

BOP

Bio ohne *ver*Packung

Müllst du noch, oder **BOP**st du schon?

Background

- Waste creation in 2011 = 455 kg/inhabitant
- 57% of waste are bio waste and packaging
- If waste is not recycled, it is dumped in landfills
- Negative implications: release of greenhouse gases and contamination of air and ground water



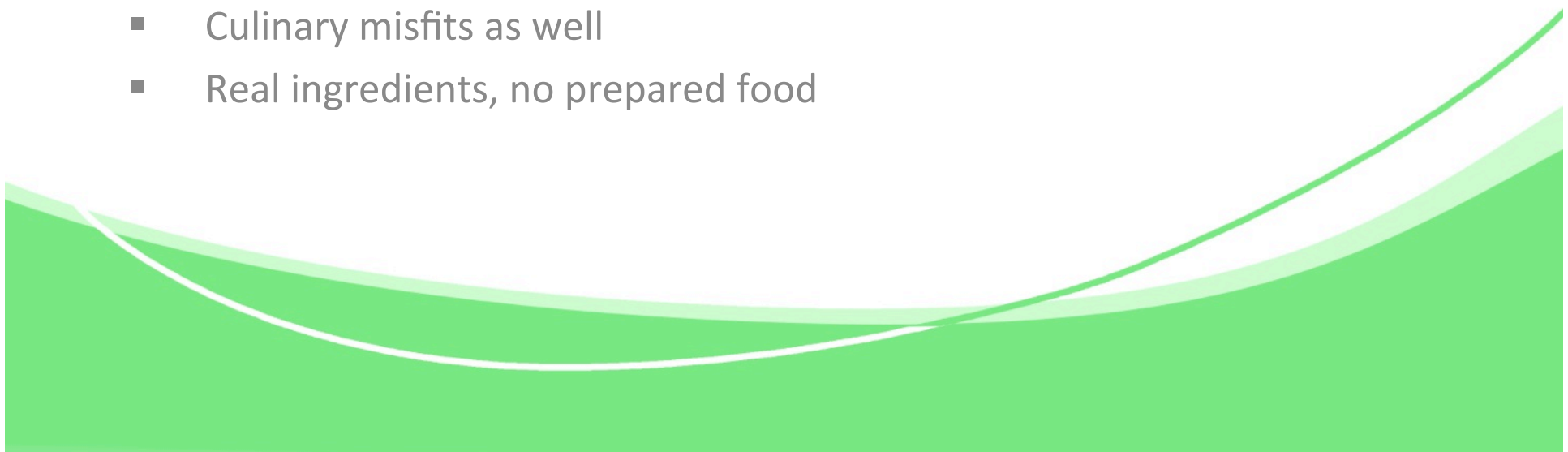
The **BOP** Concept

Philosophy

- Avoidance of disposable packaging
- Creation of reusable packaging through cooperation with suppliers
- Implementation of the principle “Reduce, Reuse, Recycle”

Our Products

- Organic/bio, fair trade products (regional and seasonal)
- Culinary misfits as well
- Real ingredients, no prepared food




The **BOP** Concept

Refill & Reuse

- Customers bring reusable containers or buy them next to the entrance
- Customers weigh each container
- Customers fill containers with desired amount of a product
- Customers pay

Aim

- Reduction of package waste
 - Positive change of customers behaviour
 - Support of regional producers
- 
- A decorative graphic at the bottom of the slide consisting of a solid green area at the base, a white curved line, and a lighter green area above it, all set against a white background.

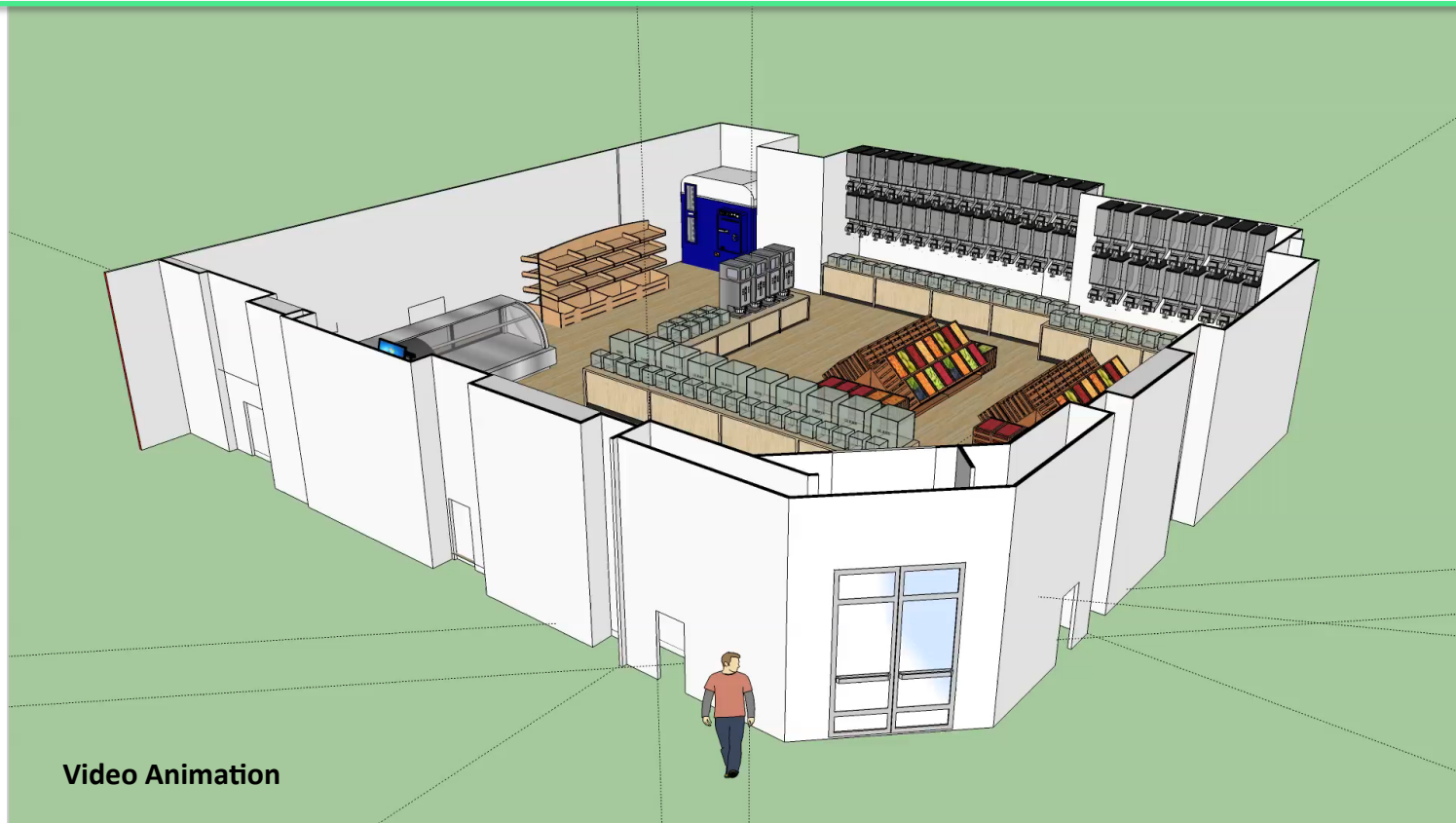
The **BOP** Look

Predominant Store Fitting

- Gravity Bins
- Acrylic Boxes (different sizes)
- Coffee Grinding Machines
- Milk Vending Machine
- Reusable Food Containers
- Preserving Jars and Linen Bags



The **BOP** Look



Video Animation

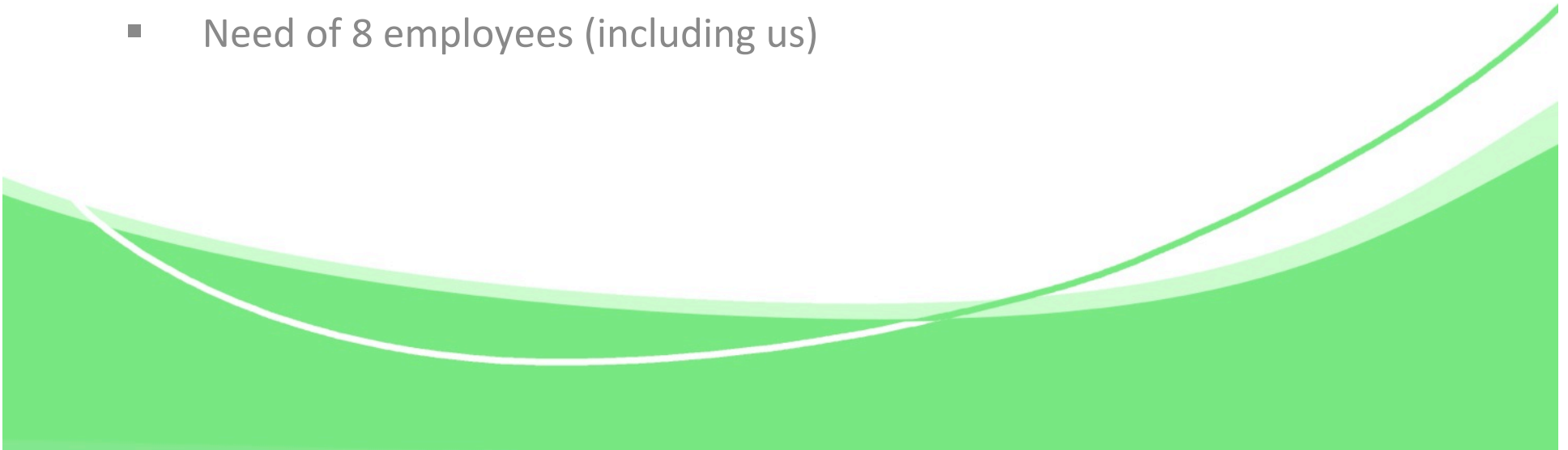
Source: Own Compilation, after GoogleSketchup

The **BO**P Company

Management

- Brandes: Sales
- Metzke: Marketing
- Weinhold: Supply Chain

- Limited Liability, BoP GmbH
- Opening hours from 8am to 8pm, Monday to Saturday
- Working shifts from 6am to 2pm and 2pm to 10pm
- Need of 8 employees (including us)

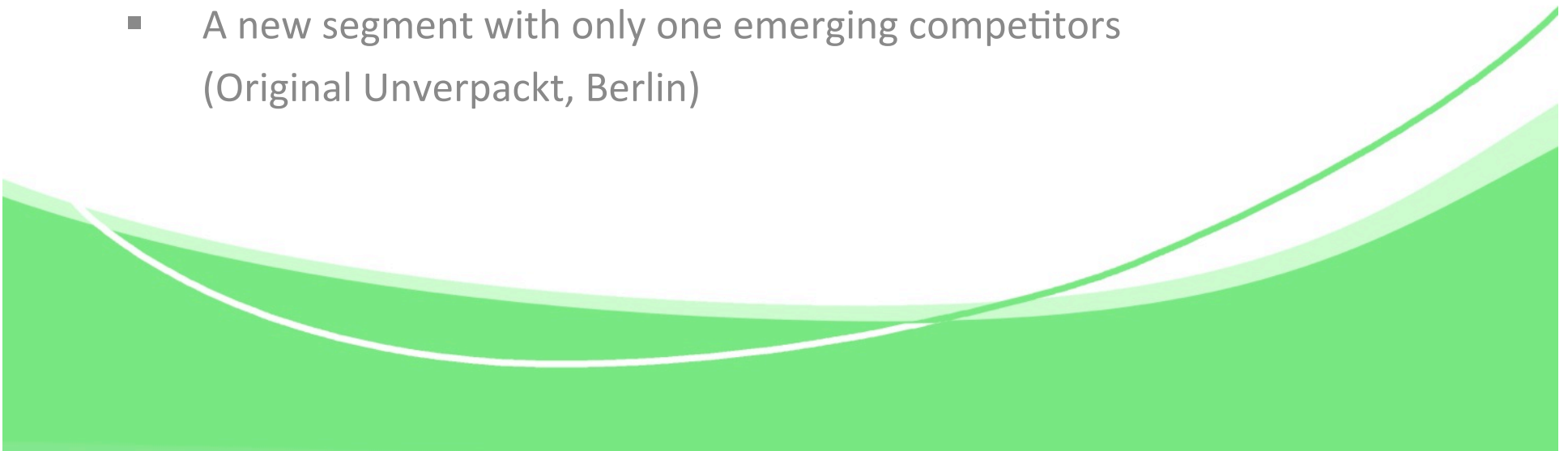


Market Analysis

General Observations

- Unnecessary packaging increases the price of a product
- Increasing awareness of customers for biological and regional products (reasons: superior flavour, context of sustainable development)
- Unique store features attract customers

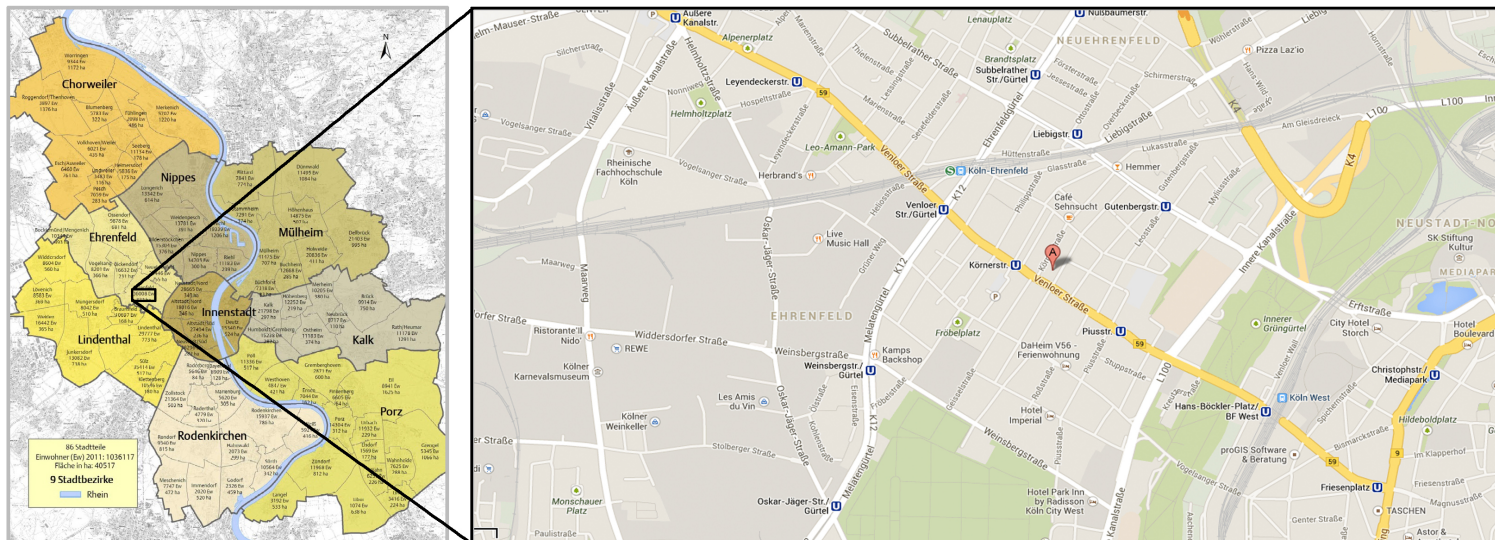
- Selling unpackaged food is a widely untouched concept in Europe
- Currently, there is no such store in place throughout Germany
- A new segment with only one emerging competitors (Original Unverpackt, Berlin)



Market Analysis

Business Location

- Cologne-Ehrenfeld, Venloer Straße
(in between Innere Kanalstraße and Ehrenfeld Mainstation)

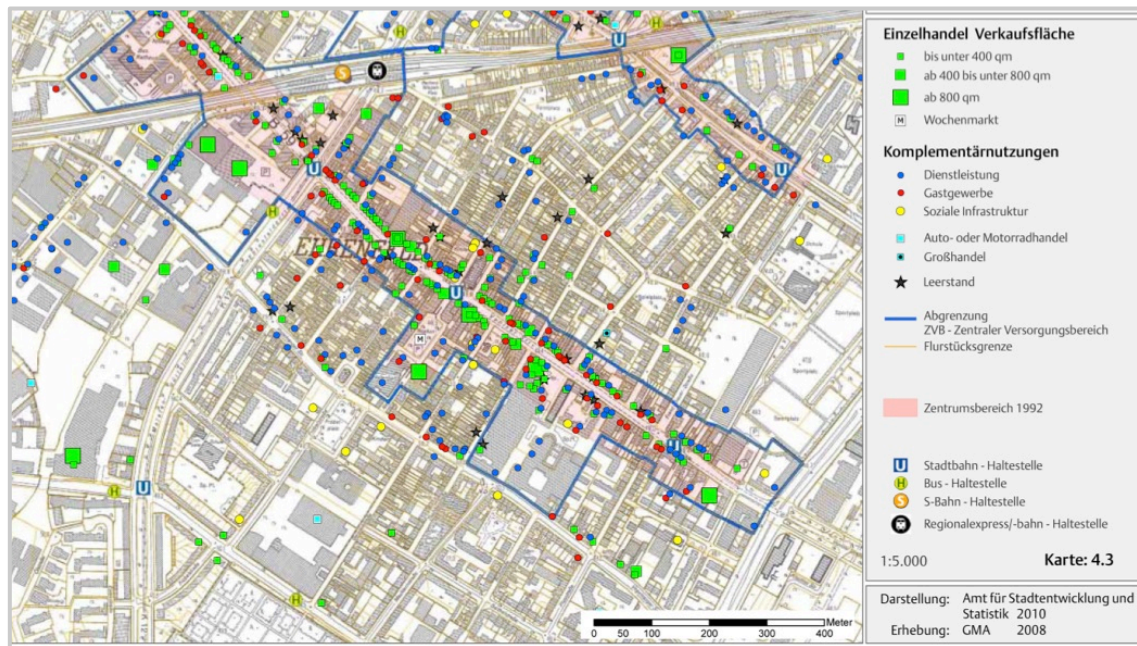


Source: after Kölner Statistische Nachrichten 6/2012 and GoogleMaps

Market Analysis

Business Location

- Retail business structure at Venloer Straße



Source: after Einzelhandels- und Zentrenkonzept Köln 2010

Market Analysis

Business Location



Source: Own Image



Source: Own Image

- Venloer Straße (left) and a potential BoP-Store (right)

Market Analysis

Business Location

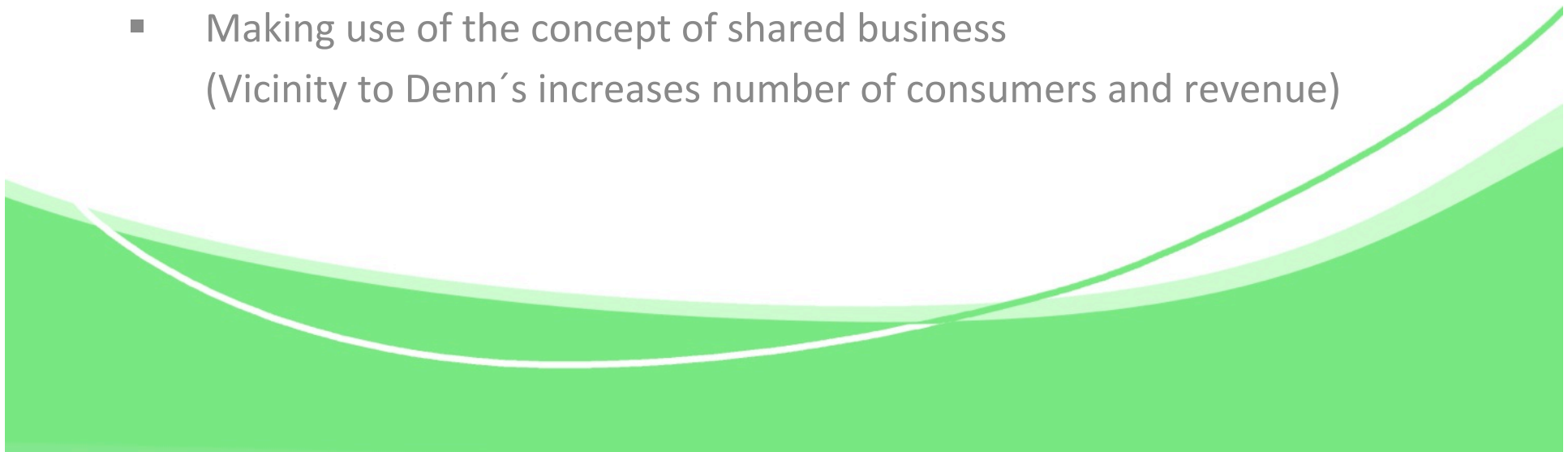


- Proximity to metro stations (left) and various retail stores (right)

Market Analysis

Reasoning for Business Location

- A very popular and dense district of Cologne (104,509 inhabitants)
- Steady increase of population
- Venloer Straße is the main arterial road in Ehrenfeld
- Distinct public transport system
- Largest agglomeration of retail business throughout the district
- Exact location close to Denn's Biostore
- Making use of the concept of shared business
(Vicinity to Denn's increases number of consumers and revenue)



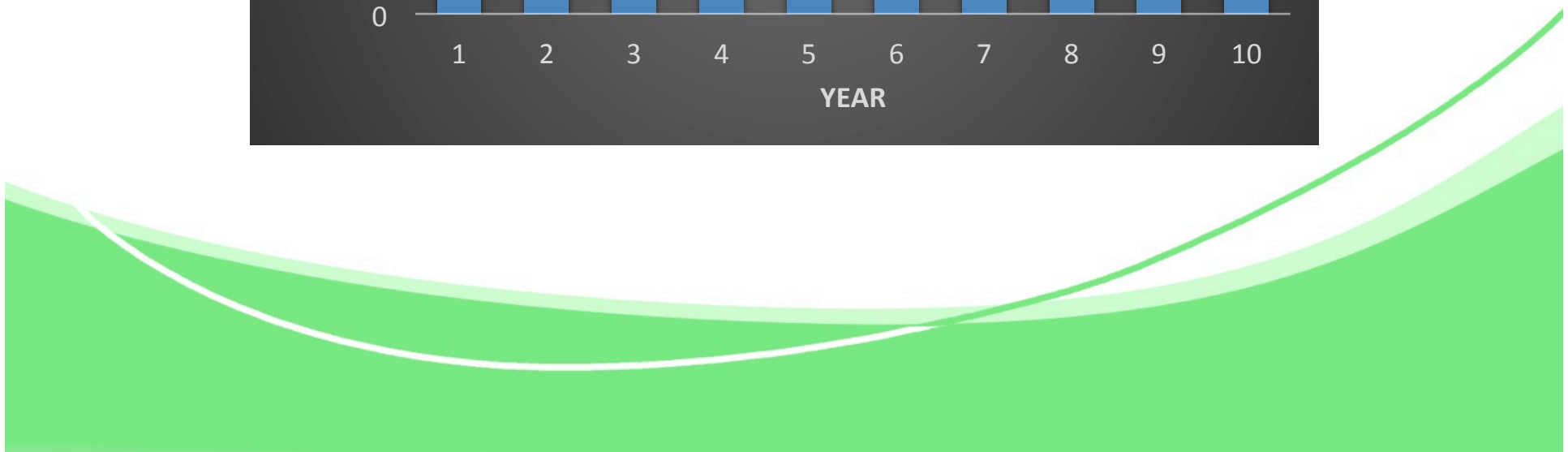
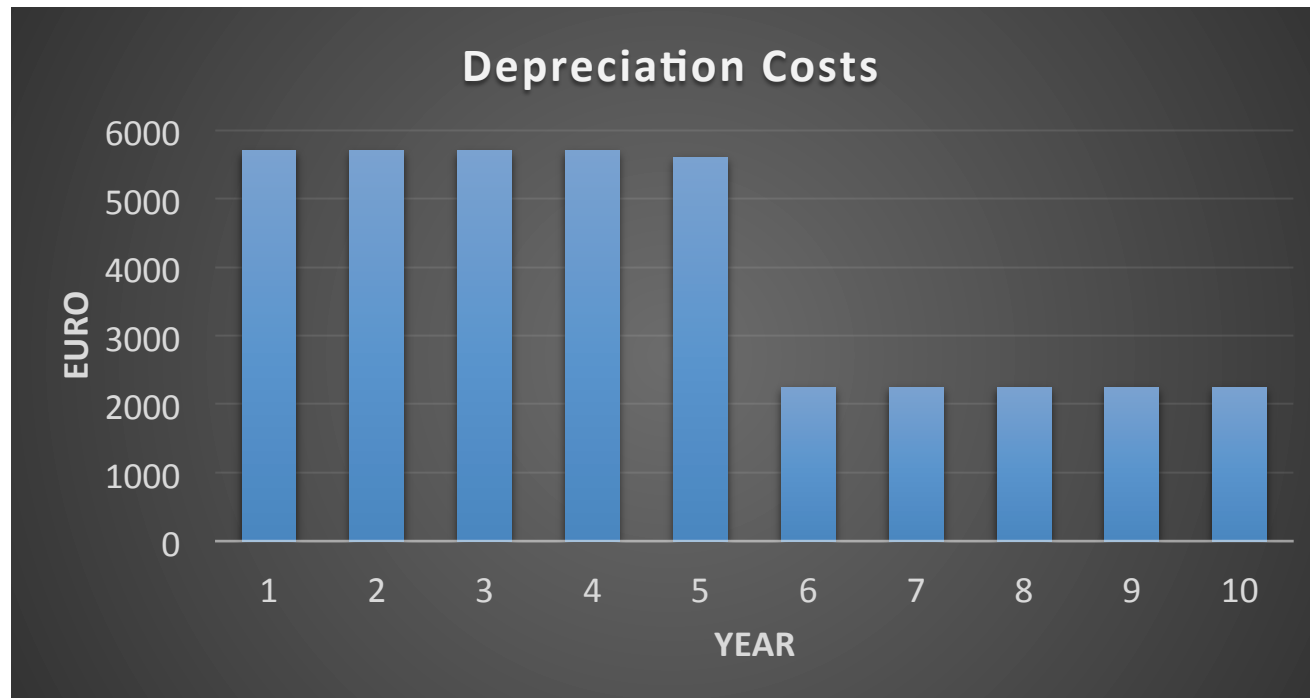
Business Calculation

Investments and Depreciation Costs

Description	Costs in €	Depreciation rate in years
Trade license	20	
Hygiene certificate	25	
Renovation and façade design	3000	
(Instalment of) Air-conditioning	2000	10
Deposit	13350	
Personnel training (hygiene instructions for handling of unpackaged groceries)	500	
Furniture (sales area, storage room, office)	2500	10
Computer	400	4
Coffee grinding machines (4 à 150€)	600	10
Gravity bins (50 à 75€)	3750	10
Boxes (30 à 60€)	1800	5
Milk vending machine L 200 Duo (2 x 100l)	4710	10
Stainless steel cans for milk vending machine (4 à 100l à 240€)	960	10
Dish washer	2570	10
Weighing scales (3 à 500€)	1500	10
Cash machines (2 à 540€)	1080	10
Cooling Meat and Dairy Counter	1700	10
Refrigerator	1000	10
Car	15000	5
Circulating capital	20000	
Unexpected costs (2 months salaries)	60000	
TOTAL INVESTMENT COSTS	136420	

Business Calculation

Investments and Depreciation Costs



Business Calculation

Financing Costs

Total investment costs	136420
Running time	10 years
Interest rate	7%
60% Credit capital	81852
40% Equity capital	54568



Year	Balance of debt in €	Interest rate	Interest Costs Paid p.a.	Repayment/paying back loan p.a.
1	81852	0,07	5729,6	8185,2
2	73666,8	0,07	5156,7	8185,2
3	65481,6	0,07	4583,7	8185,2
4	57296,4	0,07	4010,7	8185,2
5	49111,2	0,07	3437,8	8185,2
6	40926	0,07	2864,8	8185,2
7	32740,8	0,07	2291,9	8185,2
8	24555,6	0,07	1718,9	8185,2
9	16370,4	0,07	1145,9	8185,2
10	8185,2	0,07	573,0	8185,2
Total interest paid			31513,0	

Business Calculation

Labor Costs

Agreed salary brut	3360 €	we as employers pay 4006,80 €
Deduction:		
Retirement pay 19.5%	327,6	+ 327,6
Unemployment insurance 5%	84	+ 84
Health insurance 14%	235,2	+ 235,2
Income taxes 30%	1008	
Solidarity surcharge (5,5% of the income tax)	55,44	
Salary Net	1649,76 €	

- Brut pay per hour 21€ (net pay per hour 10.31€)
- Employees costs per year: 384'652,8 €

Business Calculation

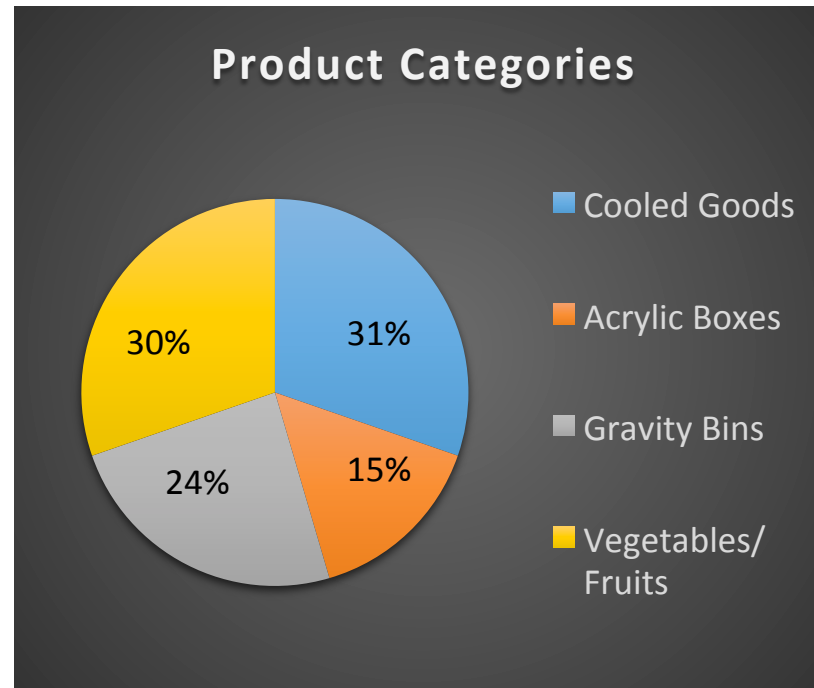
Utility Costs (Running Costs)

Item	1. year	2. year	3. year	4. year	5. year	6. year	7. year	8. year	9. year	10. year
Rent	53400	53400	53400	53400	53400	53400	53400	53400	53400	53400
Additional Costs (heating, water, waste)	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
Electricity (100% renewable energy)	4104	4104	4104	4104	4104	4104	4104	4104	4104	4104
Telephone/Internet	240	240	240	240	240	240	240	240	240	240
Cleaning Equipment	600	600	600	600	600	600	600	600	600	600
Bottles for milk (à 1€)*	20000	17000	15000	12000	10000	10000	8000	6000	6000	6000
Preserving Jars (à 1€)*	700	560	490	350	280	210	140	70	70	70
Further reusable food containers*	500	400	350	250	200	150	100	50	50	50
Car (insurance & gasoline)	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440
Business Liability Insurance	420	420	420	420	420	420	420	420	420	420
Shop Content Insurance	310	310	310	310	310	310	310	310	310	310
Legal Costs Insurance	279	279	279	279	279	279	279	279	279	279
SUM UTILITIES	84393	81153	79033	75793	73673	73553	71433	69313	69313	69313

* assuming a decreased need of repurchase for reusable food containers [1. year 100%, 2: 80%, 3: 70%, 4: 50%, 5: 40%, 6: 30%, 7: 20%, 8: 10%, 9: 10%, 10: 10%] due to reuse by customers. In first years many new customers come who don't have containers yet, but later on it evens out

Business Calculation

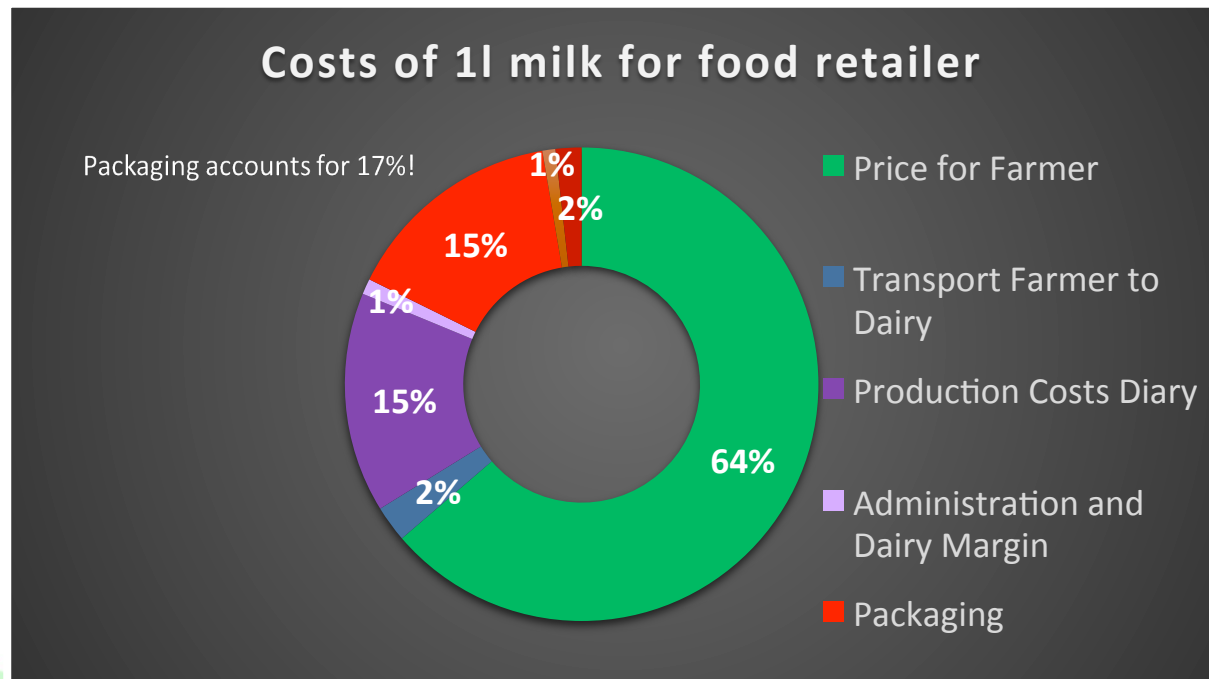
Product Costs



Business Calculation

Product Costs

- Present milk price at farmer 0.48€/l
→ our buying price is 0.63€/l (instead of 0.75€/l with packaging)



Business Calculation

Product Costs

- Product Category 1: COOLED GOODS – Milk Example

Assumed amount sold	50000	90000	120000	140000	160000	180000	200000	200000	200000	200000
CONSUMPTION COSTS										
	<i>1. year</i>	<i>2. year</i>	<i>3. year</i>	<i>4. year</i>	<i>5. year</i>	<i>6. year</i>	<i>7. year</i>	<i>8. year</i>	<i>9. year</i>	<i>10. year</i>
Raw Materials ¹	31333,3	56400,0	75200,0	87733,3	100266,7	112800,0	125333,3	125333,3	125333,3	125333,3
Packaging	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Utilities ²	21098,3	20288,3	19758,3	18948,3	18418,3	18388,3	17858,3	17328,3	17328,3	17328,3
Consumption Cost	52431,6	76688,2	94958,2	106681,6	118684,9	131188,3	143191,6	142661,6	142661,6	142661,6
SELF COSTS										
	<i>1. year</i>	<i>2. year</i>	<i>3. year</i>	<i>4. year</i>	<i>5. year</i>	<i>6. year</i>	<i>7. year</i>	<i>8. year</i>	<i>9. year</i>	<i>10. year</i>
Depreciation Costs	1424,3	1424,3	1424,3	1424,3	1399,3	559,3	559,3	559,3	559,3	559,3
Financing	1432,4	1289,2	1145,9	1002,7	859,4	716,2	573,0	429,7	286,5	143,2
Labor	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2
Raw Materials + Utilities ³	52431,6	76688,2	94958,2	106681,6	118684,9	131188,3	143191,6	142661,6	142661,6	142661,6
Total self costs	151451,4	175564,9	193691,6	205271,7	217106,8	228626,9	240487,0	239813,8	239670,5	239527,3
Self cost per liter milk	3,03	1,95	1,61	1,47	1,36	1,27	1,20	1,20	1,20	1,20

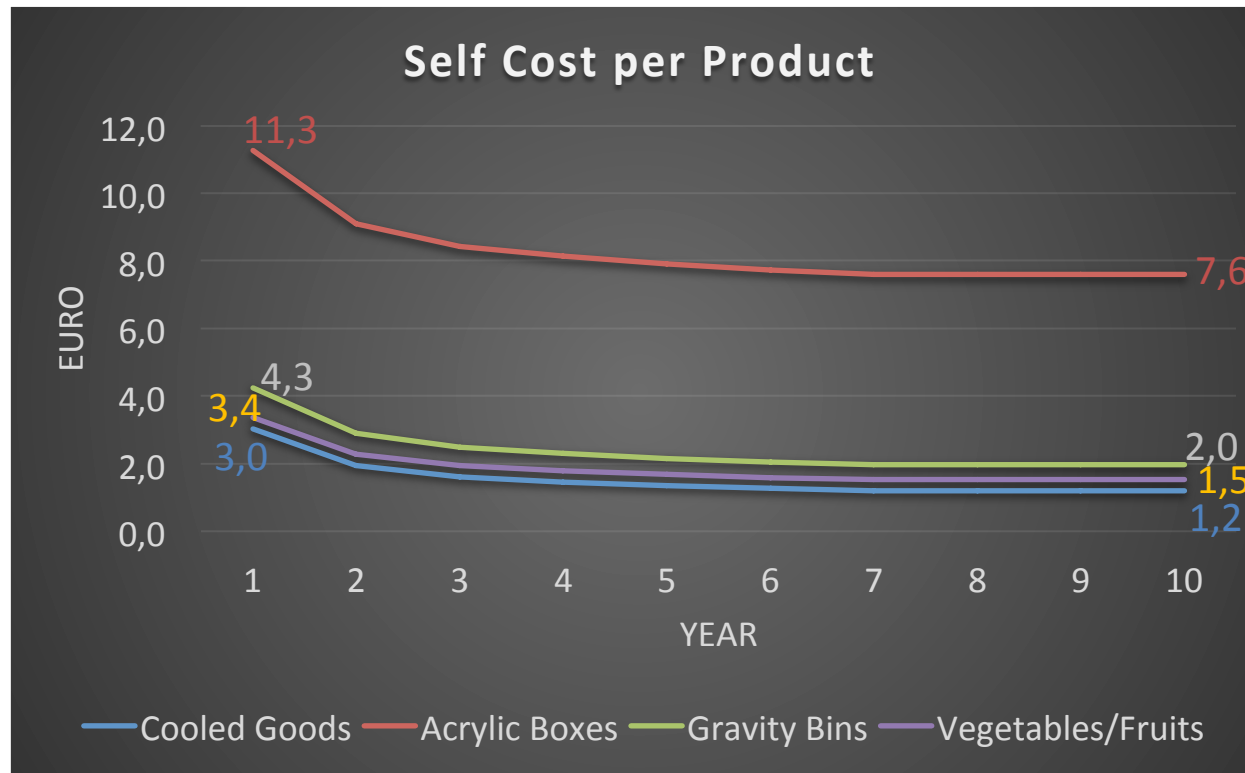
¹ purchasing price of 0.6267€/l milk

² assuming 1/4th distribution of utility costs between the four product categories

³ equals consumption cost

Business Calculation

Self Costs



Business Calculation

Price Definition

- Comparison of retail prices with Denn's and Rewe

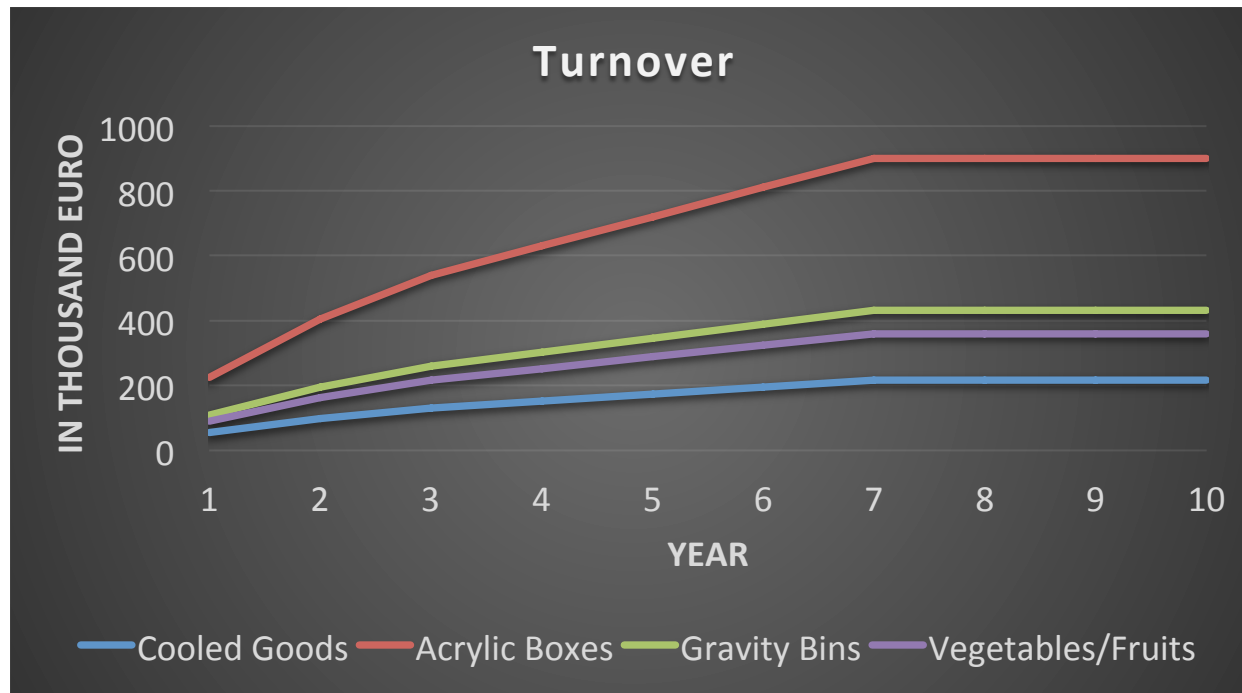
Product	BOP's price	Comparable market price range
Milk (1l)	1.2€	0.95-1.2€
Coffee (1kg)	10€	10-20€
Rice (1kg)	3€	2-5€
Potatoes (1kg)	2€	1.5-3€



Business Calculation

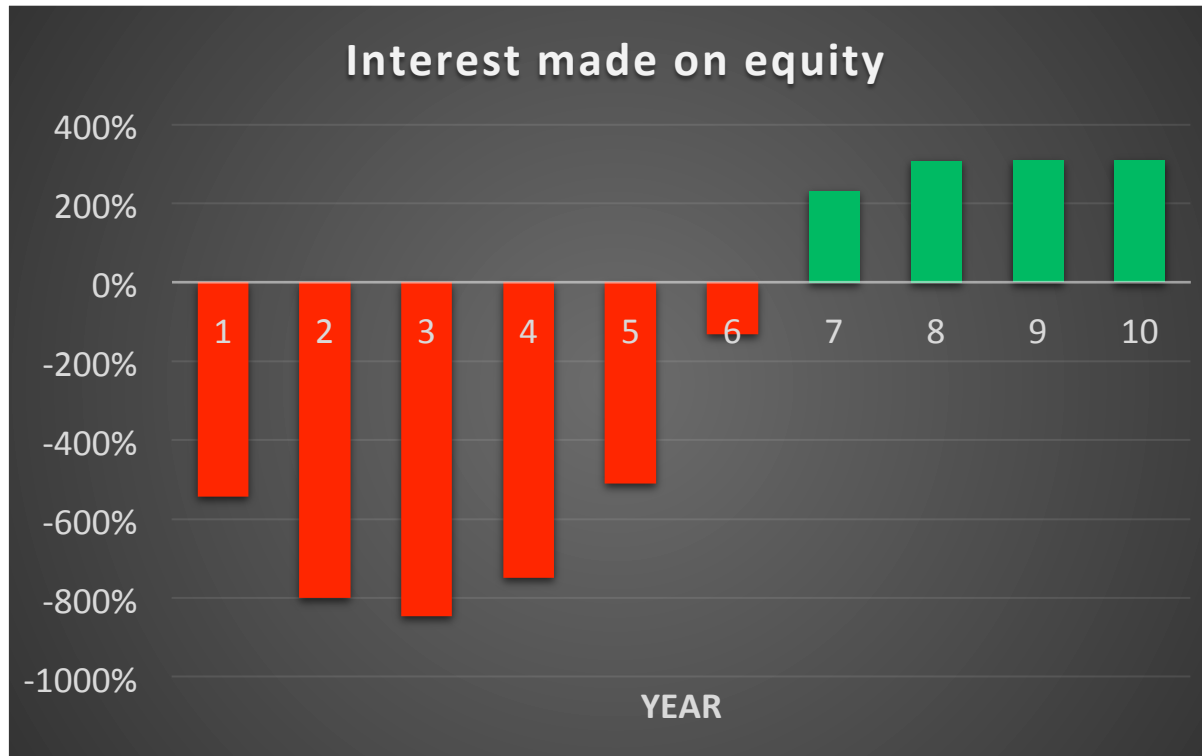
Turnover

- Assumption: 10% of purchased products won't be sold



Business Calculation

Equity Profitability



Conclusion

Müllst du noch?

Oder **BOP** st du schon?

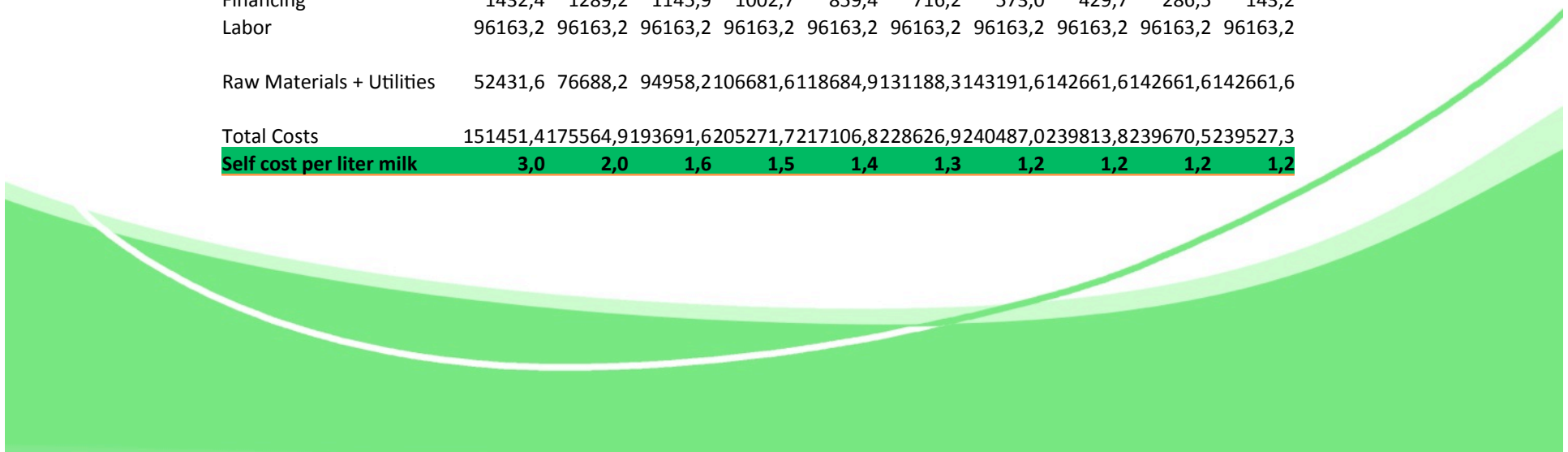


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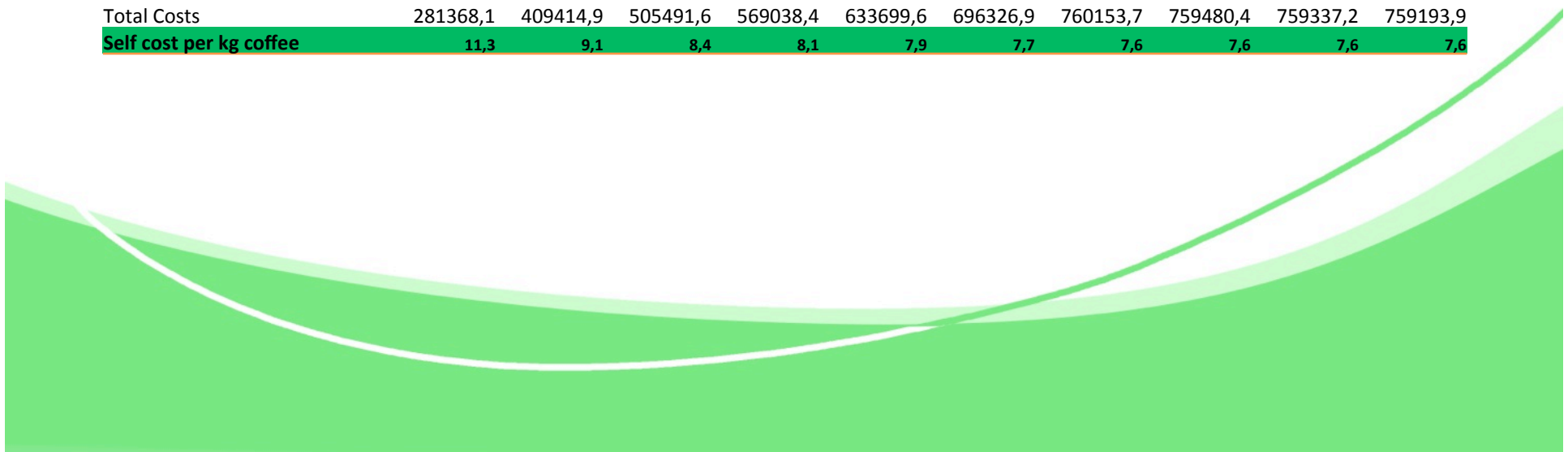
Attachments

Category 1: Example Milk	1. year	2. year	3. year	4. year	5. year	6. year	7. year	8. year	9. year	10. year
Assumed Amount Sold	50000,0	90000,0	120000,0	140000,0	160000,0	180000,0	200000,0	200000,0	200000,0	200000,0
Purchasing Price 0,63€/l										
CONSUMPTION COST										
Raw Materials ²	31333,3	56400,0	75200,0	87733,3	100266,7	112800,0	125333,3	125333,3	125333,3	125333,3
Packaging	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Utilities ³	21098,3	20288,3	19758,3	18948,3	18418,3	18388,3	17858,3	17328,3	17328,3	17328,3
Consumption Cost	52431,6	76688,2	94958,2	106681,6	118684,9	131188,3	143191,6	142661,6	142661,6	142661,6
Per Product	1,0	0,9	0,8	0,8	0,7	0,7	0,7	0,7	0,7	0,7
SELF COSTS										
Depreciation Costs	1424,3	1424,3	1424,3	1424,3	1399,3	559,3	559,3	559,3	559,3	559,3
Financing	1432,4	1289,2	1145,9	1002,7	859,4	716,2	573,0	429,7	286,5	143,2
Labor	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2
Raw Materials + Utilities	52431,6	76688,2	94958,2	106681,6	118684,9	131188,3	143191,6	142661,6	142661,6	142661,6
Total Costs	151451,4	175564,9	193691,6	205271,7	217106,8	228626,9	240487,0	239813,8	239670,5	239527,3
Self cost per liter milk	3,0	2,0	1,6	1,5	1,4	1,3	1,2	1,2	1,2	1,2



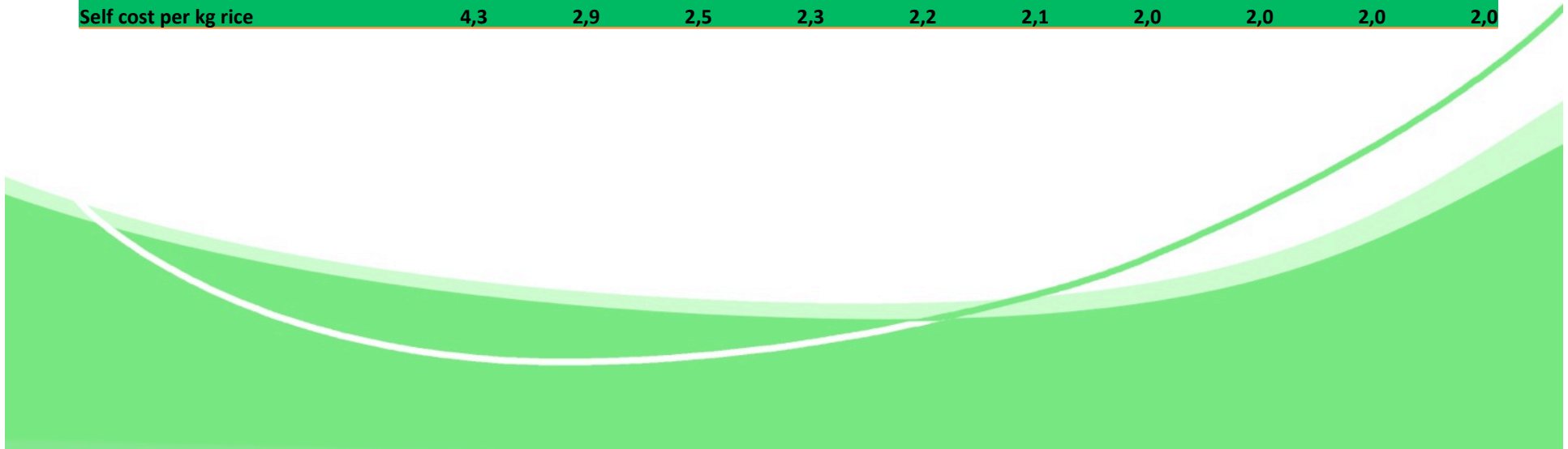
Attachments

Category 2: Example Coffee	1. year	2. year	3. year	4. year	5. year	6. year	7. year	8. year	9. year	10. year
Assumed Amount Sold	25000	45000	60000	70000	80000	90000	100000	100000	100000	100000
CONSUMPTION COSTS										
Raw Materials ²	161250,0	290250,0	387000,0	451500,0	516000,0	580500,0	645000,0	645000,0	645000,0	645000,0
Packaging	0,0	0,0	0,0	0,0	859,4	0,0	0,0	0,0	0,0	0,0
Utilities ³	21098,3	20288,3	19758,3	18948,3	18418,3	18388,3	17858,3	17328,3	17328,3	17328,3
Consumption Costs	182348,3	310538,3	406758,3	470448,3	535277,7	598888,3	662858,3	662328,3	662328,3	662328,3
Per Product	7,3	6,9	6,8	6,7	6,7	6,7	6,6	6,6	6,6	6,6
SELF COSTS										
Depreciation Costs	1424,3	1424,3	1424,3	1424,3	1399,3	559,3	559,3	559,3	559,3	559,3
Financing	1432,4	1289,2	1145,9	1002,7	859,4	716,2	573,0	429,7	286,5	143,2
Labor	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2
Raw Materials + Utilities	182348,3	310538,3	406758,3	470448,3	535277,7	598888,3	662858,3	662328,3	662328,3	662328,3
Total Costs	281368,1	409414,9	505491,6	569038,4	633699,6	696326,9	760153,7	759480,4	759337,2	759193,9
Self cost per kg coffee	11,3	9,1	8,4	8,1	7,9	7,7	7,6	7,6	7,6	7,6



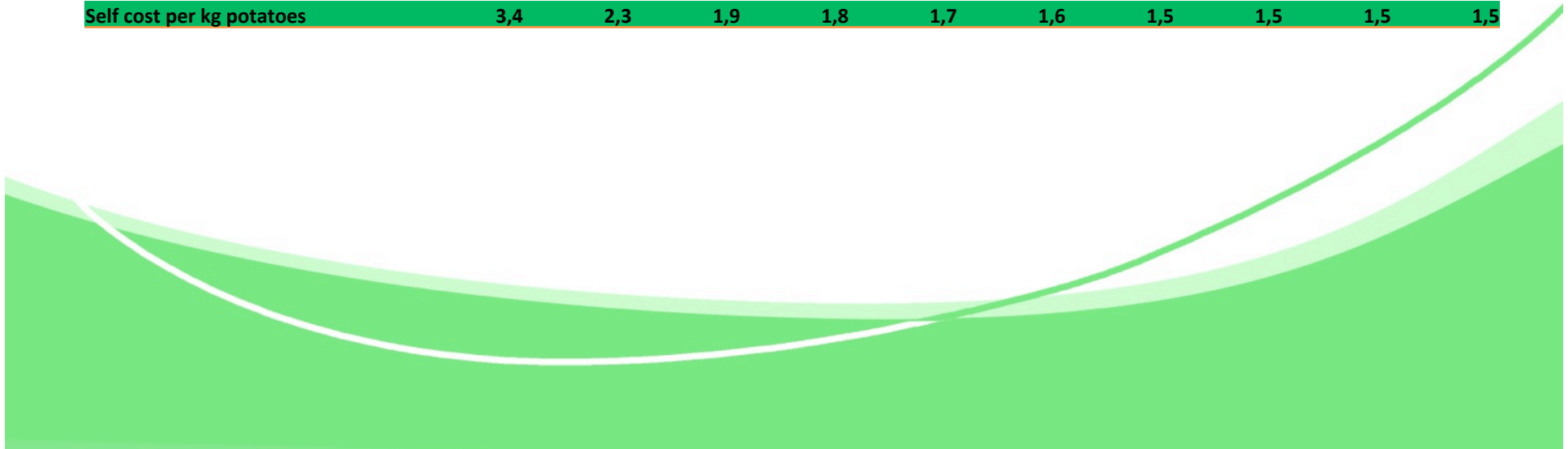
Attachments

Category 3: Example Rice	1. year	2. year	3. year	4. year	5. year	6. year	7. year	8. year	9. year	10. year
Assumed Amount Sold	40000,0	72000,0	96000,0	112000,0	128000,0	144000,0	160000,0	160000,0	160000,0	160000,0
Purchasing Price 1.25€/kg										
CONSUMPTION COST										
Raw Materials ²	50000,0	90000,0	120000,0	140000,0	160000,0	180000,0	200000,0	200000,0	200000,0	200000,0
Packaging	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Utilities ³	21098,3	20288,3	19758,3	18948,3	18418,3	18388,3	17858,3	17328,3	17328,3	17328,3
Consumption Cost	71098,3	110288,3	139758,3	158948,3	178418,3	198388,3	217858,3	217328,3	217328,3	217328,3
Per Product	1,8	1,5	1,5	1,4	1,4	1,4	1,4	1,4	1,4	1,4
SELF COSTS										
Depreciation Costs	1424,3	1424,3	1424,3	1424,3	1399,3	559,3	559,3	559,3	559,3	559,3
Financing	1432,4	1289,2	1145,9	1002,7	859,4	716,2	573,0	429,7	286,5	143,2
Labor	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2
Raw Materials + Utilities	71098,3	110288,3	139758,3	158948,3	178418,3	198388,3	217858,3	217328,3	217328,3	217328,3
Total Costs	170118,1	209164,9	238491,6	257538,4	276840,1	295826,9	315153,7	314480,4	314337,2	314193,9
Self cost per kg rice	4,3	2,9	2,5	2,3	2,2	2,1	2,0	2,0	2,0	2,0



Attachments

Category 4: Example Potatoes	1. year	2. year	3. year	4. year	5. year	6. year	7. year	8. year	9. year	10. year
Assumed Amount Sold	50000,0	90000,0	120000,0	140000,0	160000,0	180000,0	200000,0	200000,0	200000,0	200000,0
Purchasing Price 0.95€/kg										
CONSUMPTION COST										
Raw Materials ²	47500,0	85500,0	114000,0	133000,0	152000,0	171000,0	190000,0	190000,0	190000,0	190000,0
Packaging	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Utilities ³	21098,3	20288,3	19758,3	18948,3	18418,3	18388,3	17858,3	17328,3	17328,3	17328,3
Consumption Cost	68598,3	105788,3	133758,3	151948,3	170418,3	189388,3	207858,3	207328,3	207328,3	207328,3
Per Product	1,4	1,2	1,1	1,1	1,1	1,1	1,0	1,0	1,0	1,0
SELF COSTS										
Depreciation Costs	1424,3	1424,3	1424,3	1424,3	1399,3	559,3	559,3	559,3	559,3	559,3
Financing	1432,4	1289,2	1145,9	1002,7	859,4	716,2	573,0	429,7	286,5	143,2
Labor	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2	96163,2
Raw Materials + Utilities	68598,3	105788,3	133758,3	151948,3	170418,3	189388,3	207858,3	207328,3	207328,3	207328,3
Total Costs	167618,1	204664,9	232491,6	250538,4	268840,1	286826,9	305153,7	304480,4	304337,2	304193,9
Self cost per kg potatoes	3,4	2,3	1,9	1,8	1,7	1,6	1,5	1,5	1,5	1,5



Attachments

Turnover

Assumption: 10% of our products won't be sold

	1. year	2. year	3. year	4. year	5. year	6. year	7. year	8. year	9. year	10. year
Cooled Goods (ex. Milk)										
Amount Sold	45000,0	81000,0	108000,0	126000,0	144000,0	162000,0	180000,0	180000,0	180000,0	180000,0
Price per Product in €	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2
Turnover	54000,0	97200,0	129600,0	151200,0	172800,0	194400,0	216000,0	216000,0	216000,0	216000,0
Acrylic Boxes (ex. Coffee)										
Amount Sold	22500,0	40500,0	54000,0	63000,0	72000,0	81000,0	90000,0	90000,0	90000,0	90000,0
Price per Product in €	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0
Turnover	225000,0	405000,0	540000,0	630000,0	720000,0	810000,0	900000,0	900000,0	900000,0	900000,0
Graviy Bins (ex. Rice)										
Amount Sold	36000,0	64800,0	86400,0	100800,0	115200,0	129600,0	144000,0	144000,0	144000,0	144000,0
Price per Product in €	3,0	3,0	3,0	3,0	3,0	3,0	3,0	3,0	3,0	3,0
Turnover	108000,0	194400,0	259200,0	302400,0	345600,0	388800,0	432000,0	432000,0	432000,0	432000,0
Vegetables/Fruits (ex. Potatoe)										
Amount Sold	45000,0	81000,0	108000,0	126000,0	144000,0	162000,0	180000,0	180000,0	180000,0	180000,0
Price per Product in €	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0
Turnover	90000,0	162000,0	216000,0	252000,0	288000,0	324000,0	360000,0	360000,0	360000,0	360000,0
Total Amount Products Sold	148500,0	267300,0	356400,0	415800,0	475200,0	534600,0	594000,0	594000,0	594000,0	594000,0
Total Turnover from all Products	477000,0	858600,0	1144800,0	1335600,0	1526400,0	1717200,0	1908000,0	1908000,0	1908000,0	1908000,0

