	30.000,00
Rent for the factory area	5.000,00	5.000,00	5.000,00
Depreciation	20.000,00	20.000,00	20.000,00
Total Operating expenses	79.200,00	109.200,00	110.200,00
Operating income	(78.963,68)	(8.938,28)	36.015,65
Other Income and Expenses			
Interest revenue	2.400,00	2.400,00	2.400,00
Total other income and	2.400,00	2.400,00	2.400,00
expenses	2.400,00	2.400,00	2.400,00
Income before tax	(81.363,68)	(11.338,28)	33.615,65

Assets and liabilities			
Assets	Year 1	Year 2	Year 3
Fixed assets			
Intangibles	1.000,00	2.000,00	2.000,00
Long term investements	-	-	-
Research and development	-	-	2.000,00
Net fixed accounts	40.000,00	20.000,00	-
Total fixed assets	41.000,00	22.000,00	4.000,00
Current assets			
Cash	98.636,32	47.298,04	40.913,69
Inventories	108.053,67	137.176,10	159.304,85
Accounts receivable	-	-	-
Miscellaneous	-	-	-
Total current assets	206.689,99	184.474,14	200.218,53
Total assets	247.689,99	206.474,14	204.218,53
Liabilities			
Owners' funds			
Issued common stock	-	-	-
Capital reserves	47.689,99	26.474,14	44.218,53
Revenue reserves	-	-	-
Total owners'funds	47.689,99	26.474,14	44.218,53
Long term loans	200.000,00	180.000,00	160.000,00
Current liabilities			
Short term loans	-	-	-
Accounts payble	-	-	-
Miscellaneous	-	-	-
Total current liabilities	-	-	_
Total liabilities	247.689,99	206.474,14	204.218,53



3-Year Cash Flow				
	Cash at Beginning of Year		108.712,32	77.374,04
	Cash at End of Year	108.712,32		90.989,69
	Cash at End of Year	108./12,32	77.374,04	90.989,09
		Year 1	Year 2	Year 3
Operations				
Cash receipts from				
	Customers	276.413,75	397.559,18	483.513,11
	Other operations			
Cash paid for				
	Start-up expenses	- 9.000,00	-	-
	Rent for the building	- 5.000,00	- 5.000,00	- 5.000,00
	Selling expensenses	- 11.200,00	- 11.200,00	- 11.200,00
	Administrative expenses		- 43.000,00	
	Research and development		- 30.000,00	-
	Inventory purchases	- 87.020,67	- 102.663,26	- 102.663,26
	Direct labour and manufacturing overhead	-190.080,76	- 194.634,21	- 234.634,21
Cash Flow from				
Operations		- 68.887,68	11.061,72	56.015,65
Investing Activities				
Cash receipts from				
·	Sale of property and equipment			
	Collection of principal on loans			
	Sale of investment securities			
Cash paid for				
	Purchase of property and equipment	- 20.000,00	- 20,000,00	- 20.000,00
	Making loans to other entities			
	Purchase of investment securities			
Cash Flow from				
Investing Activities		- 20.000,00	- 20.000,00	- 20.000,00
Financing Activities				
Cash receipts from				
casirreceipts from	Issuance of stock			
	Bank loan	200.000,00		
Cash paid for	Dank Idan	200.000,00		
cash paid for	Repurchase of stock (treasury stock)			
	Interest on loan	- 2.400,00	- 2.400,00	- 2.400,00
	Repayment of loans		- 20.000,00	
	Dividends		20.000,00	20.000,00
Cash Flow from	Dividends			
Financing Activities		197.600,00	- 22.400,00	- 22.400,00
Cash Flow		108.712,32	- 31.338,28	13.615,65

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## **RISK ASSESSMENT**

We analyzed two main risks:

1. A great increase in the cost of the raw materials (that can be caused by seasonal factors)

2. A dramatic drop in the demand of customers

In particular we considered a doubled price for raw materials in the second year

In particular we considered:

- a customer demand of 75% instead of the the predicted 90% for the second year
- a customer demand of 75% instead of the the predicted 90% for the second year and a customer demand of 75% instead of the the predicted 95% for the third year

Defining the Profit and Loss sheet we assessed that a drop in the demand affects the business more than the increasing of cost in raw material does





# **BREAK-EVEN ANALYSIS**

YEAR 1	Trentino soup	Dried red fruits	Dried apples/pears	Mashrooms risotto	Mashrooms polenta	Bluberries risotto	Herbal tea	Dried mashrooms	Total
sales volume	3.500,00	3.500,00	7.000,00	7.000,00	7.000,00	5.600,00	7.000,00	175,00	40.775,00
price (px)	6,67	5,65	5,66	6,96	7,76	6,88	7,25	13,10	
variable unitary cost (cv)	6,06	5,13	5,14	6,33	7,05	6,25	6,59	11,91	
unitary contribution margin (px -cv)	0,61	0,51	0,51	0,63	0,71	0,63	0,66	1,19	
fixed costs									261.600,00
contribution margin = 1 - (cv/px)	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	
revenue (px * sales volume)	23.347,59	19.766,63	39.610,25	48.727,73	54.289,45	38.528,93	50.775,25	2.291,91	277.337,75
sales mix (sales volume/total sales)	9%	9%	17%	17%	17%	14%	17%	0%	100%
weihgted contribution margin									
( sales mix * (1-(cv/px)) )	1%	1%	2%	2%	2%	1%	2%	0%	9%
break-even turnover									2.877.600,00
break-even turnover per product	247.004,29	247.004,29	494.008,58	494.008,58	494.008,58	395.206,87	494.008,58	12.350,21	2.877.600,00
break-even volume per product	37.028,02	43.736,09	87.302,14	70.966,98	63.696,72	57.441,47	68.105,22	943,01	429.219,66

YEAR 2	Trentino soup	Dried red fruits	Dried apples/pears	Mashrooms risotto	Mash rooms polenta	Bluberries risotto	Herbal tea	Dried mash rooms	Total
sales volume	9.000,00	9.000,00	9.000,00	13.500,00	9.000,00	7.200,00	9.000,00	225,00	65.925,00
price (px)	5,98	4,95	4,97	6,27	7,06	6,19	6,56	12,10	
variable unitary cost (cv)	1,58	0,65	0,66	1,85	2,57	1,77	2,11	5,45	
unitary contribution margin (px -cv)	4,40	4,30	4,30	4,42	4,49	4,41	4,45	6,65	
fixed costs									282.600,00
1 - (cv/px)	0,7	0,9	0,9	0,7	0,6	0,7	0,7	0,5	
revenue (px * sales volume)	53.796,82	44.588,63	44.687,63	84.615,16	63.560,88	44.545,32	59.042,63	2.722,11	397.559,18
sales mix (sales volume/total sales)	14%	14%	14%	20%	14%	11%	14%	0%	100%
weihgted contribution margin									
( sales mix * (1-(cv/px)) )	10%	12%	12%	14%	9%	8%	9%	0%	74%
break-even turnover									381.369,60
break-even turnover per product	52.064,11	52.064,11	52.064,11	78.096,16	52.064,11	41.651,29	52.064,11	1.301,60	381.369,60
break-even volume per product	8.710,12	10.508,89	10.485,61	12.459,92	7.372,10	6.732,23	7.936,25	107,59	64.312,70

YEAR 3	Trentino soup	Dried red fruits	Dried apples/pears	Mashrooms risotto	Mashrooms polenta	Bluberries risotto	Herbal tea	Dried mashrooms	Total
sales volume	9.500,00	9.500,00	9.500,00	14.250,00	9.500,00	7.600,00	9.500,00	237,50	69.587,50
price (px)	6,89	5,82	5,83	7,20	8,03	7,11	7,50	13,57	
variable unitary cost (cv)	1,58	0,65	0,66	1,85	2,57	1,77	2,11	5,45	
unitary contribution margin (px -cv)	5,31	5,17	5,17	5,35	5,46	5,34	5,39	8,12	
fixed costs									323.600,00
1 - (cv/px)	0,8	0,9	0,9	0,7	0,7	0,8	0,7	0,6	
revenue (px * sales volume)	65.472,54	55.310,98	55.420,23	102.534,59	76.247,53	54.042,02	71.261,48	3.223,75	483.513,11
sales mix (sales volume/total sales)	14%	14%	14%	20%	14%	11%	14%	0%	100%
weihgted contribution margin									
( sales mix * (1-(cv/px)) )	11%	12%	12%	15%	9%	8%	10%	0%	77%
break-even tumover									417.725,78
break-even tumover per product	57.027,41	57.027,41	57.027,41	85.541,12	57.027,41	45.621,93	57.027,41	1.425,69	417.725,78
break-even volume per product	8.274,62	9.794,81	9.775,50	11.888,29	7.105,28	6.415,87	7.602,43	105,03	60.961,84



