

DTU Master 2010 e'ship class  
7. lecture, Monday 11 October 2010

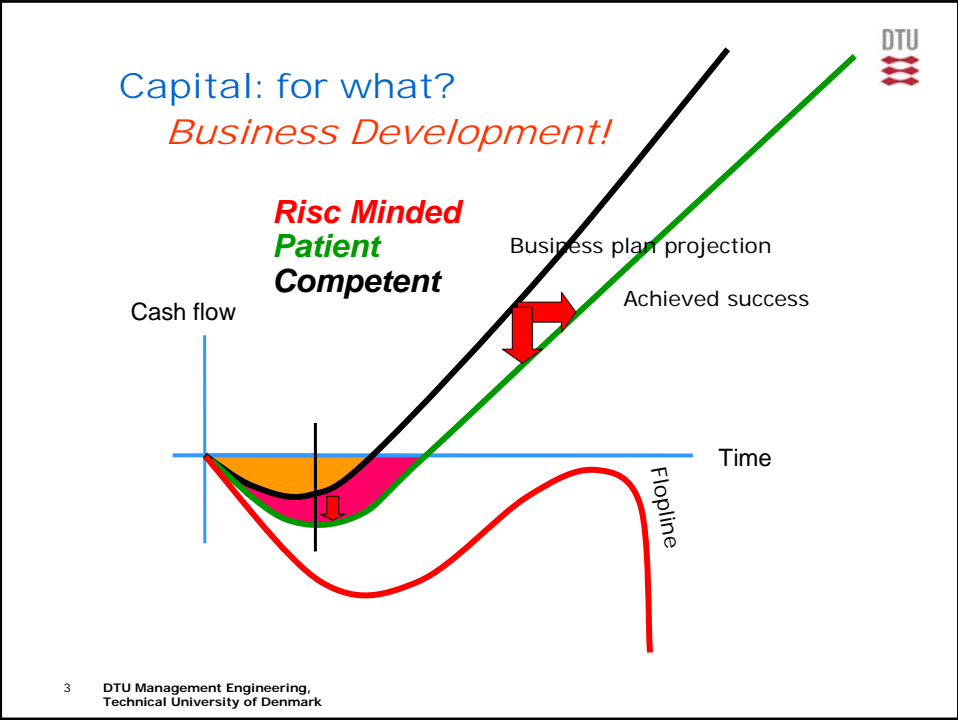
## Financing Technology Ventures

13:00 – 13:45 Flemming Lind Andersen, Lindcom A/S  
13:55 – 14:20 John Heebøll, DTU Management  
14:25 – 14:50 Do.  
15:00 – 15:35 Rasmus Bjerregaard, SEED Capital Denmark A/S

## FINANCING Technology Ventures Agenda

- **Capital: for what ?**
- **Capital: from where?**
- **Capital types related to Business Development**
- **Investor types**
- **The Investor's Quality Criteria**
- **Evaluation of Companies**
- **Example**

**Learning objectives: to enable you to identify your investment opportunities and to design your business model and your business plan accordingly.**



- DTU
- ### The entrepreneur's most important Capital Sources
- **Your own bloody money**
  - **FFF** Family, Friends & Fools
  - **In Kind** Other people's resources
  - **Your first customer:** The more pain, the better
  - **Investors' money** *if your business has a significant potential and realisation depends on speed and volume.* **VERY IMPORTANT PRECONDITION**
- 4 DTU Management Engineering,  
Technical University of Denmark

## Origins of Capital

- **You make it unnecessary**
  - Live on a Rock
  - Start selling:
    - In kind
- **You have it:** Savings, personal fortune
- **You get it:** Grants
- **You borrow it:** Loan capital
- **You sell shares:**
  - Share capital
  - private equity
  - equity capital

## GRANTS

- **Public Industrial Development Programs**
- **Ministerial focus area**
- **Private Foundations**

### Comments:

- Dream-capital for start-ups
- Hard to find but it happens

Note 1: EU limit: 200.000 EUR in public grants

Note 2: Grants are taxable income, but expenditures are tax deductible.

## LOAN CAPITAL

- **Banks**
- **Credit Institutions like FIH**
- **Private debt providers – the loaners**
- **Special products like Vækstkaution, Mezzanine capital etc.** See [www.vf.dk](http://www.vf.dk)

### Comments:

- **Cheap for the entrepreneur – Expensive for the Company**  
Paid back by the company. The entrepreneur preserves ownership
- **Personal collateral mandatory in the start-up phase.**  
If business flops: repayment after personal tax. No tax-deduction!
- **Investor runs a business**  
Never let this fact be forgotten during the moments of joy and enthusiasm

## LOAN CAPITAL - 2

### The Convertible Loan

- **Normal interest and repayment profile**
- **Can be converted into share capital on specific conditions and at specific milestones**

### Comments:

- **Some advantages in the start-up phase**  
Less initial dilution of the founders.  
Investor may convert to preserve ownership at new funding rounds.
- **Check the conditions**  
Investor gets a strong handle bar on business development  
Conversion right linked to milestone specifications. Eg.: conversion rate linked to quantified performance.

## SHARE CAPITAL – private equity

### Investor buys shares in the company

- **At kick-off with the founders**
- **Later: at capital increase (Funding rounds)**

#### Comments:

- **Expensive for the entrepreneur – Cheap for the Company**  
Nothing to pay back - but founders get diluted. Think about that, when company valuation passes a gazillion.
- **Possible mismatch in longterm objectives**  
The investor wants a rapidly expanding business – to be sold at the right time, whereas the founders may have completely different personal goals and they are probably also more risk adverse

## EXIT

The inherent consequence of equity financing

### Investor converts assets to cash and pull out

- |                                       |                        |
|---------------------------------------|------------------------|
| • <b>IPO: Initial Public Offering</b> | Rare but rewarding     |
| • <b>Trade Sale</b>                   | Acquisition            |
| • <b>Management buy-out/buy-in</b>    | Not best but ROI > 0   |
| • <b>Earn-outs</b>                    | Even worse but ROI > 0 |
| • <b>Repayment of loans</b>           | Not sustainable for VC |
| • <b>Enforcing preferences</b>        | Cutting the loss       |

## Capital types in Business Development

- **Before Kick-off**

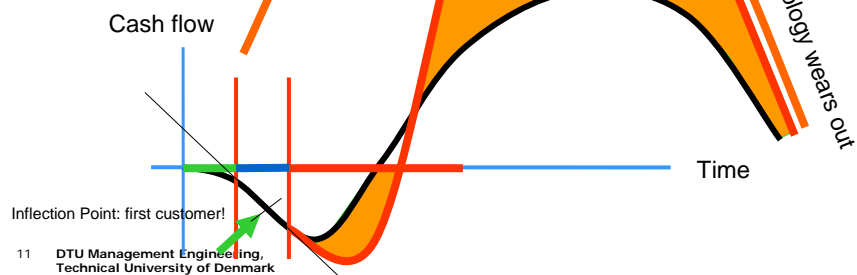
Pre-seed investment: own resources, FFF, in-kind, first customer  
 Venture Cases: also special share capital (pre-seed)

- **Start-up**

Seed investment: share capital, special loans, own money

- **Growth and commercial development**

Early stage, 2. round etc.: share capital, ordinary + special shares



## Investors

### Pre-seed

FFF: the Business Angels  
 DK: Innovation environments  
 US: Small Business Agency (SBA)

### Seed – Early Stage

SEEDCapital Denmark  
 Business Angels  
 Venture Capital companies (VC)  
 Vækstfonden

### Second round, follow-on

VC and Corporate Venture Capital  
 Credit Institutions  
 Banks  
 Vækstfonden  
 Some stock exchanges like First North

## Impact of the economical crisis:

Increased risk and scarce funding force the investors to avoid loss and protect their portfolio – so –

Investors move up in the market =>

No money in the seed – early stage segment =>

Business start-up strategies adopt to

- *FFF*
- *First Customer opportunities and*
- *Slow self-financed sustainable growth*

Venture cases become even more rare

## Investor's Criteria for Interest

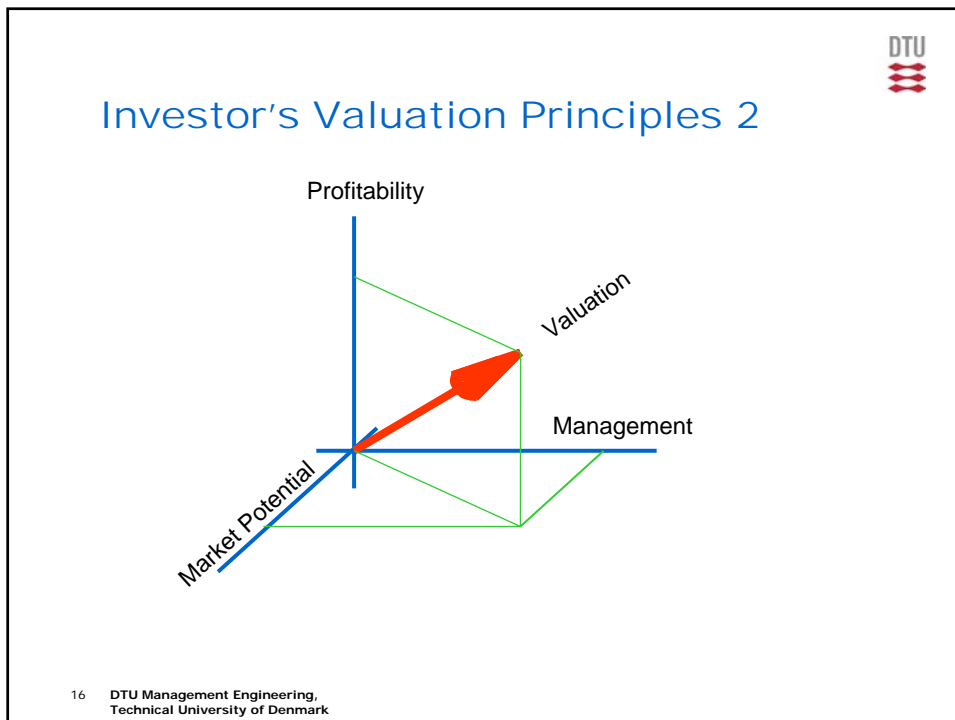
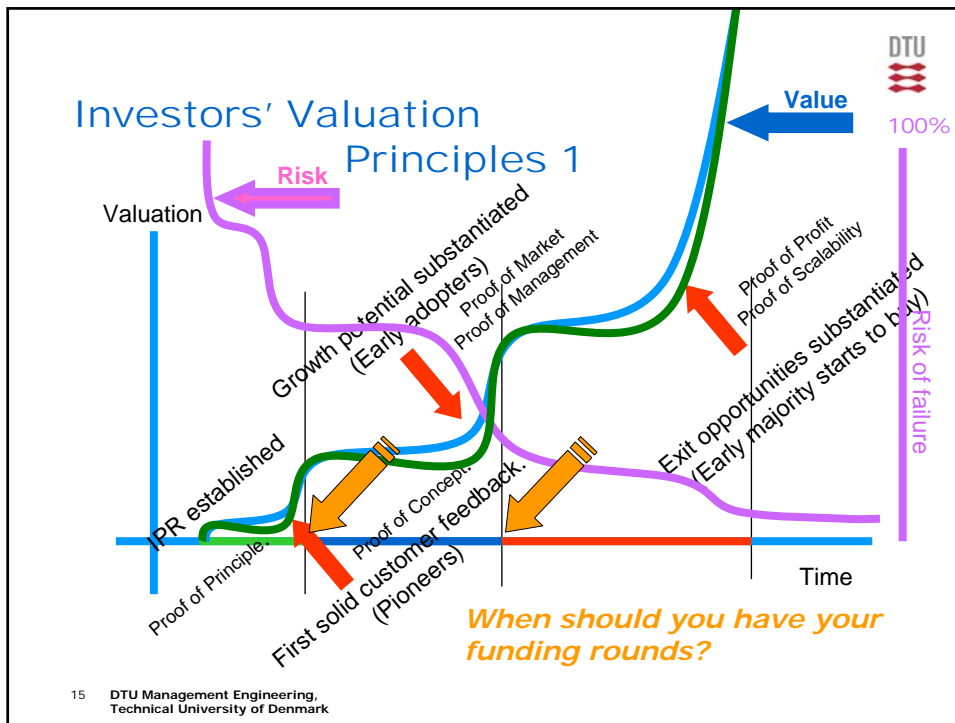
*4P*

- **Perspectives** *Pain, market size/share exit-op.*
- **Persons** *Track records, competencies, ambition*
- **Platform** *Proof of principle, concept, value, pull, profit*
- **Process** *The project acc. to the Business Plan*



### Comments:

- Must be a Venture Case: ROI > 10 in less than 5 years.  
(126 rule applies too: 100 mio in T/O, 20% profit in less than 6 yrs)
- The team is the single most important precondition
- Platform: the more commercial proofs, the better.  
Commercial proofs reflect risk and competence





## Dancing with Woolves

### Or how to deal with investors

- **Capital always Wins**
- **Your opponent has done this many times**
- **Your opponent is not depending on you**
- **Your opponent has lots of time**

### Negotiating tactics:

- **Freedom of Maneuvering**  
Never enter negotiations without having fall-back positions.
- **No major payments that jeopardize your project**  
Your investor will find out at "due diligence"
- **Don't go for money unless you can do without**  
Make it clear from the beginning that you actually don't need it
- **If you are asked for exclusivity: it costs** (all claims cost)  
Exclusivity reduces your freedom of maneuvering
- **Consider to get more investors into the game – transparently**
- **The more proofs before investment – the better**
- **Strategic partners also an asset**
- **Get yourself a management team and battle-proven advisors before opening the game**

## EXAMPLE: GBQ Ltd.

Capital need: DKK 1.5 mio -> Proof of Business  
app. DKK 10 mio -> Proof of Profitability

**Kick-off: DKK 550.000 to reach Proof of Concept**

Founders + pre-seed investor  
Private equity

**First Milestone: DKK 1.000.000 to reach Proof of Pull**

Pre-seed investor: private equity

**Second Milestone: DKK 10.000.000 to reach Proof of Profit**

Venture Capital Company: private equity

**Exit: Profits (EBITDA) > 20 mio. DKK/yr.**

(Earnings Before Interest, Tax, Depreciation and Amortization)

**Valuation based on Price/Earnings (P/E) ~ 10**

## Kick-off

DKK 125.000 shares

Shares: founders: cash contribution  
 founders: non cash contribution (patent)  
 pre-seed investor: class b shares with liquidation preferences

Founding			
Funding goal: DKK		600.000	
	Contribution	Share Price:	1,00 DKK per share class A 20,00 DKK per share class B
	Nominal	Contribution	Ownership Ratio
Founding Team, cash	50.000	50.000	40,00% Class A
Founding Team, non-cash	50.000	50.000	40,00% Class A
Investor A	25.000	500.000	20,00% Class B = liquidation preference
Total	125.000	600.000	100,00%
Total cash contribution at kick-off:		550.000	

## 1. Milestone

Contribution through capital expansion  
 Increased valuation accepted by investor due to commercial results

Capital Expansion 1.		Valuation pre-money		7.000.000 DKK				
Funding goal: DKK		1.000.000						
		Share Price:		56,00 DKK per share				
	Nom. ante	OR ante	Value ante	Contribution	New shares	Value post	OR Post	Nom post
Founding Team	100.000	80,00%	5.600.000	0,00	0,00	5.600.000	70,00%	100.000,00
Investor A	25.000	20,00%	1.400.000	1.000.000,00	17.857,14	2.400.000	30,00%	42.857,14
Total	125.000	100,00%	7.000.000	1.000.000,00	17.857,14	8.000.000	100,00%	142.857,14
Capital expansion: from				125.000,00 DKK	- to	142.857,14 DKK		

## 2. Round

Contribution through capital expansion  
 New VC investor enters  
 Funding goal: DKK 15 mio.  
 Achieved pre-money valuation: DKK 10 mio.

Capital Expansion 2.	Valuation pre-money		10.000.000 DKK						
Funding goal: DKK		15.000.000		Share Price: 70,00 DKK per share					
	Nom. ante	OR ante	Value ante	Contribution	New shares	Value post	OR Post	Nom post	
Founding Team	100.000	70,00%	7.000.000	0,00	0,00	7.000.000	28,00%	100.000,00	
Investor A	42.857	30,00%	3.000.000	0,00	0,00	3.000.000	12,00%	42.857,14	
Investor B	0	0,00%	0	15.000.000,00	214.285,71	15.000.000	60,00%	214.285,71	
Total	142.857	100,00%	10.000.000	15.000.000,00	214.285,71	25.000.000	100,00%	357.142,86	
Capital expansion: from				142.857,14 DKK - to 357.142,86 DKK					

## EXIT

Venture-case criterion: Rule 126:

100 mio T/O, 20% revenues (EBITDA = DKK 20 mio.) in 6 years

Valuation principle: Price/earnings

With profits (EBITDA) = 20 mio. DKK and P/E ~ 10 (Solid and perspective company):

Price: 10 X 20 mio. DKK = 200 mio. DKK

Exit	Valuation :		200.000.000 DKK		
	Share Price:		560,00 DKK per share		
	Nominal	Ownership	Share value	Cash invested	Return on cash investment
Founding Team	100.000	28,00%	56.000.000	50.000	1.120
Investor A	42.857	12,00%	24.000.000	1.500.000	16
Investor B	214.286	60,00%	120.000.000	15.000.000	8
Total	357.143	100,00%	200.000.000	16.550.000	