

Finance and Fundraising

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Ljubljanski Univerzitetni Inkubator

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**LJUBLJANSKI UNIVERZITETNI
INKUBATOR**



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA GOSPODARSKI
RAZVOJ IN TEHNOLOGIJO



EVROPSKA UNIJA
EVROPSKI SKLAD ZA
REGIONALNI RAZVOJ

My Background and what I do



- Regional Finance Director for Systems Division in Knauf Insulation






Content

- Business and financial projections
- Basics about accounting & finance
- Investments
- Financial plans



A wide-angle photograph of a desert landscape. The foreground is dominated by sand dunes with intricate, wavy ripples. The dunes extend into the distance, creating a sense of depth. The sky is a clear, pale blue, suggesting a bright, sunny day. The overall color palette is warm and golden, typical of a desert environment.

What is your
business objective?

Why are you here?

VENTURE CAPITAL

I NEED \$100,000 FOR MY LOCATION-BASED, SOCIAL MEDIA, CLOUD START-UP.



Dilbert.com DilbertCartoonist@gmail.com

I'M NOT GIVING YOU \$100,000 JUST BECAUSE YOU SPEWED SOME BUZZ-WORDS.



THEN HOW ABOUT \$10 MILLION?



7-12-12 © 2012 Scott Adams, Inc./Dist. by Universal Uclick

WAIT... NOW IT SOUNDS LIKE A GOOD INVESTMENT. HOW DID YOU DO THAT?



I CAN TELL YOU, BUT IT WON'T BE FLATTERING.



Why are numbers so important?

- Numbers stand behind any (important) business idea
- Numbers support any hypothesis
- Numbers are a universal global language that anyone understands (you, banks, investors)
- Finance gathers numbers in meaningful segments and groups and forms

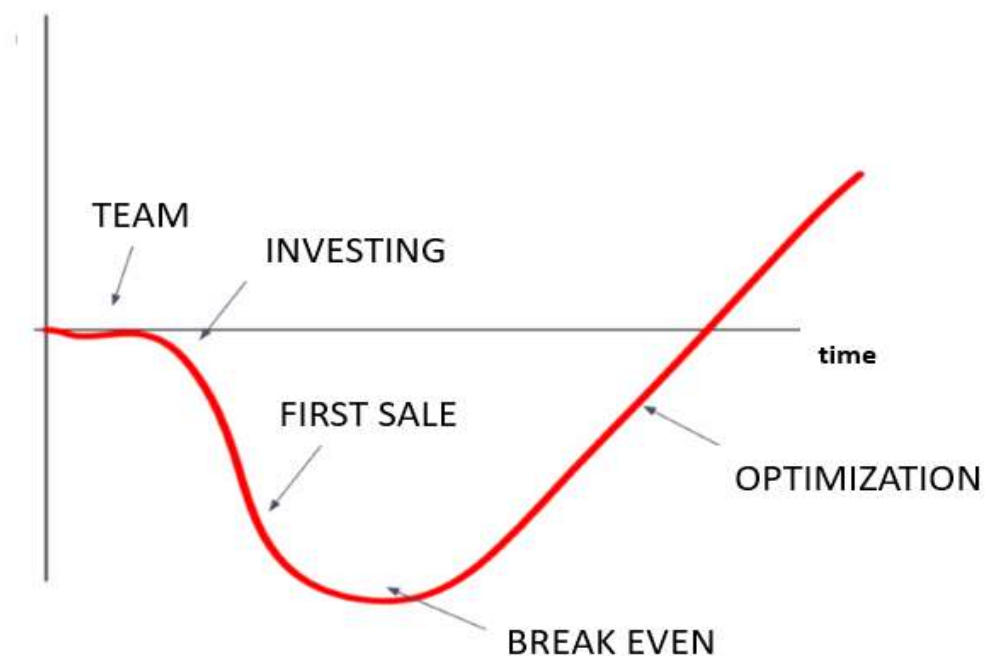
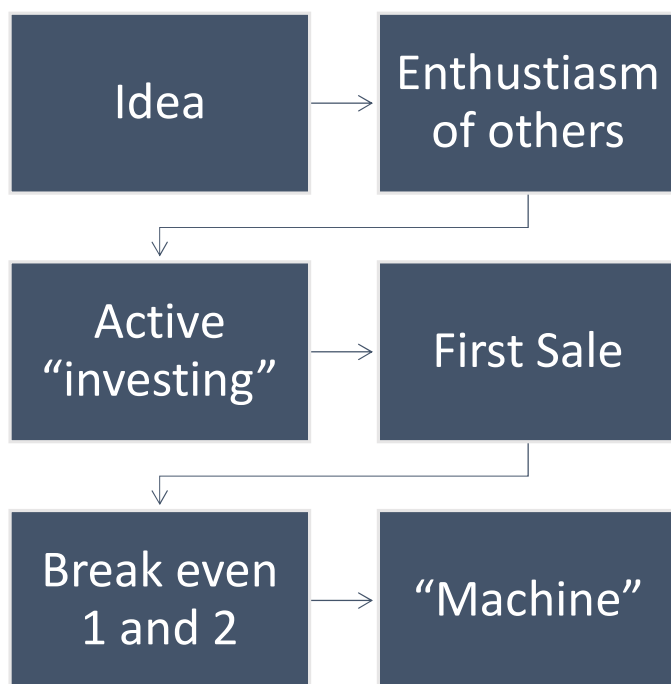


What is your business goal?

- Profit
- Positive difference between Revenues and Expenses
- Margin
- Margin and/or profit per unit
- Greater good...?
- If we are not profitable on long term...?



Entrepreneurial Process





Main Questions I should ask Myself / My Team?

What stage of Entrepreneurial Process are we in?

What are known information?

What are our assumptions about the market?

What are we aware that we do not know?

How far in time can we have reliable information or assumptions?

What is our goal for the next 6 months? 12 months? 2 years? 3 years?

What is our alternative plan? If things do not work-out, how long do we persist until we pivot?

How much money do we have? How many months of 'life' do we have considered the current funds we have?

How much funding can we realistically obtain in the next 6 months?

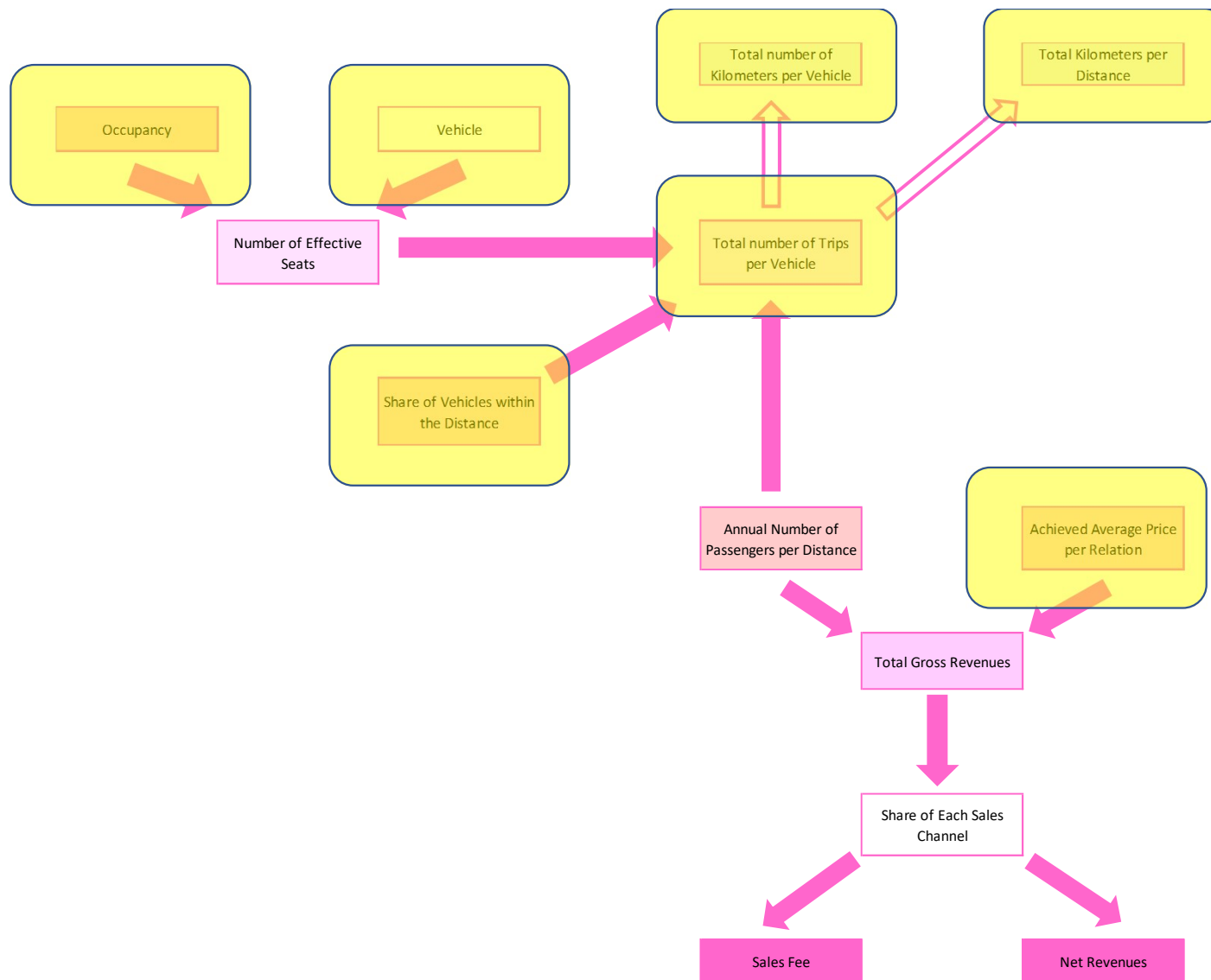
To what level of detail should our business projections be prepared?

How can we verify the cost assumptions of our current state pilot product/solution?



Revenues





Income from Sales of Media Space	Y1	Y2	Y3	Y4	Y5
Size of the shopping area covered (m2)	200.000	500.000	1.000.000	2.500.000	5.000.000
Average number of shoppers per m2	5	5	5	5	5
Number of shoppers	1.000.000	2.500.000	5.000.000	12.500.000	25.000.000
% of shoppers with app installed	15%	20%	25%	30%	30%
% of shoppers with app ON	30%	33%	36%	39%	40%
Number of shoppers reached	45.000	165.000	450.000	1.462.500	3.000.000
Average # of MD per shopper per visit	5	6	7	8	10
MD number	225.000	990.000	3.150.000	11.700.000	30.000.000
Average AD / MD	0,10	0,10	0,10	0,10	0,10
AD number	22.500	99.000	315.000	1.170.000	3.000.000
Ad value	€ 0,15	€ 0,12	€ 0,09	€ 0,07	€ 0,05
Total Income	€ 33.750	€ 118.800	€ 283.500	€ 819.000	€ 1.500.000
Value per impression	€ 0,03	€ 0,03	€ 0,03	€ 0,03	€ 0,03
Fixed price for use of platform	€ 10.000	€ 0	€ 0	€ 0	€ 0
Free until number of impressions reached	10.000	10.000	10.000	10.000	10.000
Total Income from Sales of Platform	€ 9.450	€ 38.610	€ 113.400	€ 397.800	€ 960.000

	2015	2016	2017	2018	2019		
Sales Revenues	27.330 €	319.380 €	808.020 €	1.212.030 €	1.818.045 €		
Expenses	142.353 €	340.019 €	542.143 €	694.331 €	867.163 €		
Sales & Commercial expenses	17.733 €	82.938 €	176.802 €	270.003 €	373.805 €		
Technical Expenses	- €	- €	- €	- €	- €		
Translation Expenses	2.000 €	4.000 €	4.000 €	5.000 €	5.000 €		
Marketing & Promotion expenses	39.700 €	70.300 €	78.100 €	89.700 €	107.250 €		
Marketing	28.400 €	47.800 €	56.100 €	66.167 €	80.717 €		
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Other IT Expenses	11.400 €	37.200 €	53.800 €	54.333 €	54.833 €		
Management and Administration expenses	43.320 €	91.581 €	133.441 €	150.494 €	172.675 €		
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EBIT	-	115.023 €	-	20.639 €	265.877 €	517.699 €	950.882 €
% in revenue		-421%	-6%	33%	43%	52%	
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Expenses

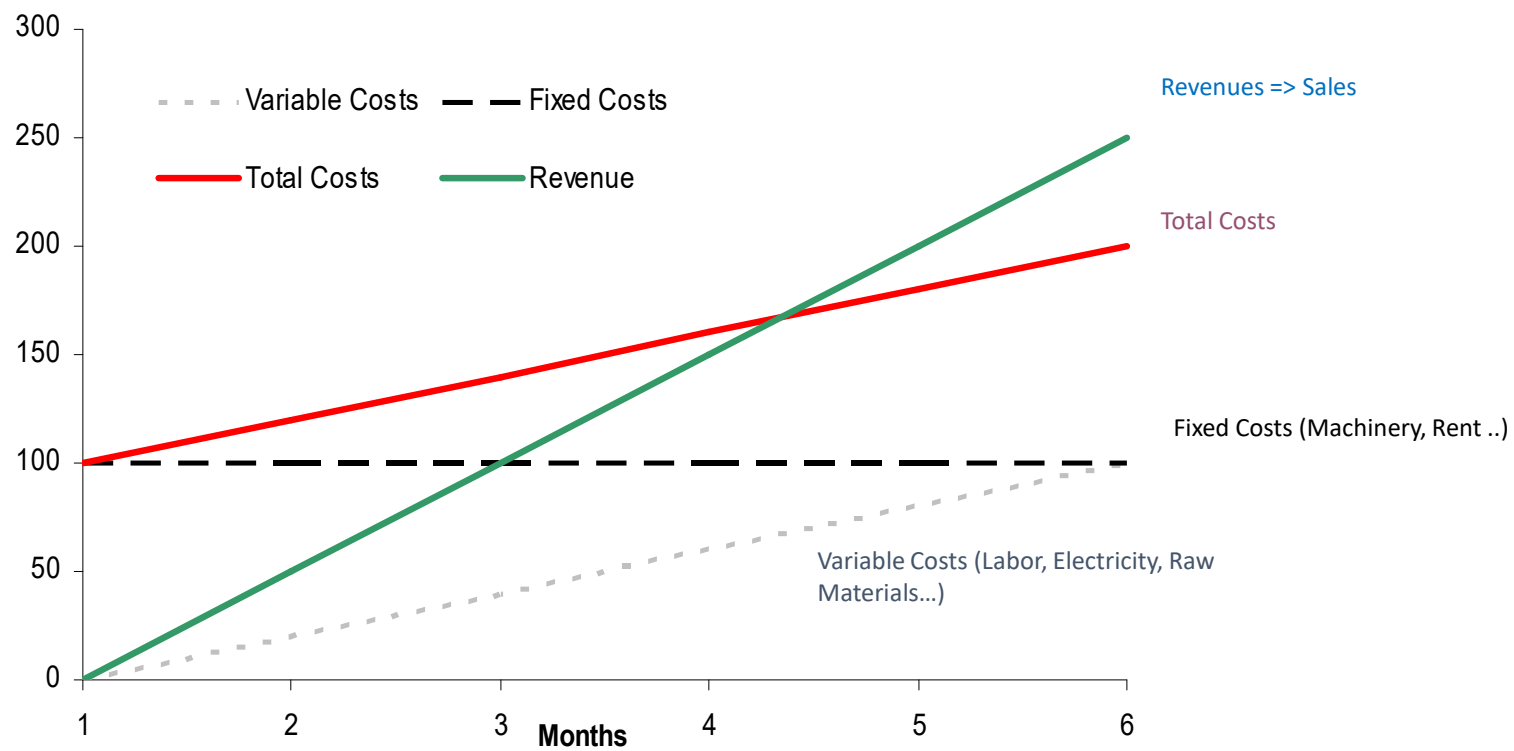


Fixed and Variable Expenses

- **Fixed expenses:** do not change in a period of time:
 - Rent, overheads, water, electricity, heating
 - Salaries (Personnel expenses)
 - Licences, domain, cloud storage...
- **Variable cost:** costs that change depending on the business activity in time:
 - Material
 - Energy
 - Packing
 - Postage, logistics
 - Marketing, promotion, advertising

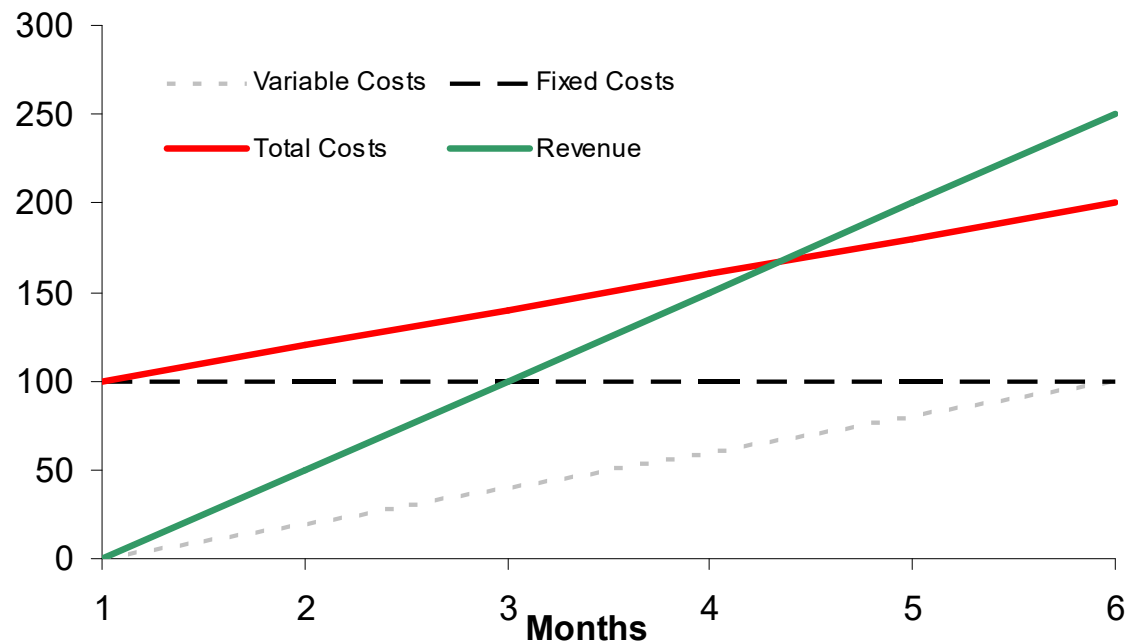


Fixed and Variable Expenses



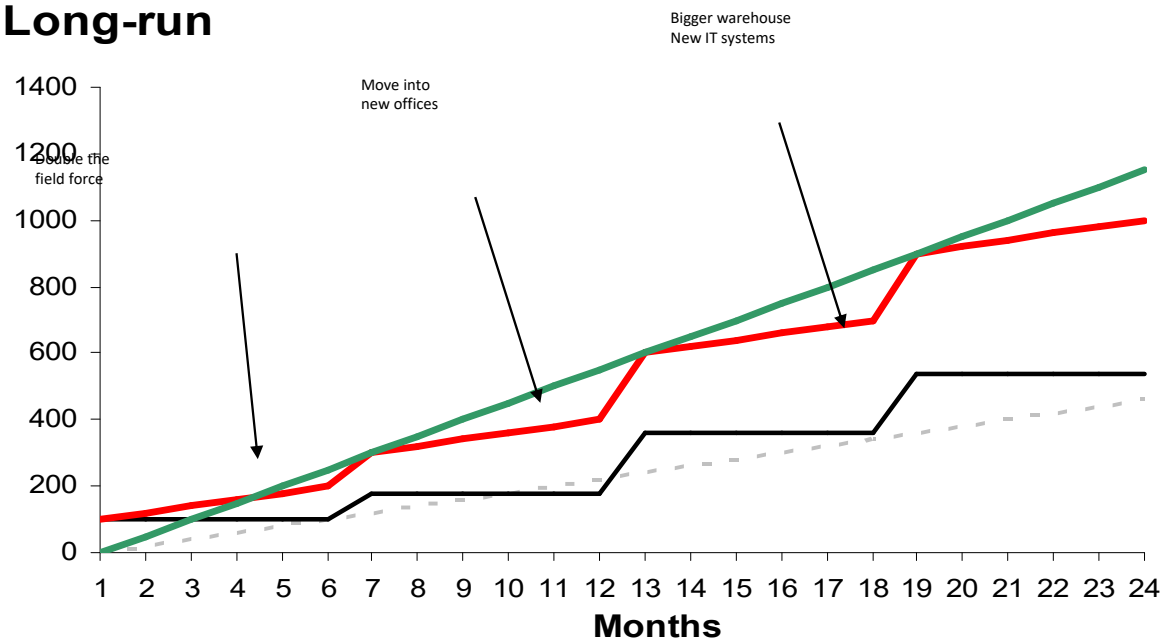
Short-Term and Long-Term View

Short-run



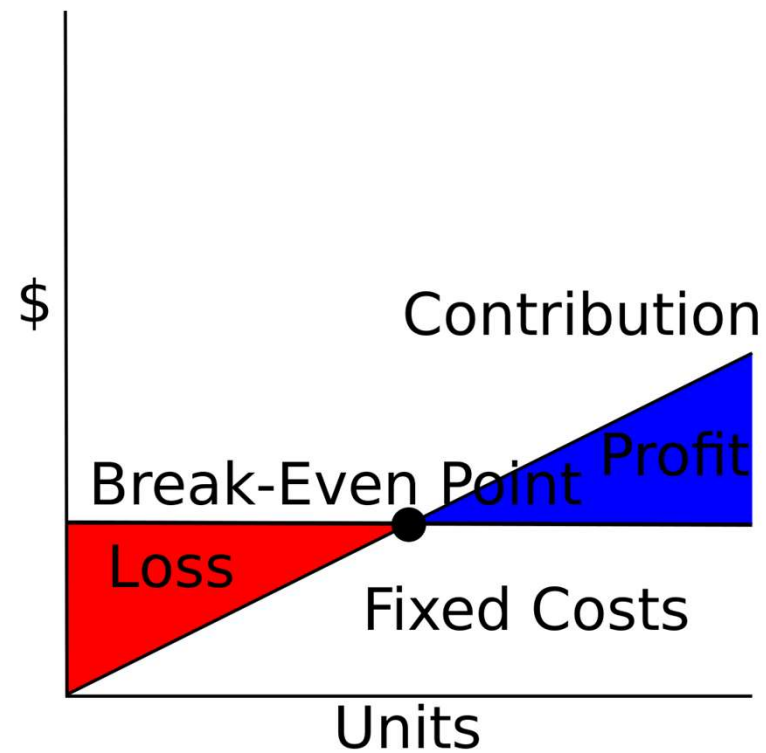
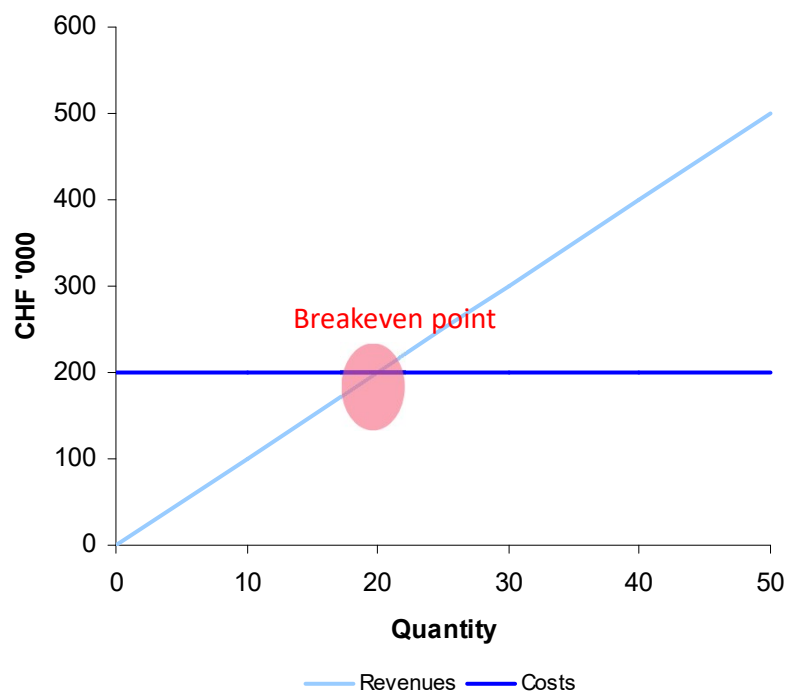
Short-Term and Long-Term View

Long-run



Break Even

Quantity	0	10	20	30	40	50
Revenues	0	100	200	300	400	500
Costs	200	200	200	200	200	200





Cash Flow



Cash Flow is NOT Profit!

- Cash Outflows that are not expenses
- Cash inflows that are not sales revenues
- Every expense is not a cash outflow
- Net Cash Flow is not profit
- Payment of VAT is not an expense

- Understanding of Cash Flow is fundamental basis for decision making!
- Basic Accounting needs to be understood better understand Cash Flow.

Cash Flow

- Cash Flow Statement shows various cash Flows and is derived from Income Statement and Balance Sheet
- Cash Flow is fundamental basis for decision making in modern finance and investment world (loans, investments, project evaluation, companies)
- How do we calculate the Cash Flow?
 - Cash Flow Statement – exact calculation – easy to make for the past periods
 - Cash Flow estimations:
 - $\text{EBITDA} = \text{Earnings Before Interest and Tax} + \text{Depreciation}$
 - $\text{EBITDA} + \text{Working Capital} + \text{Investments}$



Balance Sheet – Shows the Assets and Liabilities of a Company

- Assets and Liabilities
- Per one day
- Equity

Current Assets	460	Current Liabilities	200
Cash	210	Bank Loans	0
Receivables from Cust.	150	Payables to Suppliers	200
Inventories	100	Accrued Liabilities	0
Long-term Assets	250	Equity	510
Fixed Assets	250	Capital	500
Other Assets	0	Retained Earnings	0
		Net Profit (Loss)	10
Total Assets	710	Total Liabilities	710

Balance Sheet

Balance Sheet Logic of Items:

Closer to Cash	Current Assets	460	Current Liabilities	200	Due in short period
	Cash	210	Bank Loans	0	
	Receivables from Cust.	150	Payables to Suppliers	200	
	Inventories	100	Accrued Liabilities	0	
Increasing in Liquidity	Long-term Assets	250	Equity	510	Increasing in Maturity
	Fixed Assets	250	Capital	500	
	Other Assets	0	Retained Earnings	0	
			Net Profit (Loss)	10	
Hard to liquidate	Total Assets	710	Total Liabilities	710	Long-term commitment

Income Statement = Profit & Loss Account = P&L

- P&L shows how the company has performed in a period of time
- Many ways to show the P&L

Sales	150
Cost of Sales	-100
Gross Profit	50
Marketing & Sales Expenses	-20
General & Administration Expenses	-10
Operating Profit	20
Other Income/Expense	0
Profit before Taxes	20
Taxes	-10
Net Profit (Loss)	10

Income Statement

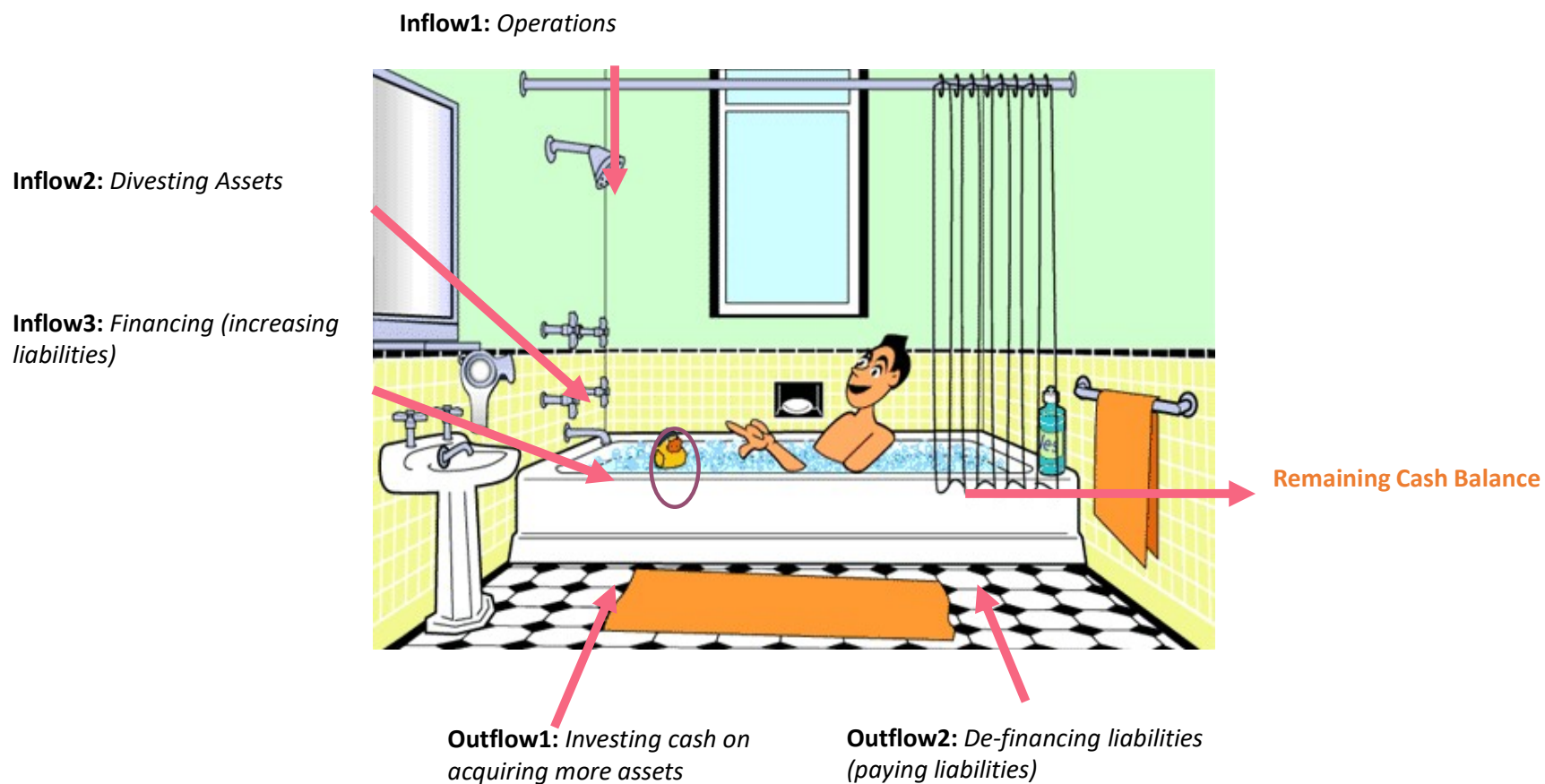
Sales	150
Cost of Sales	<u>-100</u>
Gross Profit	50
Marketing & Sales Expenses	-20
General & Administration Expenses	<u>-10</u>
Operating Profit	20
Other Income/Expense	<u>0</u>
Profit before Taxes	20
Taxes	<u>-10</u>
Net Profit (Loss)	10

Cost of Sales	100	Sales	150
Gross Profit	50		
Marketing&Sales Ex.	20	<i>Gross Profit</i>	50
General&Admin. Ex.	10		
Operating Profit	20		
Other Expenses	0	<i>Operating Profit</i>	20
		Other Income	0
Profit before Taxes	20	<i>Profit before Taxes</i>	20
Taxes	<u>10</u>		
Net Profit	10		

Income Statement

Revenue from Sales	
- Cost of goods sold and expenses	
=	EBIT = Earnings Before Interest and Taxes
EBIT = Operating Profit	
<hr/>	
+ Finance Revenues	
- Finance Expenses	
=	EBT = Earnings Before Taxes
EBT	
<hr/>	
+ Other Revenues	
- Other Expenses	
<hr/>	
- Corporate Income Tax	
+/- Deferred Taxes	
<hr/>	
= Net Profit	Net Profit

Understanding of Cash Flow



Cash Flow

Cash Flow relates to the change in cash balance

- Cash In and cash Out
- 3 types of Cash Flow:
 - **Operational Cash Flow:** cash that the company received from selling its products and services and uses for buying goods and services from its core activity (Core Business)
 - **Investment Cash Flows:** cash that the company uses for buying investments, fixed assets or also cash that the company received in case they sell its assets (CAPEX)
 - **Financing Cash Flows:** cash that the company received from banks as loans, financing from investors or a cash outflow in cases of repaying the loans to the banks and paying dividends to owners



TURNOVER is VANITY
PROFIT is SANITY
but
CASH
is KING

Cash Flow Statement

Cash Flow from Operating Activities	-40
Net Income	10
Decrease / (Increase) in Account Receivables	-150
Increase / (Decrease) in Account Payables	200
Decrease / (Increase) in Inventories	-100
Increase / (Decrease) in Accrued Liabilities	0
Cash Flow from Investing Activities	-250
Capital Expenditures	-250
Investments	0
Others	0
Cash Flow from Financing Activities	500
Bank Loans	0
Payments (to) / from Shareholders	500
Net Change in Cash Position	210

Investing!
Financing!

Investing!

Financing!


Interpretation:

- Company has not generated money from business
- Money has been used for investments
- The company has received the money from the bank by a loan



Business and Financial Plan



A magnifying glass is positioned over a bar chart. The chart shows data for three quarters: Q2, Q3, and Q4. Each quarter has two bars, one blue and one green. The blue bars are consistently taller than the green bars. The magnifying glass is centered over the Q3 and Q4 data points, making them the most prominent. The background is dark, and the text on the left is white.

Why is Business and Financial plan always such an important part of every pitch and presentation?

Startup Genome Report Extra on Premature Scaling

- *a project coauthored by Berkeley & Stanford faculty members with Steve Blank and 10 startup accelerators as contributors.*
- *The report analyzed 3,200 high growth web/mobile startups.*
- ***Within 3 years, 92% of startups failed. Of those who failed 74%, failed due to premature scaling.***
- *Premature scaling means spending money on marketing, hiring etc. either before you found a working business model (you acquire users for less than the revenue they bring) or in general spending too fast while failing to secure further financing.*

Startup Genome

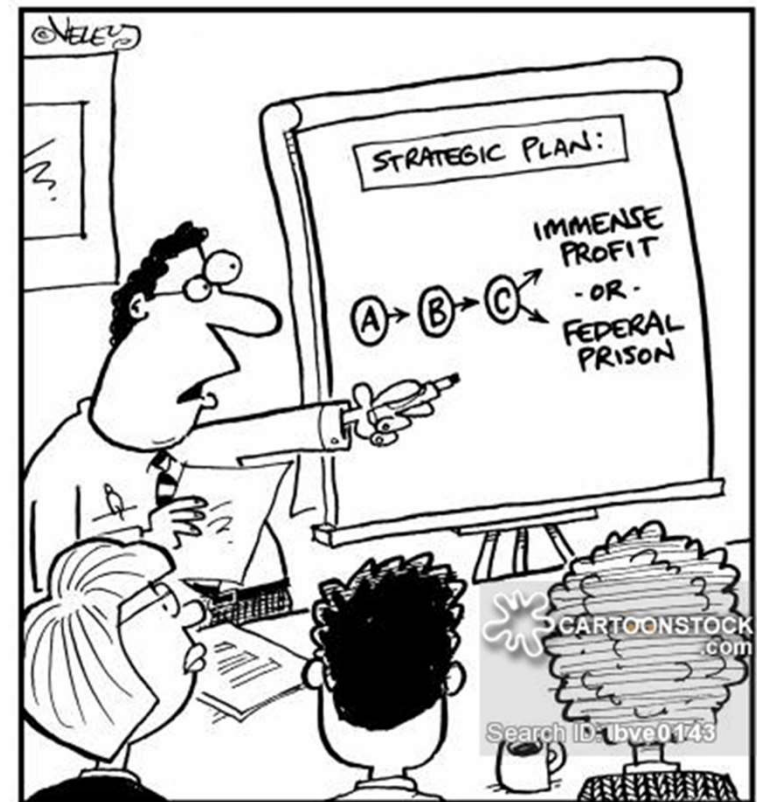
Startup Genome Report Extra on Premature Scaling

A deep dive into why most high growth startups fail

This is an addition to the Startup Genome Report covering premature scaling based on data from 3200+ high growth technology startups. The Startup Genome Report is a 67 page analysis that was coauthored by researchers from UC Berkeley & Stanford. Other contributors include Steve Blank, the Sandbox Network, and 10 accelerators from around the globe. You can download it at <http://blog.startupcompass.co>

Who for am I preparing financial plan?

- Your own team
- Existing investors
- Potential new investors
- Banks
- Government bodies, SME instrument
- Basis for future reporting
- Board plan & company plan



"Stay with me now, people, because in Step C, things get a bit delicate."

Planning

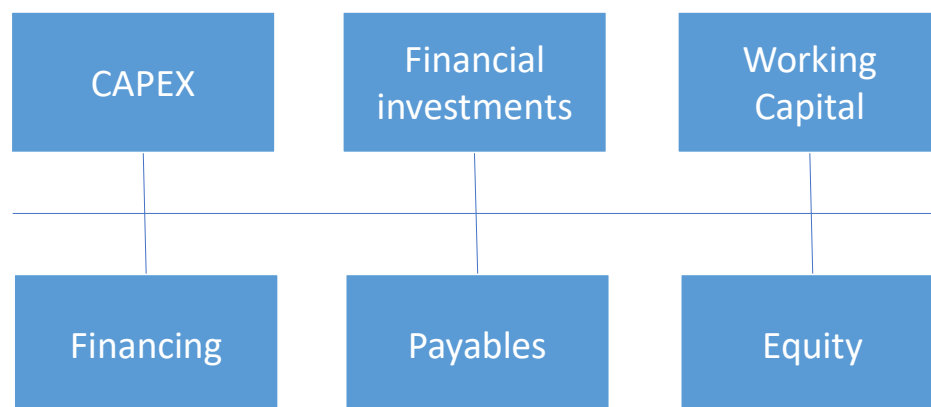
- Strategic Plan
- Business plan
- Financial Plan

- Accounting is a view of the PAST
- Plans are view in the FUTURE

- **Usually for Investors a 3-5 years business and financial plan needs to be prepared**



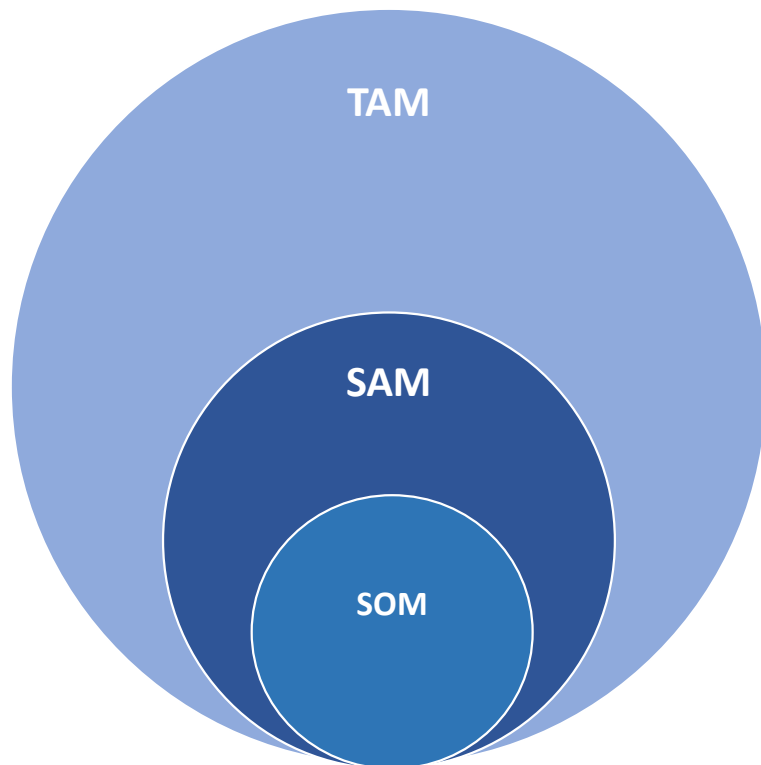
Income Statement Items How much do I produce and how much does it cost me?



Balance Sheet Items

What resources do I need to sell and produce?

TAM, SAM, SOM



- TAM = Total Available Market
 - Total market
- SAM = Serviceable Available Market
 - Segment of the market
 - Focus on your technology/services
- SOM = Serviceable Obtainable Market
 - Realistic market share
 - Competition, obstacles, trends, countries, sales channels

	2015	2016	2017	2018	2019	2020
Revenues	€ 426.428	€ 5.427.728	€ 23.120.550	€ 33.220.398	€ 41.794.718	€ 46.884.767
Gross Revenues	€ 490.993	€ 6.256.747	€ 26.682.689	€ 38.360.737	€ 48.289.680	€ 54.202.042
Sales to End-Clients via Web & Mobile portals	€ 319.146	€ 3.691.481	€ 14.141.825	€ 17.262.332	€ 18.350.078	€ 16.802.633
Sales via Local Tourist Agencies (Business Partners)	€ 0	€ 62.567	€ 533.654	€ 1.534.429	€ 2.414.484	€ 3.252.123
Sales via Global Contract Partners	€ 122.748	€ 1.439.052	€ 5.603.365	€ 7.672.147	€ 9.175.039	€ 9.756.368
Sales via Affiliate Program	€ 24.550	€ 437.972	€ 2.401.442	€ 4.219.681	€ 6.277.658	€ 8.130.306
Sales via Loyalty & Reference Program	€ 24.550	€ 625.675	€ 4.002.403	€ 7.672.147	€ 12.072.420	€ 16.260.613
Sales Fees	€ 67.512	€ 866.559	€ 3.722.235	€ 5.370.503	€ 6.784.700	€ 7.642.488
Revenues from advertising media space	€ 2.946	€ 37.540	€ 160.096	€ 230.164	€ 289.738	€ 325.212
	0,60%	0,60%	0,60%	0,60%	0,60%	0,60%
Net Revenues	€ 426.428	€ 5.427.728	€ 23.120.550	€ 33.220.398	€ 41.794.718	€ 46.884.767
Total Direct Cost	€ 447.638	€ 4.569.474	€ 16.387.424	€ 23.787.001	€ 29.337.809	€ 32.007.783
	105,0%	84,2%	70,9%	71,6%	70,2%	68,3%
Direct Cost related to Own Fleet	€ 0	€ 0	€ 0	€ 0	€ 0	€ 0
Direct cost related to Outsourced Fleet	€ 447.638	€ 4.569.474	€ 16.387.424	€ 23.787.001	€ 29.337.809	€ 32.007.783
Gross Margin	-€ 21.211	€ 858.254	€ 6.733.126	€ 9.433.397	€ 12.456.909	€ 14.876.983
% in revenue	-5,0%	15,8%	29,1%	28,4%	29,8%	31,7%

2015	2016	2017	2018	2019	2020
100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
115,1%	115,3%	115,4%	115,5%	115,5%	115,6%
74,8%	68,0%	61,2%	52,0%	43,9%	35,8%
0,0%	1,2%	2,3%	4,6%	5,8%	6,9%
28,8%	26,5%	24,2%	23,1%	22,0%	20,8%
5,8%	8,1%	10,4%	12,7%	15,0%	17,3%
5,8%	11,5%	17,3%	23,1%	28,9%	34,7%
15,8%	16,0%	16,1%	16,2%	16,2%	16,3%
0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
105,0%	84,2%	70,9%	71,6%	70,2%	68,3%
0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
-5,0%	15,8%	29,1%	28,4%	29,8%	31,7%

	2014	2015	2016	2017	2018
Promotion Expenses	\$ 20.950	\$ 317.020	\$ 562.000	\$ 850.000	\$ 1.184.000
Marketing (related to B2B, Business Development)	\$ 7.950	\$ 66.000	\$ 110.000	\$ 154.000	\$ 174.000
#1 Events	\$ -	\$ 36.000	\$ 66.000	\$ 92.000	\$ 112.000
#2 Print material	\$ 1.000	\$ 6.000	\$ 6.000	\$ 6.000	\$ 6.000
#3 Travel expenses	\$ 5.000	\$ 8.000	\$ 8.000	\$ 16.000	\$ 16.000
#4 Business Development	\$ -	\$ 12.000	\$ 24.000	\$ 32.000	\$ 32.000
#5 Video	\$ 1.950	\$ 2.000	\$ 4.000	\$ 4.000	\$ 4.000
#6 Co-Branding & Tools	\$ -	\$ 2.000	\$ 2.000	\$ 4.000	\$ 4.000
Promotion expenses (related to End Clients)	\$ 13.000	\$ 251.020	\$ 452.000	\$ 696.000	\$ 1.010.000
Channel #1 Facebook	\$ 3.000	\$ 54.000	\$ 108.000	\$ 180.000	\$ 216.000
Channel #2 Display (Google)	\$ 3.000	\$ 48.000	\$ 84.000	\$ 120.000	\$ 180.000
Channel #3 Adwards	\$ 3.000	\$ 42.000	\$ 72.000	\$ 108.000	\$ 180.000
Channel #4 Retargeting	\$ 3.000	\$ 36.000	\$ 66.000	\$ 102.000	\$ 144.000
Channel #5 Youtube	\$ -	\$ 12.000	\$ 42.000	\$ 78.000	\$ 120.000
Channel #7 Twitter	\$ 1.000	\$ 9.000	\$ 36.000	\$ 48.000	\$ 84.000
Channel #8 PR	\$ -	\$ 22.020	\$ 10.000	\$ 20.000	\$ 40.000
Channel #9 Pinterest	\$ -	\$ 6.000	\$ 9.000	\$ 12.000	\$ 15.000
Channel #10 Instagram & Snapchat	\$ -	\$ 6.000	\$ 9.000	\$ 12.000	\$ 15.000
Channel #11 Own products for promotion	\$ -	\$ 16.000	\$ 16.000	\$ 16.000	\$ 16.000

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EBITDA	-	111.523 €	-	13.906 €	274.311 €	523.799 €	957.982 €
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<i>96 in revenue</i>		-408%		-4%	34%	43%	53%
CAPEX	-	9.600 €	-	8.200 €	4.500 €	10.800 €	7.200 €
Investment in NWC		4.691 €		7.063 €	6.580 €	5.071 €	5.919 €
NWC	-	4.691 €	-	11.754 €	18.335 €	23.405 €	29.324 €
Free Cash Flow	-	116.432 €	-	10.352 €	288.145 €	536.405 €	980.107 €

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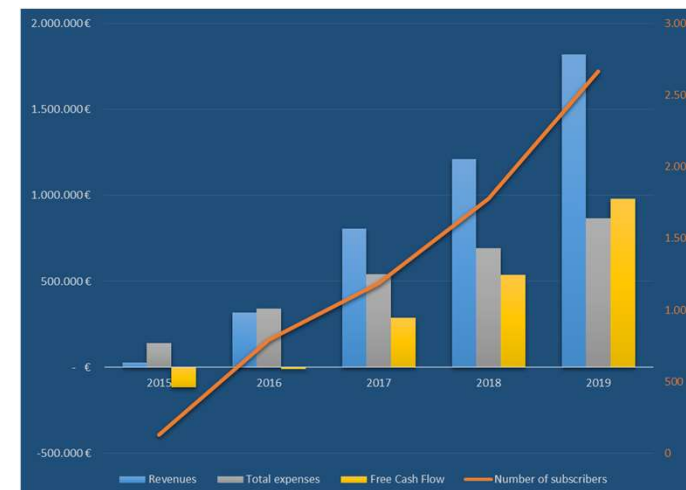
Investment (Equity)		120.000 €		30.000 €	- €	- €	- €
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Cash Flow after Investment		3.568 €		19.648 €	288.145 €	536.405 €	980.107 €
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PURPOSE OF ADDITIONAL FINANCING	€ 150.000	
marketing & sales	€ 57.433	38%
development team & expenses	€ 39.600	26%
other	€ 52.967	35%

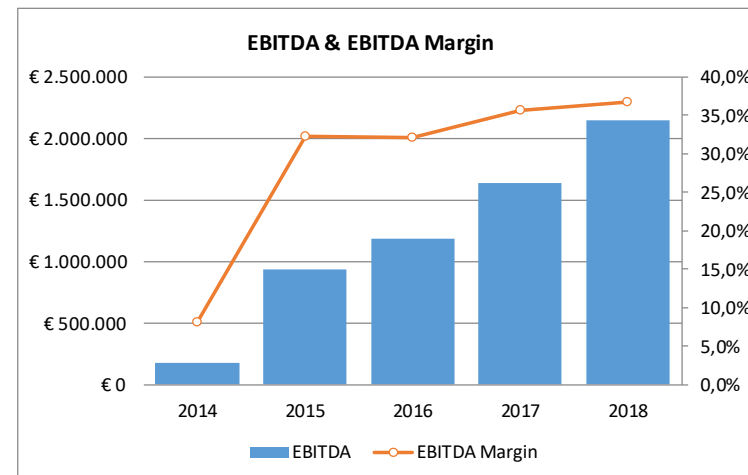
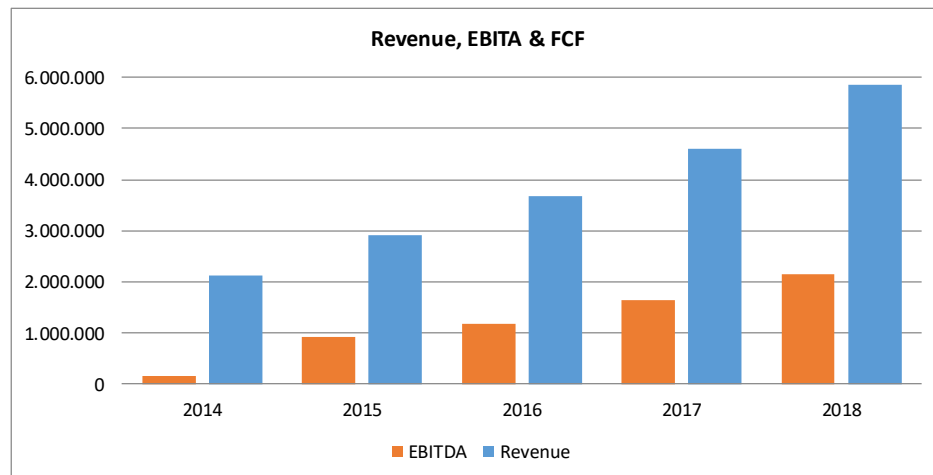
A Summary View

	2015	2016	2017	2018	2019
Revenues <i>revenue growth</i>	27.330 €	319.380 € 1069%	808.020 € 153%	1.212.030 € 50%	1.818.045 € 50%
EBITDA <i>EBITDA Margin</i>	- 111.523 € -408%	- 13.906 € -4%	274.311 € 34%	523.799 € 43%	957.982 € 53%
FCF	- 116.432 €	- 10.352 €	288.145 €	536.405 €	980.107 €
Sales per employee	7.809 €	39.923 €	75.516 €	89.780 €	113.628 €
Employees	3,5	8,0	10,7	13,5	16,0
Number of subscribers	130	790	1.185	1.778	2.666
CAC	305,4 €	106,5 €	197,7 €	151,4 €	120,7 €



Summary

	2014	2015	2016	2017	2018
Revenue	€ 2.137.863	€ 2.905.334	€ 3.676.074	€ 4.595.093	€ 5.843.866
Revenue growth	185%	36%	27%	25%	27%
EBITDA	€ 172.350	€ 934.810	€ 1.182.400	€ 1.634.496	€ 2.144.238
EBITDA margin	8,1%	32,2%	32,2%	35,6%	36,7%
Employees	19	30	45	48	60



Be realistic!

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“Display the sales projections with day-glo colors and a backlight. It will give the illusion that our future is bright.”

- *„we will acquire 5% share in EU in 3 years...”*
- *„we will grow our business one country per year...”*
- *„Based on the past experience our CAC will only decrease in time“*
- *„By January 2016 we will employ 3 new sales representatives...”*
- *„Our new office will start operating in March 2016 and will grow from 3 to 6 people by the end of the year..“*
- *„due to uniqueness of our solution we will negotiate a better price...”*
- *„We will acquire registration by the end of the year..“*
- Growth abroad is not as growth at home
- Does your business model require sales people or can you sell solutions online?
- How defensible is your competitive advantage?
- How many competitors are out there competing with you?
- Count on realistic barriers or cost of market entry
- Follow stories from your competitors
- Follow experience from similar businesses

Most Common Mistakes

- Not having current and accurate data
- Not having enough historical data to predict future trends
- Lack of variance analysis against actual figures
- Forgetting seasonal and cyclical trend adjustments
- Lack of market research



Most Common Mistakes

- Building your plan once and for third purpose only
- Wishful thinking
- Hockey stick projections
- No sanity check
- Vague assumptions
- Forgetting or underestimating certain areas (working capital, tax liabilities)



A bull and a bear figurine are positioned on a financial chart. The bull is on the left, and the bear is on the right. The chart shows a line graph with a downward trend. The text "Share Price" is visible on the chart. An orange horizontal bar is located in the top left corner.

Investments

The background of the slide is a dark blue digital interface. It features a grid of hexagonal tiles, each containing a white icon. The icons include gears, a lightbulb, a Wi-Fi signal, crossed wrench and screwdriver, a person riding a bicycle, a brain with gears, a person sitting at a desk, a circuit board, a microscope, a truck, and a person riding a motorcycle. A hand is visible on the right side, pointing at a tile that contains the text '4.0'.

Why do we invest?

- Growth of Business
- Automatization
- Future Cost Reduction
- To avoid uncertainty in the future

- To have more in the future than we have now
- Growth of the cash flow



Investment Evaluation

- Comparing more possible investments or more investment Scenarios
- Investments mean future and uncertainty
- Risk
- Different time distance mean different risk
- Different personal view on Risk

Methods

- **Net present value:** method that recalculates all cash flows of a project to present value
 - When $NPV > 0$ investment makes sense
 - Cost of capital
 - [NPV = Net Present Value]
- **Internal Rate of Return:** cost of capital/discount rate at which NPV is zero
 - Investment makes sense when $IRR >$ internal rate of the company for every project
 - [IRR = Internal Rate of Return]
- **Payback Time:** period in which the investment amount returns

$$NPV = I_0 + \frac{I_1}{1+r} + \frac{I_2}{(1+r)^2} + \dots + \frac{I_n}{(1+r)^n}$$

Investment Evaluation

Example:

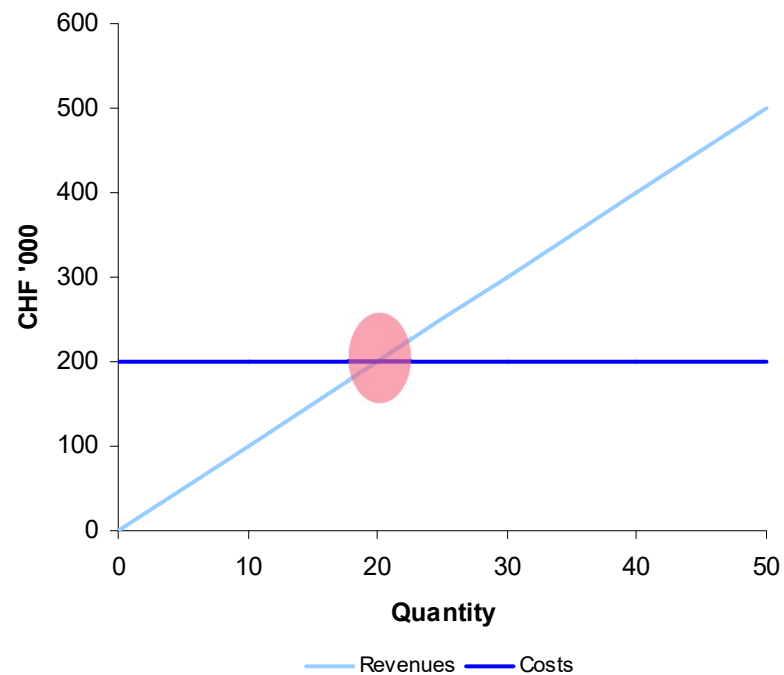
- Investment in new plant with 3 years lifetime
- Investment value 20 mio

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
investment	-20			
revenue		+15	+15	+15
costs		-5	-5	-5
net cash flow	-20	+10	+10	+10

- Should we invest? (Cost of capital 10%)

Breakeven point vs. Payback point

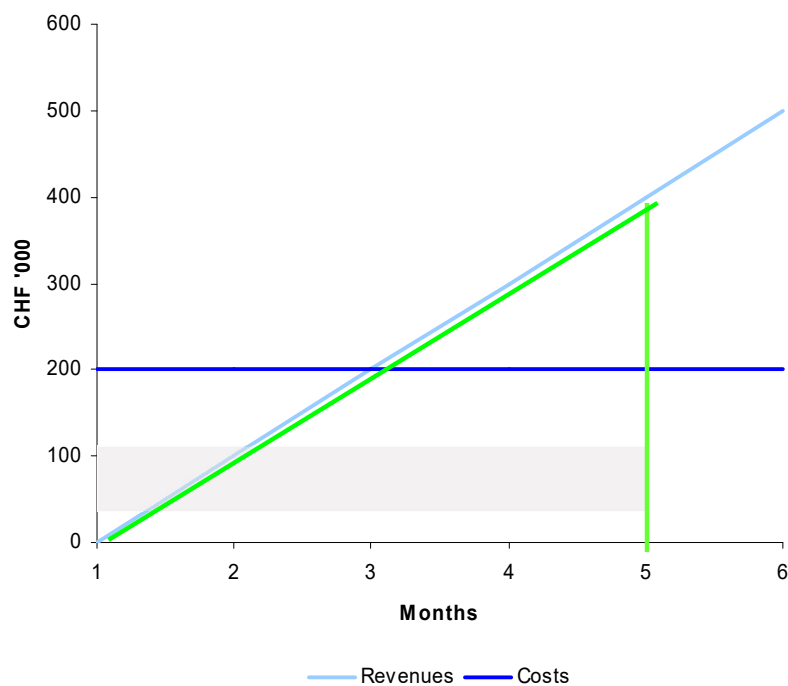
Quantity	0	10	20	30	40	50
Revenues	0	100	200	300	400	500
Costs	200	200	200	200	200	200



- Where is the breakeven point?
- When we sell 20 units
(Costs = Revenues)

Breakeven point vs. Payback point

Months	1	2	3	4	5	6	Total
Revenues	0	100	200	300	400	500	1500
Costs	200	200	200	200	200	200	1200



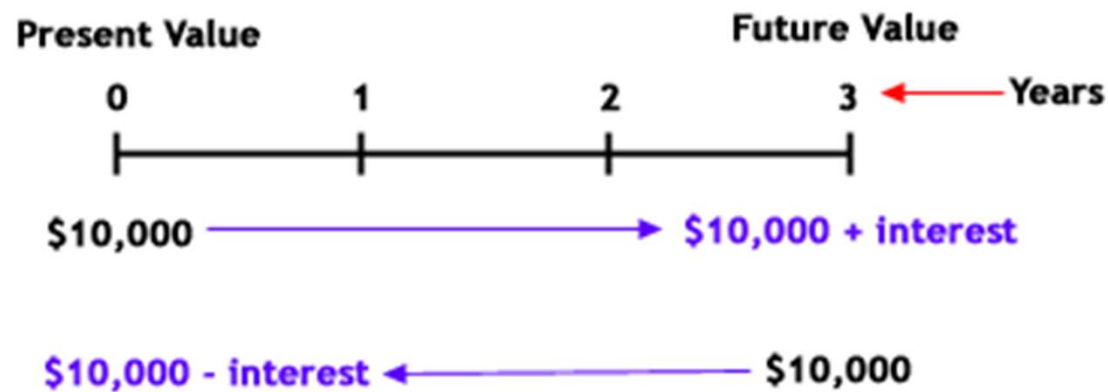
- Where is the payback point?
- in Month 5
(Accum. Revenues = Accum. Costs)
(0+100+200+300+400 = 200 X 5)

Time Value of Money

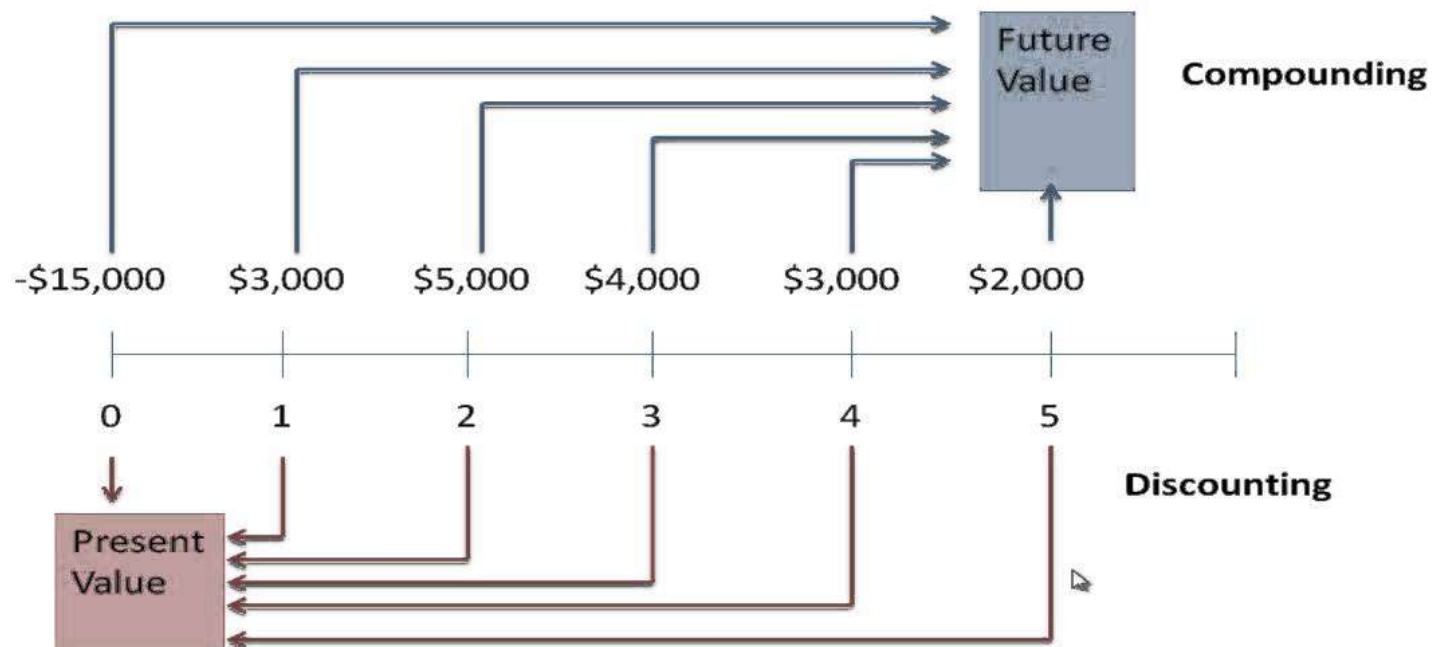


$$FV = PV(1+I)^N$$

FV = future value
 PV = present value
 I = interest
 N = number of periods

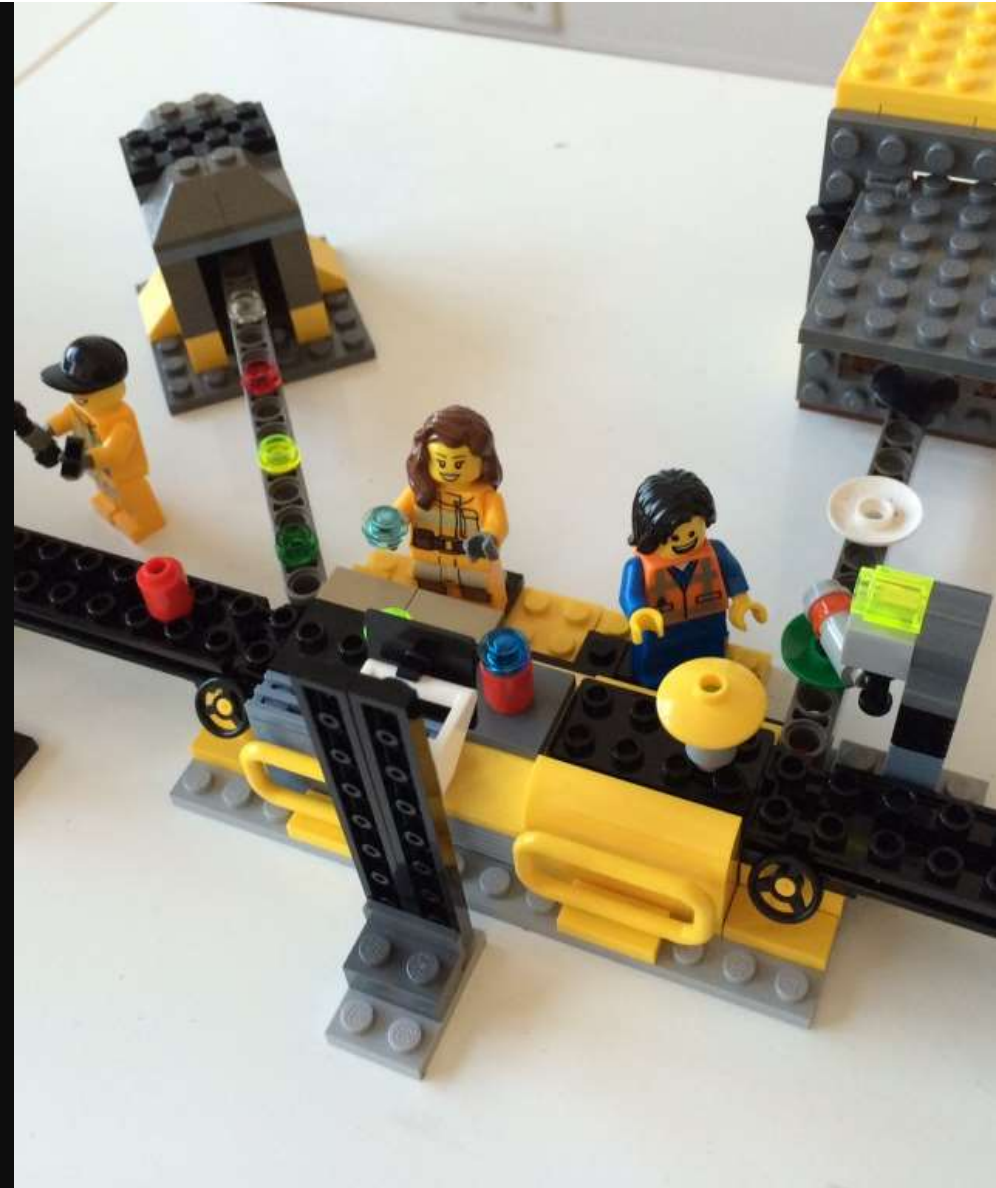


Present and Future Value



What elements should be included in Investment Evaluation?

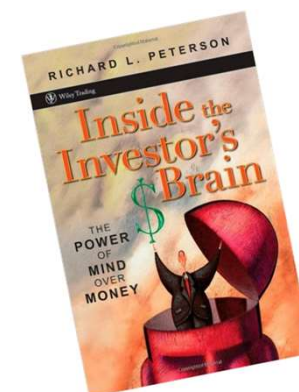
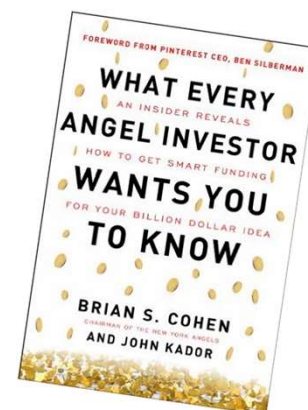
- Revenues or Inflows?
 - Expenses or Outflows?
 - Investment or also Working Capital?
 - How do I take into account Risk?
 - Where do I get discount rate / cost of capital?
-



What if we are the investment?



- Investor's View
- Expectation and Measurement
- Freedom and Money
- Plan and Actual results





Thank you!

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