



# Mind Shaker Meeting Financial needs and valuation

June 2015  
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# Our mindshaker meeting



1. Team building
2. Reconsider your business plan
3. Economic and financial forecasts

## **4. Financial Needs and valuation**

5. Operations & milestones
6. Lean start up
7. Reconsider your strategy
8. Market strategy
9. Investors and execution of the deal
10. elevator pitch day

## Valuation :

- **Source of financing: Debt or equity**
- **Valuation : Brief overview on the most common methodologies**
- **How to value a start up company**
- **Investing in start up : what investors want**

Recap from our previous lessons :

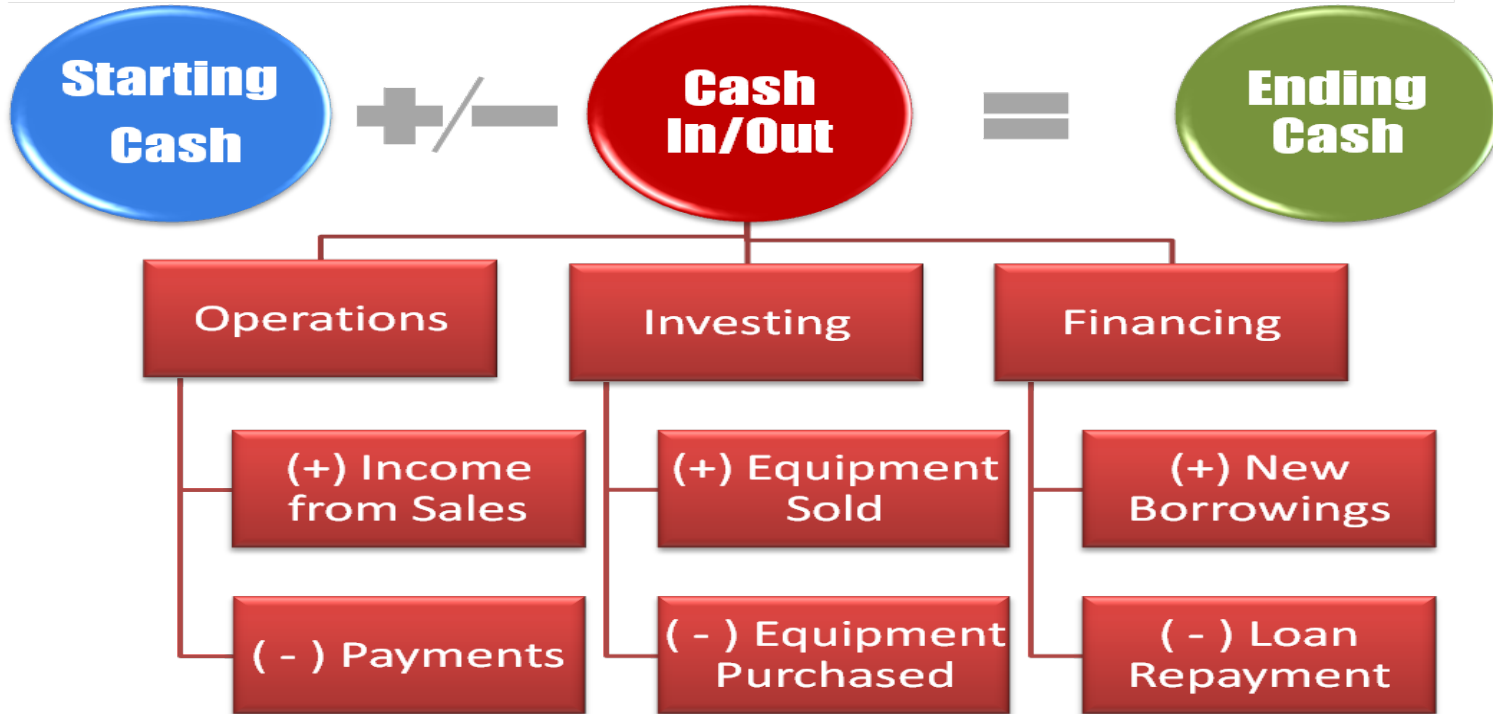
## **Cash Flow statement**

# Financial needs and valuation



- + net profit (-net losses)
- + depreciation and amortization
- + other non cash items (i.e. provisions)
- +/- Change in working capital (negative if it increases)
- capex and investments
- = cash flow from operating activities**
  
- dividend payment
- + disinvestments
- + equity financing (capital injection)
- = cash flow of the period or change in net financial position**

## Cash Flow Statement



## Financial needs

- The net cash burned by operating activities until the company becomes cash positive
- Maximum cash flow requirement in the first years of the start up
- maximum net debt evolution without capital injections
- ... or to make it easy for a start up : total costs and total investments assuming zero revenues in the first couple of years

# Financial needs and valuation



## Use of funds

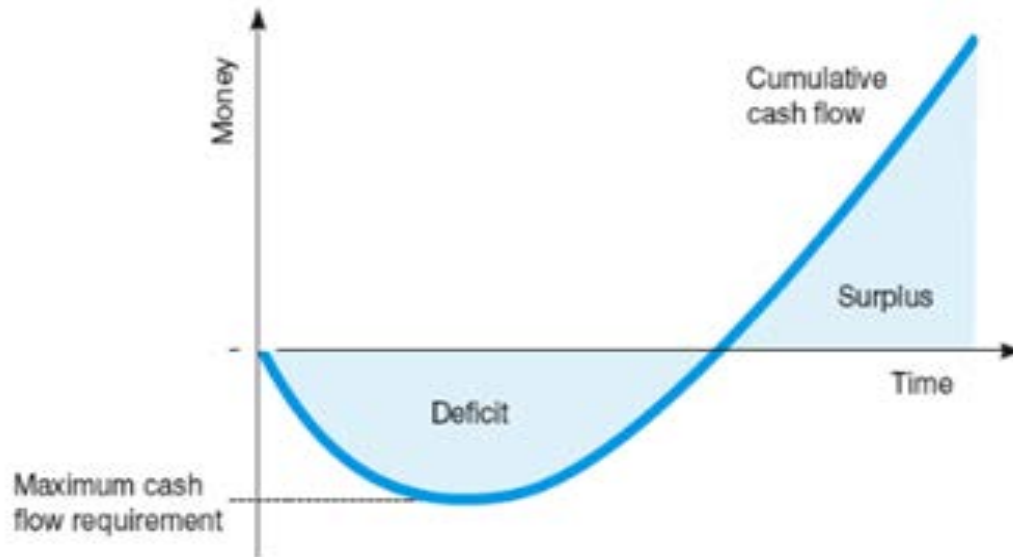
- Detailed list of the total costs and total investments for the launching and development of the start up in the first 2/3 years
- Detailed list of costs and investments required for the operating activities until the company reach its break even

## Source of financing

- The debt financing to cover total costs and investments
- or
- The capital injection to cover net financial debts
- or
- A mix of debt and equity financing



## Financial needs



## Financial needs and source of financing

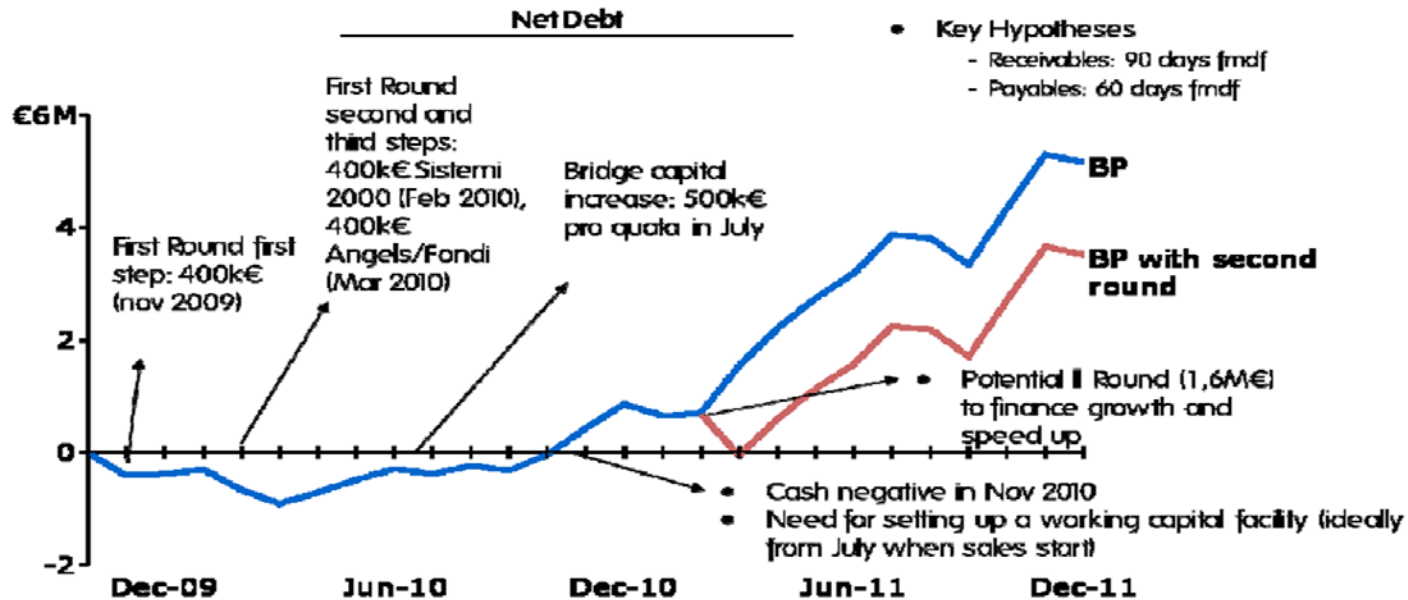
### How to write estimates

1. State the Net cash flow trend for the first years
2. Calculate Net Financial position evolution focusing on the first 2/3 years
3. Calculate the maximum level of net debt
4. focus on source of financing

### What investors want

1. Financial needs assuming zero revenues for the first 2 years
2. High visibility on use of funds
3. High visibility on source of financing
4. Net debt vs. net equity

## Financial Needs and coverage



## Financial Needs and coverage

### Financial needs : 500.000 euro

In the 2012-2013 period the company will increase/improve the products , will develop the commercial network and will enter in new markets . For these activities the financial needs are around 500k euros. The investments and costs expected for the next two years are as follow:

- 1- Start up of the company, the product and initial commercial development: self-financing of the management team (100k euro);
- 2- Development of the product, its evolutions and investments in IT: 150k euro
- 3- Time to market : commercial development and marketing costs, : 100k euro
- 4- Labour costs : 150k euro
- 5- Other Fixed costs : 100k euro

### Coverage of the Financial needs

- 1- Self Financing 100k euro from the management team (already done)
- 2- First Round of financing: 500k euro from new partners (private or industrial investors) (June 2012):
- 3- Debt/Banks Financing : 100k thanks to contract with banks of other financial structure (already done) ;
- 4- From 2013 and for potential International development: operating cash flow + potential Second round of financing from VC.

## Source of financing

### DEBT

1. Very clear and stable activity
2. Strong investment in tangible assets
3. future cash flow with high visibility
4. New investments for existing company
5. Debt is a burden: interest and debt to be repaid

or

### EQUITY

1. Start up
2. High risks investment
3. High intangible assets
4. Sectors with growth rate but low visibility
5. Equity investors accept higher risks

## Source of financing

### **The answer is EQUITY !**

Your are forced to look for equity to attract risk investors and to develop your company

You can get the financing in exchange of stake of your company

you know the capital needs...

....but your don't know the stake of your company to be sold

**now you need to value your start up company !**

# Valuation :

brief overview on the most  
common methodologies

## How to value a company

- **Valuation based on restated assets and liabilities (NAV)**
- **Valuation based on balance sheet and income statement**
- **Valuation based on market multiples or on comparison of m&a deals (Peers)**
- **Valuation based on cash flows (DFC)**



# Financial needs and valuation



Valuation based on restated assets and liabilities balance sheet (NAV)

**Value of the company = NAV (Net asset value) = restated value of the assets - restated value of liabilities**

**Positive** → easy to calculate and based on official values of the financial reports

**Negative** → does not consider the future prospects of the company

**Sectors** → Typically used for real estates companies or, in smaller extent, for insurance companies. Sectors where the value of the company is more evident in the mkt value of the assets and liabilities

**WHY THIS IS NOT FOR YOU??**

# Financial needs and valuation



Valuation based on balance sheet and income statement

**Value of the company = Restated book value + added value based on extra profit expected**  
or

**Value of the company = Capital Employed \* normalized ROCE / Wacc**

**Positive** → very accurate as it is based on official balance sheet and it takes into account the future prospect of the company

**Negative** → hard to calculate as it requires knowledge of details of the company; too much dependency on the normalized values

**Sectors** → Typically used for banks, where it is easier to find normalized values

**WHY THIS IS NOT FOR YOU??**

# Financial needs and valuation



Valuation based on market multiples or on comparison of m&a deals

**Value of the company = profit x multiple based on stock market or m&a deals**

**Positive** → based on real deals or stock market; very objective

**Negative** → hard to used for small companies or innovative start up due to lack of comparable ; too simplistic

**Sectors** → Typically used for industrial and consumer companies; sectors with high competition and companies similar to each others (i.e auto; food&beverage, etc.)

# Financial needs and valuation



Valuation based on cash flows

**Value of the company = actualized cash flow expected for the near future + terminal value**

**Positive** → valuation totally based on future prospects, strong focus on cash flows

**Negative** → Terminal value and wacc are extremely important...and subject to manipulation

**Sectors** → Typically used for utilities companies and for high growth companies. Utilities sectors have high visibility on future cash flows; fair values in high growth sectors are based on long term cash flows.

## Valuation :

How to value a start up company

## Valuation of a start up company:

Most common methodologies to value a start up company:

- Peers
- DCF
- Start up Assets (cash vs. Idea&work)

## 1. Peers valuation

### How to make valuation

1. Find the most comparable companies
2. Find the market or the M&A multiples based on current or next year figures
3. Apply the peers multiples to your company's normalized forecasts (typically 4<sup>th</sup> or 5<sup>th</sup> year)
4. Calculate the fair value based on average of mkt multiples

### What investors want

1. Clear idea of peers and comparables
2. Market or M&A multiples based on external sources
3. Reasons to justify the year of forecasts to which multiples have to applied

# Financial needs and valuation



## Peer comparison

A- PE	Price / Earnings (or Net profit)
B- Ev/Sales :	Enterprise Value (or equity value + net debt) / Sales
C- Ev/Ebitda	Enterprise Value (or equity value + net debt) / Ebitda
D- Ev/Ebit	Enterprise Value (or equity value + net debt) / ebit

### Company's value

- E- Net sales
- F- EBITDA
- G- EBIT
- H- net profit
- I- Net cash (debt)
- L- Enterprise Value

### Company's valuation

M -Fair valuation on PE	A*H	
N -Fair valuation on Ev/Sales		(B*E )-I
O - Fair valuation on Ev/Ebitda		(C*E )-I
P- Fair valuation on Ev/Ebit	(D*E )-I	
Company's valuation :	Average (+M+N+O+P)	



## 2. DCF valuation (3 main difficulties, in BOLD)

### How to make valuation

1. Free cash flow estimates for at least 5 years
2. Wacc based on capital structure with zero debt
3. Risk premium in line with risk and visibility
4. **Terminal growth in line with long term prospects**
5. **Terminal value based on the last year of forecast**
6. Terminal value based on normalized capex

### What investors want

1. Clear and well described free cash flow estimates
2. Capex and working capital consistent with growth
3. **Risk premium for start up company at least 15%**
4. Terminal growth above economic trend, typically above 5%

## Discounted Cash Flow (DCF) Formula

$$= \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n}$$

CF = Cash Flow

r = Discount Rate (WACC)

n = Time in Years

# Financial needs and valuation



DCF: how it works

A- Operating profit (Ebit)

B- tax rate

C- tax charges

(A\*B)

D- Depreciation & Amortization

E- Change in Working Capital

F- Capex

**G- Free Cash Flow**

**(A-C+D-E-F)**

H- WACC

I- Number of years after current year

L- Discounting factor  $(1/(1+WACC))^n$  n. of year  $G/(1+H)^I$

**M - Actualized Value**

**(G\*L)**

# Financial needs and valuation



## DCF: how it works

<b>A- Actual Value Free Cash Flow</b> (Sum of the actualized free cash flows , 5 years period)	
B- Last year Free cash flow	
C - WACC	
D- Terminal growth (basic assumptions)	
E- Terminal Value	$B/(C-D)$
F- Discounting factor of terminal value	
<b>G- Actual Terminal Value</b>	$E * F$
<b>H- Total Enterprise Fair Value</b>	$A+G$
I- net cash (debt) at current year-end	
L – other assets/liabilities (or minority stakes)	
<b>M - Total equity fair value</b>	$H+I+L$

## Valuation of a start up company: overview

- Don't be greedy and look for financial partners for the long term and not just financial investors for the short term
- Risk and rewards must be shared in a proper way
- Company valuation must be in line with its developing phase and with the market and company prospects
- Company valuation must be in line with its peers based on recent M&A deals and stock market multiples
- A proper and fair valuation can positively affect future rounds of financing
- Don't forget financial investors will also look for a credible and proper exit strategy.

**Valuation:**  
what investors want:



$$IRR = \left( \frac{FV}{PV} \right)^{\frac{1}{n}} - 1$$

## Valuation of a start up company: investors want IRR !

IRR for the start up investors is based on three main figures :

- PV (Present value) : start up value at year zero
- FV (Future value) : valuation when investor sell its stake
- n (Time horizon) : number of years of the investment

Investment decision in start up company are based on IRR (Internal Rate of Return)

Investors always compare start up value with potential exit value

Start up investors ask for higher IRR to match the higher risk

....lower visibility requires higher returns



# Financial needs and valuation



## Case study

PV (Present value) : \$900

FV (Future value) : \$ 3,000

n (Time horizon) : 8 years

$$\begin{aligned} IRR_{\theta} &= \left( \frac{FV}{PV} \right)^{\frac{1}{n}} - 1 \\ &= \left( \frac{\$3,000}{\$900} \right)^{\frac{1}{8}} - 1 \\ &= 0.1624 \\ &= 16.24\% \end{aligned}$$

## Investment valuation

<u>Period</u>	<u>Roud of financing</u>	<u>Valuation methodology</u>
1. Year zero	<b>1. Seed money</b>	<ul style="list-style-type: none"><li>– Focus on your financial needs</li><li>– Focus on stake for investors</li></ul>
2. Year five	<b>2. Exit of investors</b>	<ul style="list-style-type: none"><li>– Fair Value based on Peers</li><li>– Fair value based on DCF</li></ul>

## Investment valuation

- Period
1. Year zero : Valuation Seed money = A (assumption: 1 mln eu)
  2. Year five : Valuation Exit of investors = B (assumption : 10 mln eu)
  3. Calculate IRR (Internal Rate of Return) :  $B/A$  for 5 years  
....in our case is almost 60%

VENTURE CAPITAL AND BUSINESS ANGELS LOOK FOR START UP WITH  
IRR > 30% !

## Investment valuation : case study

### Start up Valuation

Equity valuation based on dcf	1.000.000
VC stake	40%
VC capital invested	400.000

### Trade sale after 5 years

Valuation based on peers	10.000.000
VC inflow from sale	4.000.000
Payback period	5

Expected IRR	58,49%
Cash Multiplier	10,00

# Financial needs and valuation



Financial needs  
Stake for investors



PRESENT VALUE  
(seed money)

Valuation based on peers  
Valuation based on DCF



FUTURE VALUE (exit)

IRR



Required Return for investors

Valuation of a start up company: Let's put everything together

## Step 1 :Valuation based on DCF

Based on growth company with very low visibility assumptions:  
wacc with risk premium  $>15\%$  ; terminal growth  $>4\%$

## Step 2 :Valuation based on peers

based on 5th year of estimates for **your company** and multiplier  
based on current year of estimates for **your peers**

## Step 3 : Future value (exit for investors)

average of fair values based on DCF and peers

## **Step 4 :Financial needs**

Capital required to finance the first  $2/3$  years of your start up

## **Step 5 :Stake for investors**

% of capital to be sold to investors to get the capital required

## **Step 6 : Present value (seed money)**

Post money valuation : The valuation of a company immediately after the round of financing

## **Step 7 :IRR**

Calculate the return for the investors based on Present value, Future value and 5 years of investment period

## **Step 8 :IRR vs Required Return**

Compare IRR vs. the required return for investors investing in start up company

## **Step 9 : Investment decision: invest in start up?**

YES : If IRR is above Required Return;

NO : If IRR is below Required Return...

... rethink your present value



## Valuation of a start up company: last check for your present value

**Present value : seed money valuation based on start up assets**

**Total value of the start up company =  
+ book value (or capital injected by investors)  
+ goodwill (founders contribution)**

- based on assets from founders and assets from investors
- Asset from founders : goodwill : work and idea
- Assets from investors : capital injected
- Based on Correlation between founders idea and work (or total goodwill) vs. Cash injected

## Present value : seed money valuation based on start up assets

### How to make valuation

1. Assets are : idea + work + cash
2. Value of the company = cash + goodwill
3. Cash = Book value = capital injected by (investors
4. Goodwill = work already done (or to be develop in the future) by the founders + value of the idea
5. Valuation of the idea should represent around 50%/70% of the goodwill (what investors typically ask for)

## **Pre - Money Valuation : founders asset**

The valuation of a company prior to a round of investment. This amount is determined by considering both work and idea valuation from founders.

## **Cash injected : investors assets**

The investment event with the capital transferred in the start up in exchange for company stake.

## **Post - Money Valuation : total value**

The valuation of a company immediately after the capital increase or the round of financing.

## Check your valuation (present value or seed money)

- 1) Present Value = Post - Money Valuation : total value
- 2) investor asset= Financial needs = cash injected
- 3) Investor stake = Cash injected as % of total value
- 4) Founders asset = total value – cash injected
- 5) Founders stake = founders assets as % of totale value
- 6) value of the idea = Founders asset - work contributed
- 7) Idea in % = value of the idea / founders asset

## A typical case study for start up companies

- **Closing : founders : 66%, investors: 33%**  
Shareholders' structure after the deal
- **Pre - Money Valuation : 800k**  
The valuation of a company prior to a round of investment
- **Book Value or Capital increase : 400k**  
Round of financing apportioned by the financial investors
- **Post - Money Valuation : 1.200k**  
The valuation of a company immediately after the capital increase or the round of financing.

# Financial needs and valuation



- Total value of the start up company = book value (or cash injected by fin. investors) + goodwill (mgmt)
- i.e. Total value (1200k) = book value (400k) + goodwill (800k)
- i.e. Shareholder structure : founders = 66%; financial investors = 33%
- Goodwill = work + idea of the founders
- Idea : ??? , very hard to value but let's assume 50% of the goodwill
- Work : the reaming 50% of the goodwill.....therefore 400k
- That's to say, the founders will have to work with zero / limited salary for (typically) 24 months
- Assuming a normal wage of 50k per year for the 4 founders....
- ...400k of goodwill means 2 years with zero salary

...is it fair?

# The world of investors

1. Where to raise new funds:  
who are the investors

# Start up and investors



*A - Seed money from family and friends (and incubators)*

*B - Business angels or private investors: Capital increase reserve to new shareholders*

*C - Private equity or Venture Capital funds*

*D - Fresh money from extraordinary deals (m&a) with other companies*

*E - Going public: listing in the stock market*

*... but the early stage company needs more then just money ....*



# Start up and investors



## *A: Seed money from family and friends (and incubators)*

The entrepreneur inject fresh money in the company helped by his family and friends (or incubators)

### **POSITIVE**

- Very easy and fast, with no needs to build business plan or discuss with other investors
- Corporate governance and controlling structure speed up strategic decision

### **NEGATIVE**

- Financial resource extremely limited
- Extremely high exposure of the entrepreneur on his business activity
- lack of new competences and expertise
- risk of slow down in growth due to the limited financial and professional resources

## *B: Business angels or private investors: Capital increase reserve to new shareholders*

Selling minorities stake of the company to new partners

### **POSITIVE**

- Fresh money and new expertise in the company
- New professionals easy to integrate within the management team of the company
- Looking at History, investors with entrepreneurial experience succeed on investing in start up/early stage company also thanks to their support in the developing of the business
- Flexibility and speed in the investment decision by the new partner

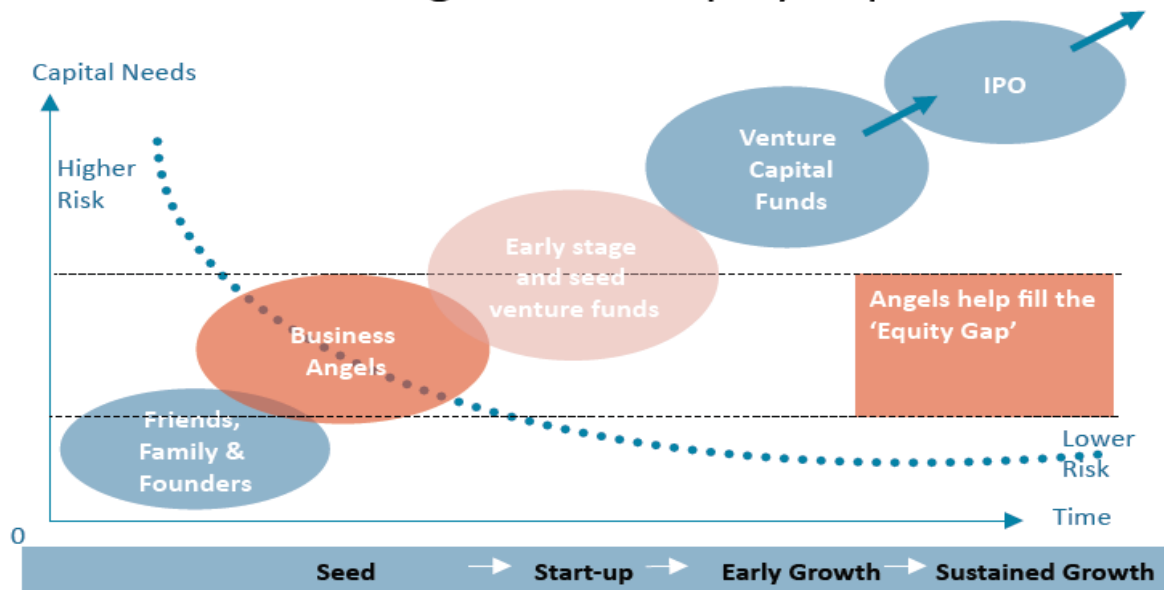
### **NEGATIVE**

- New corporate governance and new controlling structure in the company
- Rather limited capital injection

## The world of investors

2. Different investors for different stages of the company

## Business Angels fill the Equity Gap



# Start up and investors



**New funds from new partners : different amounts during the different stages of the life cycle of the company**

- **Seed**
  - In the early stage focus is on product and market analysis and Incubators can help the company in the very early stage.
  - Money comes from private investors
- **Start up**
  - After the start up focus moves on time to market, commercial and marketing strategy.
  - Money comes from group of investors or professional investors.
- **Early growth and sustained growth**
  - During the expansion focus is on revenues, commercial development and new markets (and don't forget innovation).
  - Venture Capital or Private Equity funds first and IPO later can support the expansion stage of the company.

# Start up and investors

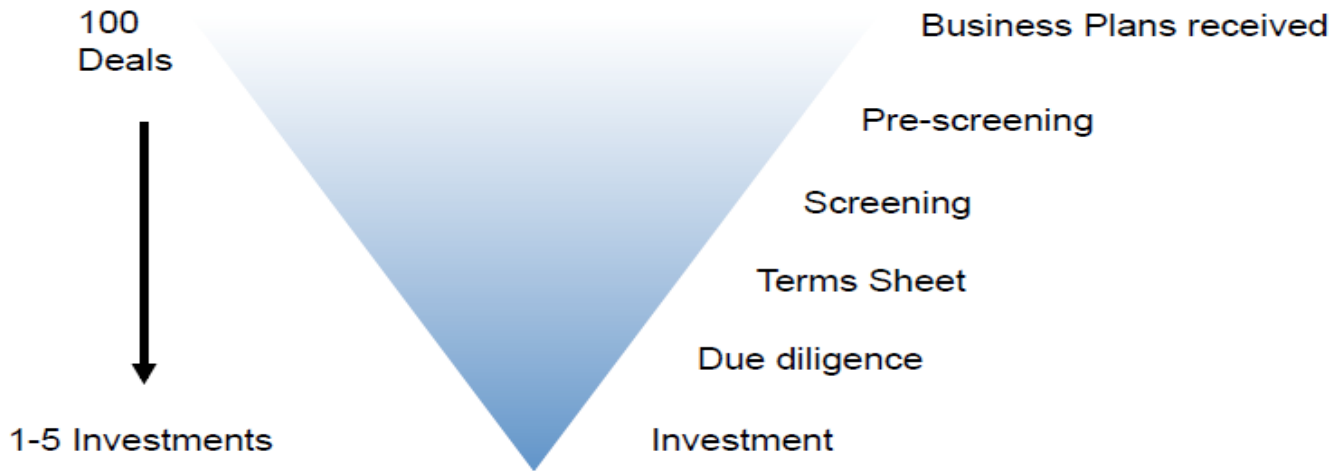


- **Friends & Family – € 20k / 50k – “Seed Capital”**
  - Very early stage
  - Investors close to the entrepreneur
  - Incubators
- **Business Angels / Private investors – € 30k / 1.000 k for single investment– “Startup Capital” and early stage “Expansion Capital”**
  - semi-professional (mainly former entrepreneur, manager, financial or business consultants) investors driven by the quality of the idea or the management team
  - Group of business angels operating as part of syndicates.
- **Venture Capital – € 1.000k / 5.000 k per single investment – “Expansion Capital”:**
  - Funds (VC or PE) focusing on innovative and growth companies
  - Backed by institutional investors or banks

## The world of investors

### 3. Investing in start up companies : how it happens

# Start up and investors



Source: EBAN Research Committee





## Business angel network and professional investors : how they invest in start up company

### 1. Pre-screening

An internal team analyze and makes a pre-selection of the deals...

### 2. Screening

The business angels / partners select the best ideas and collect the investment propositions...

### 3. Term sheet and corporate governance / exit strategy

Business angels play an important role in writing a new corporate governance; focus on valuation and exit strategy.

### 4. Due diligence

Business angels and consultants make in depth analysis of the company and of the product/ markets

### 5. Execution of the investment

after the *due diligence* the partners of the network collect and invest their money in the company through a dedicated vehicle (closing of the deal )

# Start up and investors



## Investment analysis in early stage company : **PRE- SCREENING**

Reading of the Executive summary, focusing on :

- is the idea really innovative ?
- is the market really growing / has strong growth potential ?
- is the business model scalable ?
- is the company / product in line with own investment philosophy?
- Categories of investors :
  - a) growth investors
  - b) technology/innovative investors
  - c) value investors
  - d) turn around investors
  - e) sector theme investors (digital, alternative energy, ....)

## Investment analysis in early stage company : **SCREENING**

- Very careful Reading of the Business plan
- Meeting with the management
- Analysis of the business idea with the help of sector experts
- Analysis of the management team, its background and its commitment
- Sensitivity analysis of the future prospects
- What if analysis, assuming different assumptions on market growth, volumes and revenues focusing on cash burn
- Weakness and potential action to improve the company's structure and mgmt team
- Corporate governance and Exit strategy : first considerations

# Start up and investors



## Investment analysis in early stage company : **TERM SHEET AND CORPORATE GOVERNANCE**

- Focus on valuation methodology, work/experience already brought in the company by the management , goodwill
- Focus on the structure of the deal
- Focus on legal issues related to the deal
- Focus on valuation and exit strategy
- Focus on shareholder structure after the deal
  - (stake for mgmt. team vs. stake for financial investors)
- Corporate Governance : focus on control and power pertaining to financial investors
- Focus on costs related to the mgmt team: wages, incentives and lock up agreements

# Start up and investors



## Investment analysis in early stage company : **DUE DILIGENCE**

- Several Meetings with all the management team and other partners
- Meeting (together with the mgmt. ) with potential / actual supplier and clients
- In depth analysis of the annual financial reports or the start up program (focusing on legal company, stated book value, financial position , other asset)
- In depth analysis of the product/services , the technology innovation and the intellectual property
- In depth analysis of the reference market and the customers needs
- In depth analysis of the competitors
- In depth analysis of the cost structure
- In depth analysis of the economics and future prospects
- In depth analysis of cash flow and financial needs

# Start up and investors



Investment analysis in early stage company : **EXECUTION OF THE INVESTMENT DEAL**

- Cash to be invested , valuation of the company ---> stake sold to investors
  - Corporate governance : legal shareholders' agreement
  - Execution of the deal with the help of legal experts
  - Exit strategy
- 
- .... and now we go , keeping in mind what investors want!!!
    - Stake in the company : from 20 to 49%
    - Corporate Governance : a seat in the BOD with some veto power
    - Return from investment : at least 30% per year
    - Valuation : Correlation between goodwill and founders wages
    - Exit strategy : clear finish line before starting