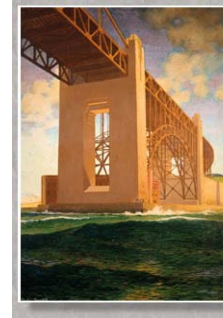


ALLIANCE VENTURE



**Investing in emerging
technology companies
& supporting their
global expansion**



Choosing Innovation projects

Collaboration strategies

a VC perspective

Erling Maartmann-Moe

www.allianceventure.com

Overview of lecture

- What is venture capital?
- Example portfolio
- Sources of capital
- Process for evaluation
- Investment criteria
- Disruptive technologies
- Quantitative measures
- Shares and value creation

Alliance Venture – Overview

- Alliance Venture invests in *Norwegian emerging technology* companies at an early stage with a focus on ICT:
 - where we can *add value* with our operational experience and international network
 - by supporting their *international expansion through alliances* with leading technology corporations and international venture capital firms
- Funds under management:

Alliance Venture IP

- Formed in 2001
- Capital of 83 MNOK
- Fully invested in 9 companies
- 5 exits with good multiples

Alliance Venture Polaris

- Formed in December 2006
- Capital of 339 MNOK
- Selected by Innovation Norway (IN) as the Oslo-based nationwide seed fund
- Committed capital structure is 51% private funds and 49% loan from IN

Venture: Webster's dictionary

Main Entry: ¹ven·ture Pronunciation: \ 'ven(t)-shər\ Function: *verb*

Inflected Form(s): ven·tured; ven·tur·ing \ 'ven(t)-sh(ə-)rɪŋ\

Etymology: Middle English *venteren*, by shortening & alteration from *aventuren*, from *aventure* adventure Date: 15th century *transitive verb*

1 : to expose to hazard : [risk](#) , [gamble](#) <*ventured* a buck or two on the race>

2 : to undertake the risks and dangers of : [brave](#) <*ventured* the stormy sea>

3 : to offer at the risk of rebuff, rejection, or censure <*venture* an opinion> *intransitive verb* : to proceed especially in the face of danger
— ven·tur·er \ 'ven(t)-sh(ə-)rər\ *noun*

Alliance Venture Polaris – Portfolio Companies



Provides a new system for web navigation that automatically generates a menu for any website without any redesign that allows much more efficient and user-friendly way to browse the site. www.bmenu.com



Aggregator of digital music, signing artists and labels within independent music outside the major record companies, and selling its tracks through leading storefronts like iTunes and Microsoft. Focusing on the Nordic market, but also has operations in China and South Africa. www.phonofile.com



Develops gas sensors for detection of gases and measurement of gas concentrations in applications such as air control in buildings, detection of combustible gases in explosive areas, patient monitoring and anesthetics systems in hospitals. www.optosense.com



Has developed the PagePlanner publishing software with primary focus on the magazine and catalogue industry. PagePlanner delivers a multi-platform (magazine, mobile, iPad, web) publishing system as SaaS. www.pageplanner.com

Alliance Venture Polaris – Portfolio Companies



Offers digital cross media communication technology, primarily for audience participation and user submitted content in broadcasting and advertising. The platform works for both traditional TV and webTV, IPTV, mobile TV etc where viewers participate through their mobile phones, the Internet, set-top boxes etc. www.never.no



Provider of Integrated Access Devices (IAD). The IAD combines the functionality of the broadband modem and the high speed wireless router, targeting the market for residential devices, offering integrated high speed internet access, Voice over IP (VoIP), IPTV and mobile services in the same unit (Quattro play). www.pingcom.net



Novelda is a fabless semiconductor company developing single chip realizations of Ultra Wide-Band (UWB) Impulse Radios (IR). Novelda aims to become the world's leading supplier of integrated circuits (IC) to OEMs for UWB-IR-based sensor and wireless communication products.

www.novelda.no



3D perception develops and supplies patented projection technologies and projection related solutions to the simulation, automation and entertainment industries. Products enable geometrical correction of images projected on to curved screens and make it possible to seamlessly combine images from multiple projectors. www.3d-perception.com

Alliance Venture Polaris – Portfolio Companies



Encap delivers a patented user authentication solution for online banking or enterprise VPN log-in. The solution replaces the access token/electronic code calculator with the user's own mobile phone as the hardware component in the implementation of the two-factor user authentication security mechanism. www.encap.no



Integrasco is a leading Internet Word of Mouth analytics firm which helps global brands make sense of the buzz found on blogs, bulletin boards and any other interactive consumer channel, focusing on product buzz in multiple languages. Integrasco is a pioneer in the field of data mining and in possession of comprehensive mining technology. www.integrasco.com



poLight develops active optical components for the imaging, optical communication and display markets, with the main focus on auto-focus lenses for wafer level cameras for mobile handsets and other portable devices, based on a portfolio of patents. www.polight.com

Alliance Venture IP – Portfolio Companies



Offers tailor-made portals and communities for learning in large organizations, hosted as a Service. www.edvantagegroup.com



Provides a system for search in unstructured data and pattern evolution at unprecedented computational power. Initially targeting bioinformatics, but also pursues applications in other vertical markets. www.interagon.com



Develops and commercializes superconducting microelectronics components for defense and the wireless and optical network industries. www.hypres.com



Integrating a 3D graphics processor on a removable distribution medium. This enables e.g. the distribution of games on flash memory cards for mobile devices, where the necessary hardware elements are packaged together with the game as a plug and play device. www.fxitech.com



Develops prescription drug in a handheld delivery device that can treat migraine headache faster, safer, and more economically than current therapies. www.capnia.com



A Swedish software company that develops and markets solutions for support automation and self service. TiFiC's solutions use the latest research to automatically identify and solve computer support issues. www.tific.com

Sources of Capital

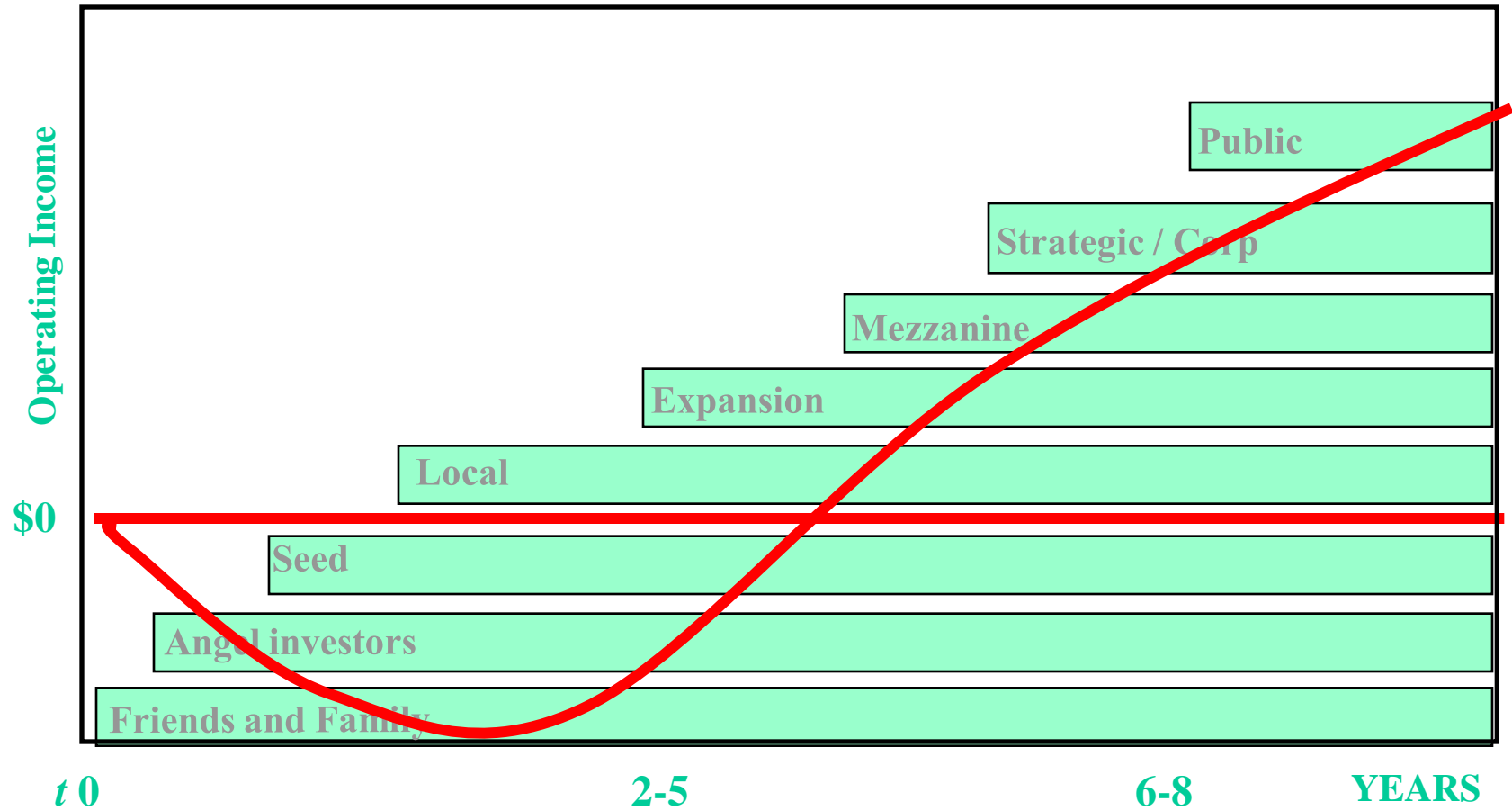


Kilde: Smarter Ventures, FT Prentice Hall, 2003

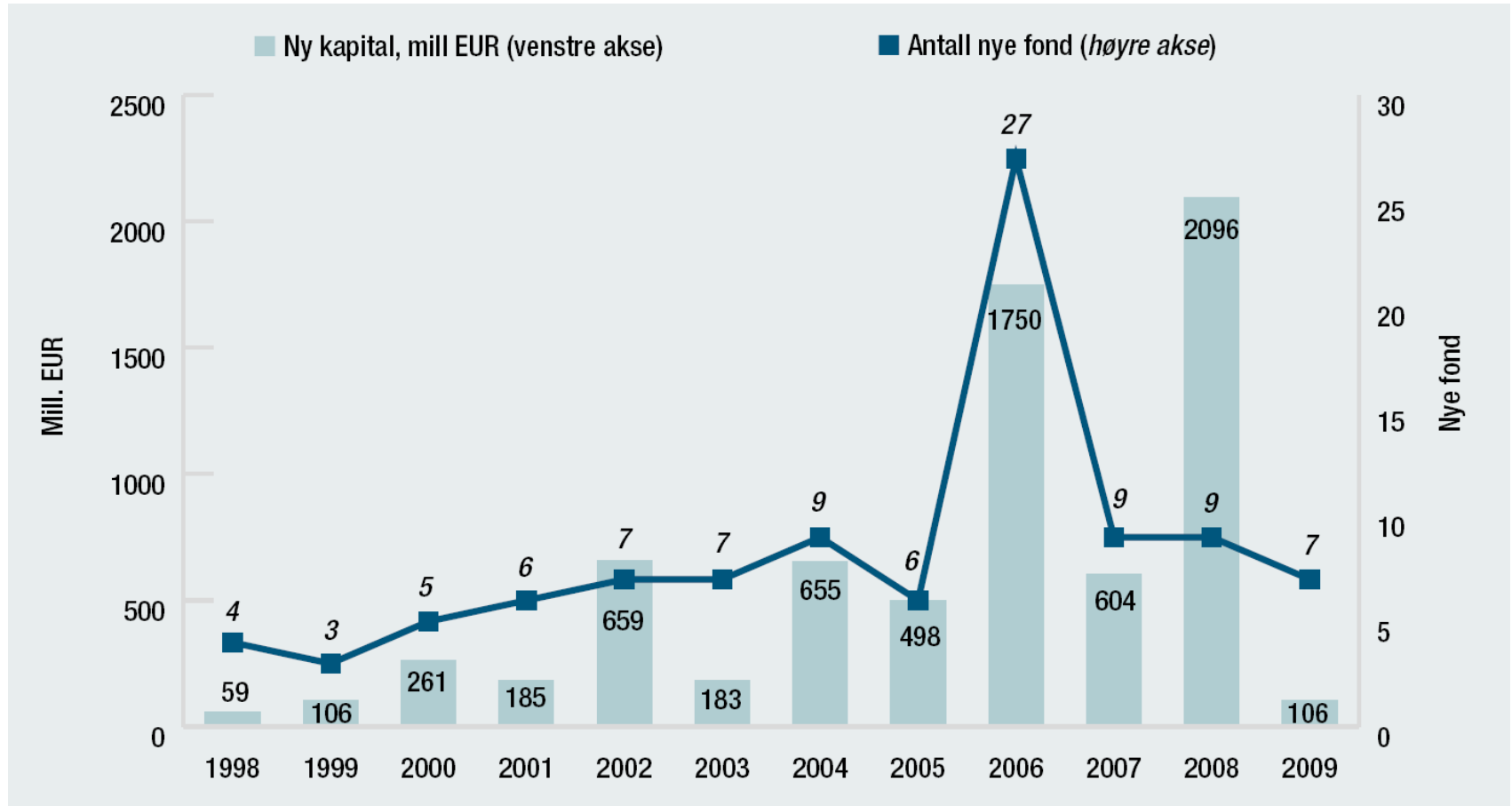
Sources of capital - equity

- In general:
 - Equity
 - Loans – generally not available for start-ups
 - Soft funding – important supplement
 - Revenue, profit
- Equity sources for start-ups:
 - Own team
 - "FFF" (friends, fools and family)
 - Rich persons
 - Professional investors / Business Angels
 - Seed Funds
 - Venture Capital Funds
 - Established companies/industrial investors

Funding stages

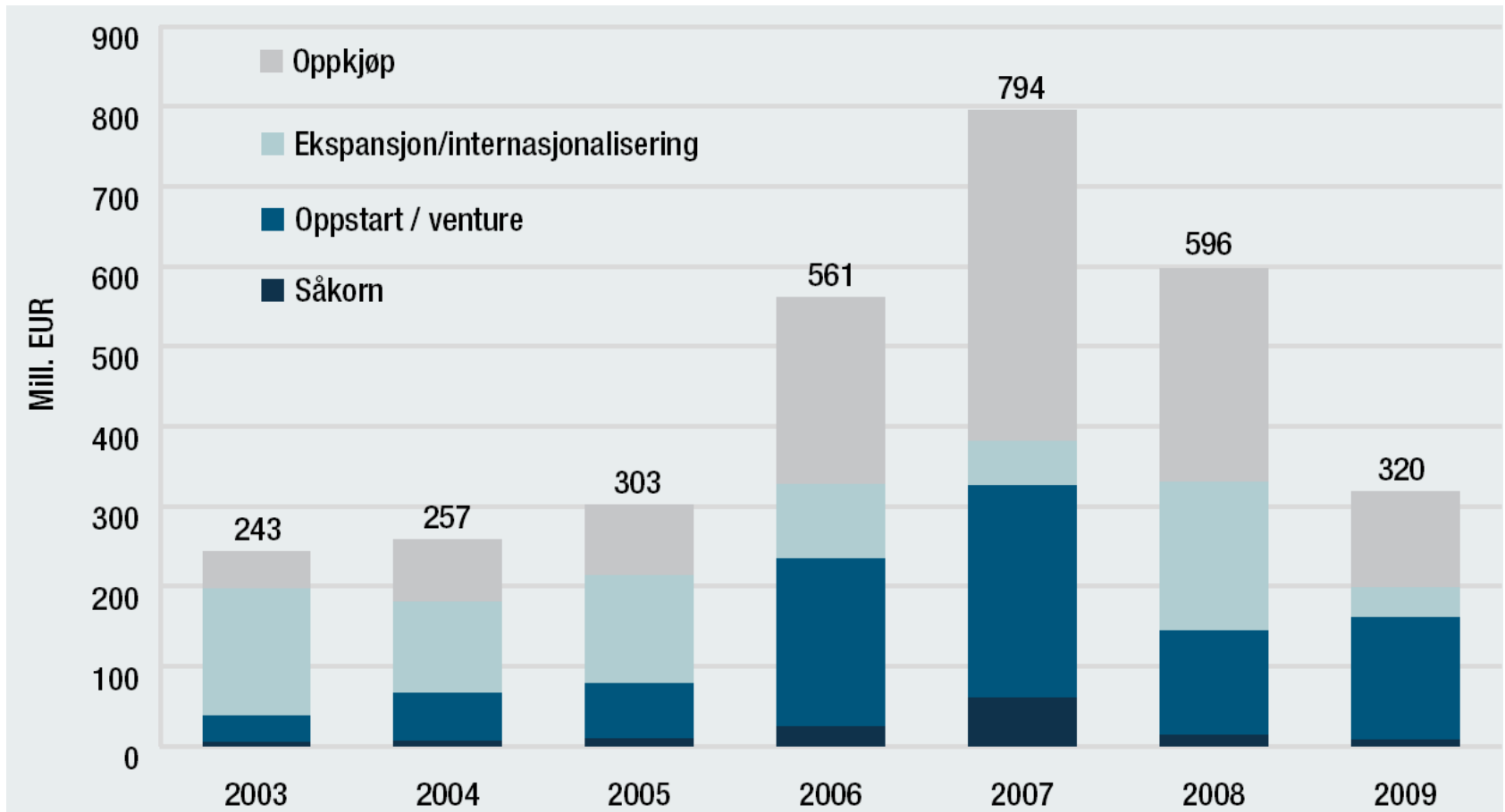


Establishment of new funds, number and capital (MEUR)



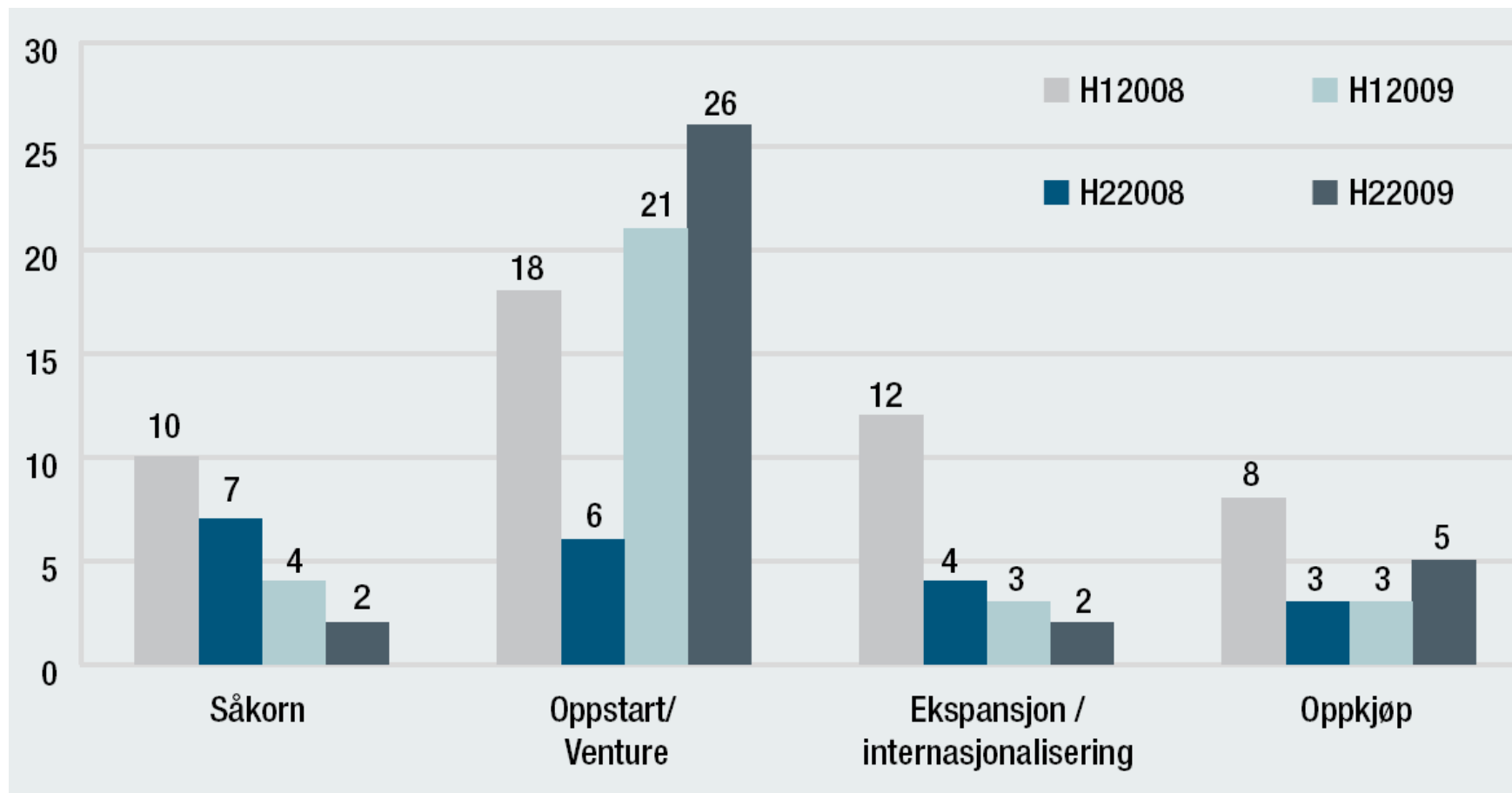
Kilde: NVCA årbok 2010

Årlige investeringer fordelt på fase (MEUR)



Kilde: NVCA årbok 2010

New investments (phase)

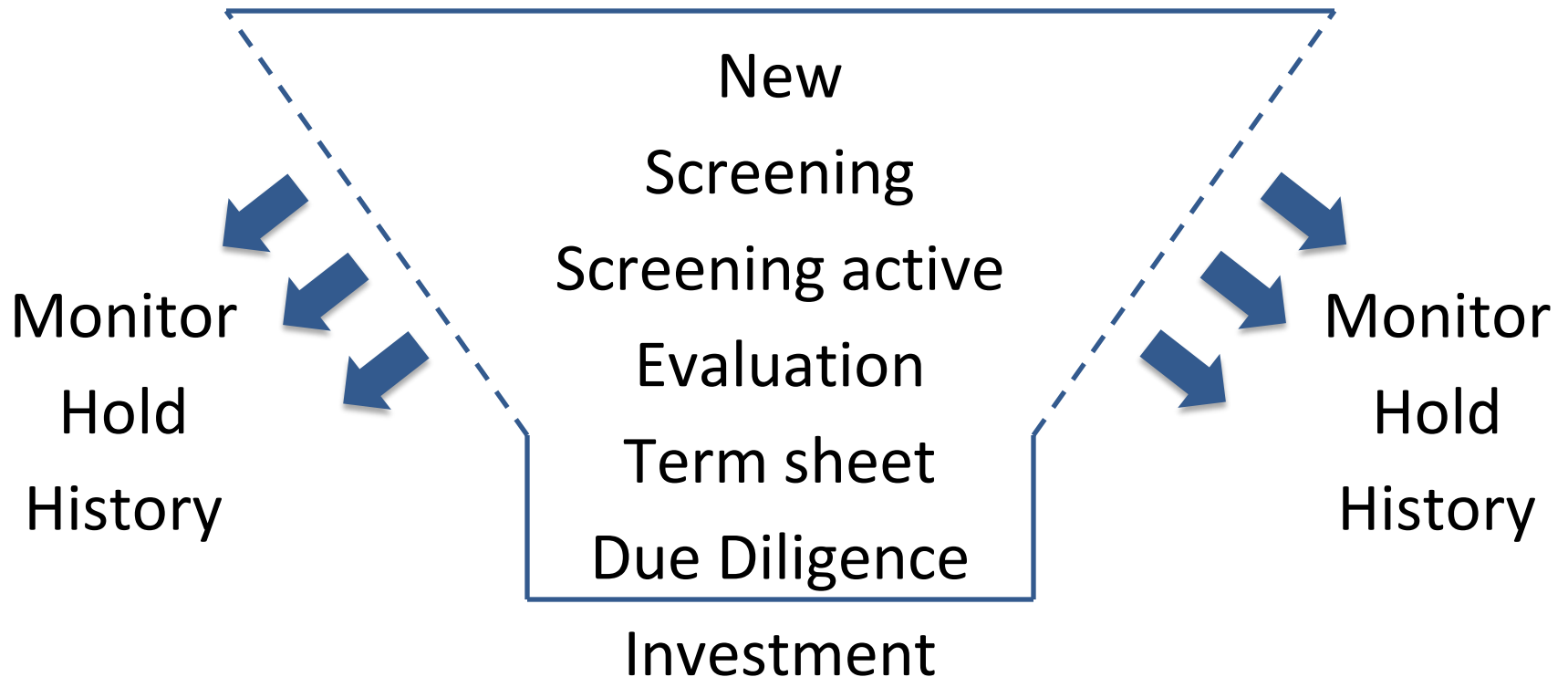


Kilde: NVCA årbok 2010

Norwegian seed and VCs

Såkom	Region	Oppstart /Venture	Region	Oppkjøp /Ekspansjon	Region
Atech Management AS	Østlandet	Alliance Venture	Østlandet	Altaria	Østlandet
Bølgen	Vestlandet	BTV Invest	Østlandet	Borea Opportunity	Vestlandet
Campus Kjeller	Østlandet	Convexa	Østlandet	Credo Partners AS	Østlandet
Fjord Invest	Vestlandet	Energy Future Invest	Østlandet	FSN Capital Partners	Østlandet
KapNord	Nord-Norge	Energy Ventures	Vestlandet	Gezina AS	Østlandet
LEN/Såkominvest Midt-Norge	Midt-Norge	Energy Capital Management	Østlandet	Herkules Capital	Østlandet
Midvestor Management	Midt-Norge	Ferd Venture	Østlandet	HitecVision	Vestlandet
Norinnova Forvaltning	Nord-Norge	Hafslund Venture	Østlandet	IKM Invest	Vestlandet
Procom Venture	Vestlandet	ICON capital group	Østlandet	Marin Forvaltning	Vestlandet
Pronord	Nord-Norge	Incitia Ventures	Østlandet	NorgesInvestor	Østlandet
ProVenture Management	Midt-Norge	Investinor	Midt-Norge	Norvestor Equity	Østlandet
Sarsia Seed Management	Vestlandet	Kistefos Venture	Østlandet	Progressus Management	Vestlandet
Sinvent/SINTEF	Midt-Norge	Mallin Venture AS	Østlandet	Reiten & Co	Østlandet
Spring Management	Østlandet	Neomed Management	Østlandet		
Sydvestor AS	Vestlandet	Northzone Ventures	Østlandet		
		O. N. Sunde Venture AS	Østlandet	Utenlandske forvaltere i Norge	
		Sarsia Management	Vestlandet	Altor Equity Partners	Østlandet
		Skagerak Venture Capital	Sør-Norge	CapMan Norway	Østlandet
		Teknoinvest	Østlandet	EQT Partners	Østlandet
		TeleVenture Management	Østlandet	IK Investment Partners	Østlandet
		Venturos Venture	Østlandet	Nordic Capital/NC Partners AS	Østlandet
		Verdane Capital	Østlandet	Ratos AB	Østlandet
		Viking Venture	Midt-Norge		

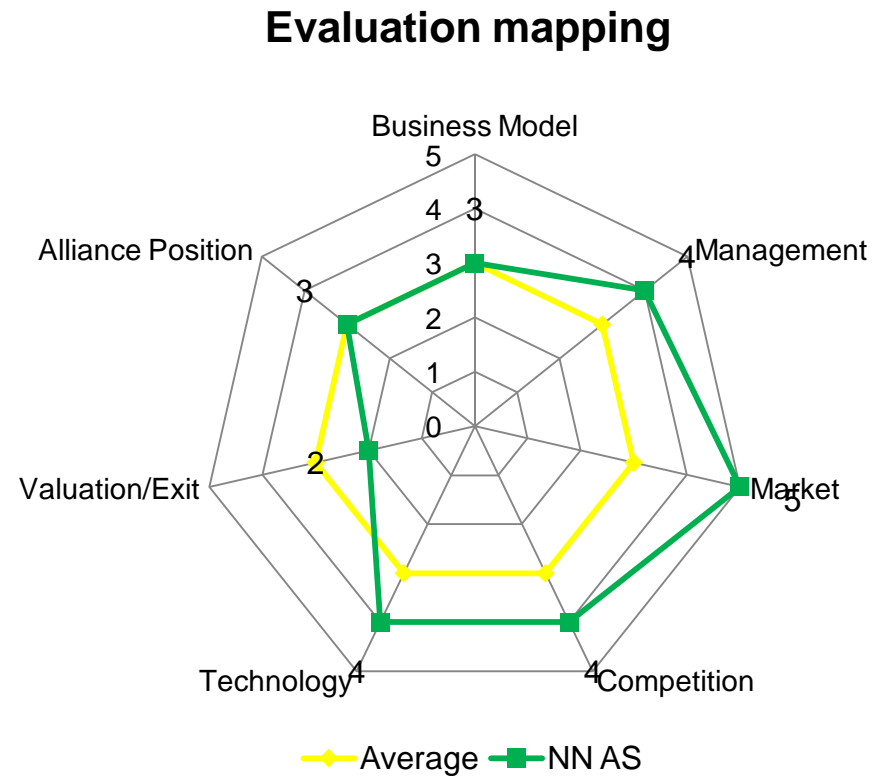
Process for evaluation and decision



Supported by tools

Dimensions

- Business Model
- Management
- Market
- Competition
- Technology
- Valuation/Exit
- Alliance Position



Dimensions – Business Model

- Business Model
 - Scalability
 - Risk
 - Upside
 - Cash flow/ burn-rate

Dimensions – Management

- Management
 - Management strength
 - Technical competence
 - Strength and weaknesses

Dimensions – Market

- Market
 - Market potential _ TAM (Total Adressable Market)
 - International potential
 - Cultural/language independence

Dimensions – Competition

- Competition
 - Competitive landscape
 - Competitors
 - Unfair advantage

Dimensions – Technology

- Technology
 - Level of technology
 - Products
 - Protection/ patents/ uniqueness

Dimensions – Valuation/exit

- Valuation/exit
 - Pricing
 - Alternative exit scenarios and potential

Dimensions – Alliance Venture position

- Alliance Venture position
 - Portfolio focus for Alliance
 - Can Alliance contribute?
 - Alliance position
 - Alliance influence

Portfolio goals Alliance Venture

- Potential for 5-10 x investment
- Minimum ownership and value potential: 20%, 30 MNOK
- Can the team deliver, should it be strengthened?
- Good working relationship – “coachable”
- Strategic exit potential
- Differentiation/protection (“competitive advantage”)

Choosing an innovation project

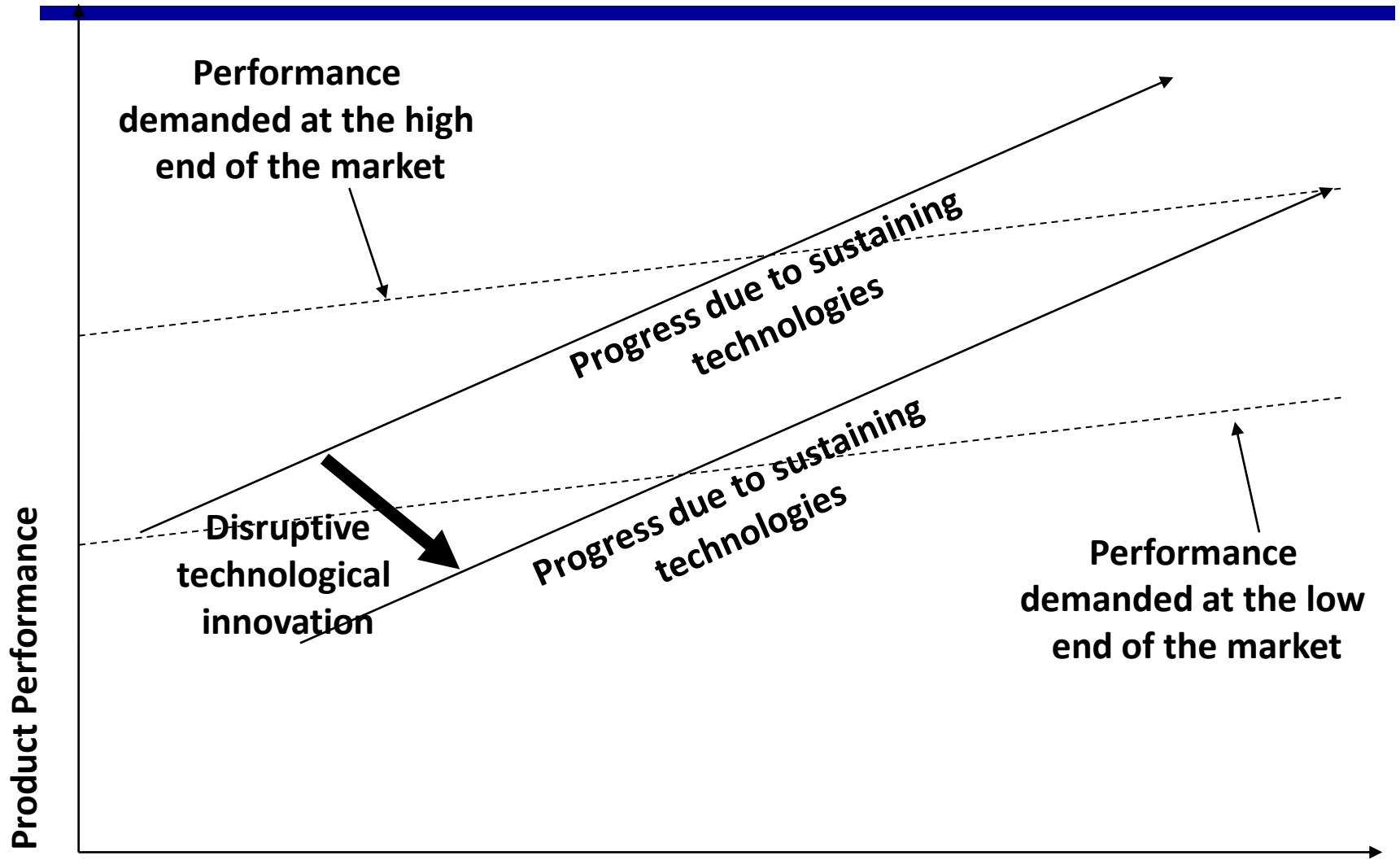
- Large potential market, global
- Game-changer/distruptive
- Scalability
- Unfair advantage
- Your team can do it
- Customer-driven development

Don't build a better mousetrap...

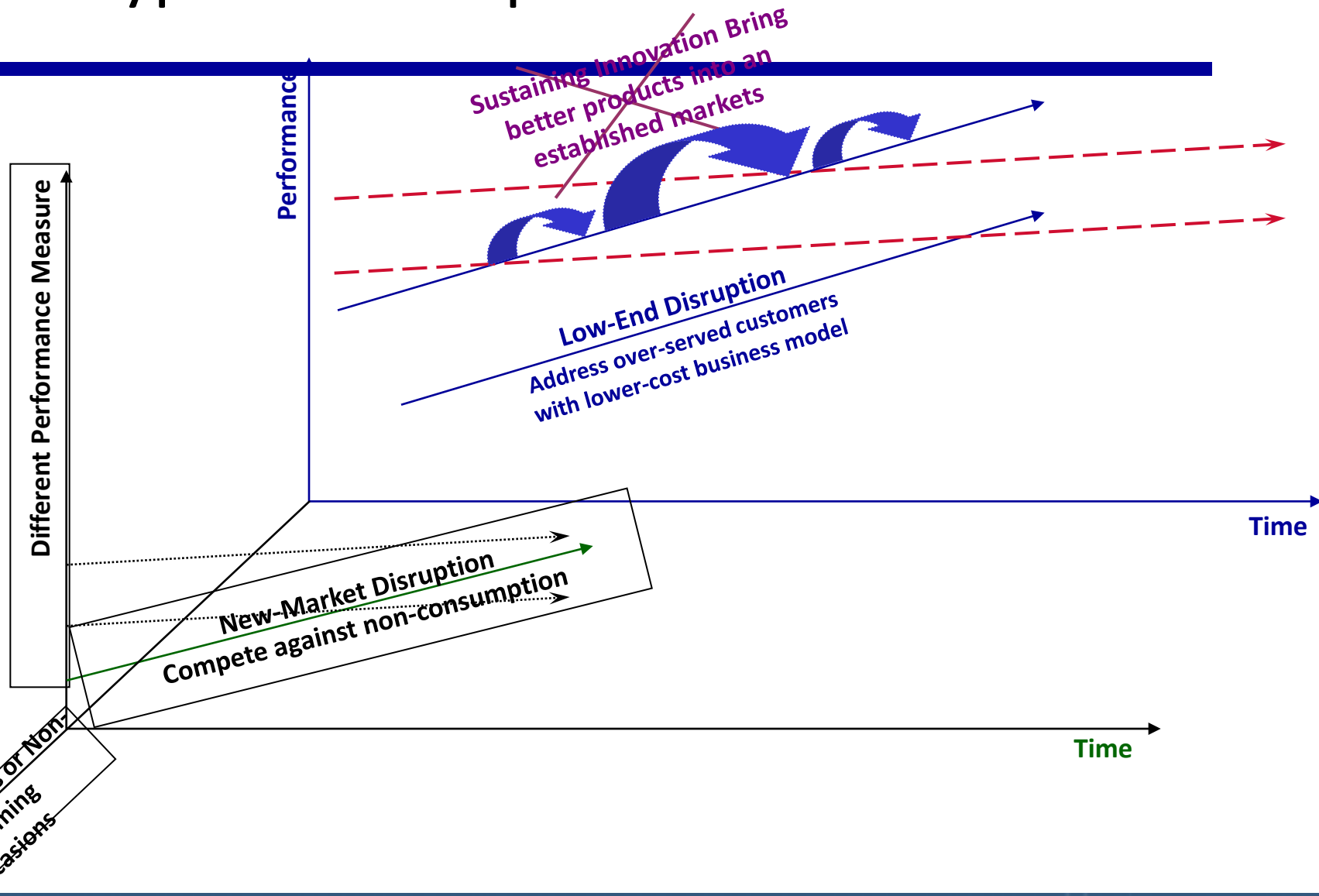
- ...be disruptive!

Disruptive Innovations

- New product or service
 - Often of lower quality than existing, at point of introduction...
 - ...but with game-changing potential
 - Undermining the business model of incumbents
 - Creating new markets
- Digital Video
- Desktop publishing
- PC
- Digital advertising: FINN
- iPod



Two types of disruption



Decades of disruptive innovation



1870 → 1950



1960 → today

What connects these innovations?

- ... start with “good enough” performance along traditional dimensions
- ... new benefits such as simplicity, convenience or low prices
- ... appeal to “overshot” customers or “nonconsumers”
- ... often utilize “low cost” or “start small” business models
- ... take advantage of competitive weaknesses and blind spots

Remember that quality is relative

**Customer is willing
to give this up...**

**In order to get
this...**

Picture quality



Memories

**Customization
and service**



**Convenience,
low cost**

What is “good enough”?

Find creative ways to test assumptions

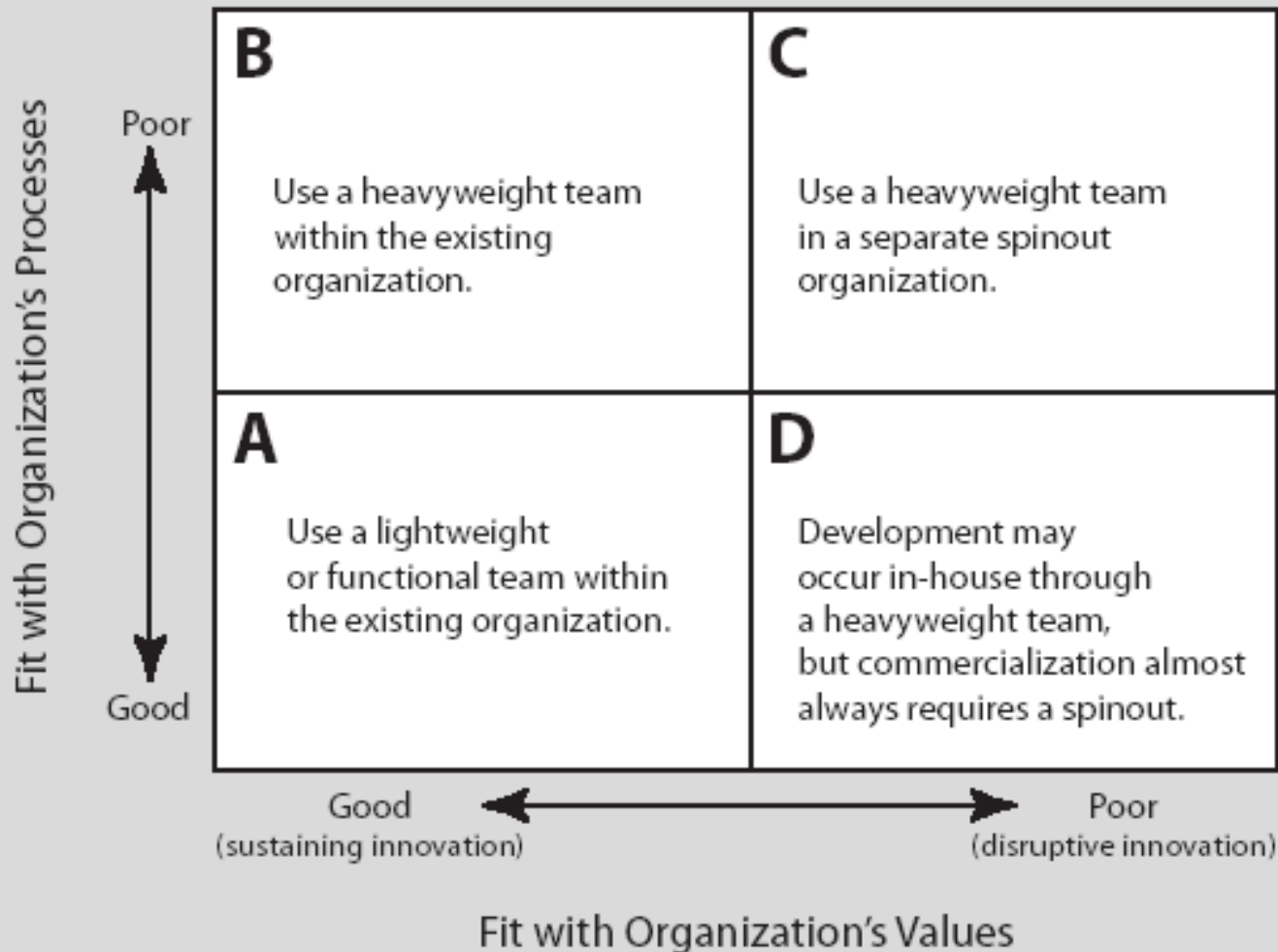
Keep it simple, keep it cheap

- Create a rapid, “good enough” prototype
- Talk to/observe customers and consumers
- Talk to internal resources
- Look to your history
- Google the idea
- Talk to experts in the field
- Conduct a focus group
- Scan Internet customer boards
- Perform secondary research
- Identify early milestones
- Launch in a test market
- Research patents

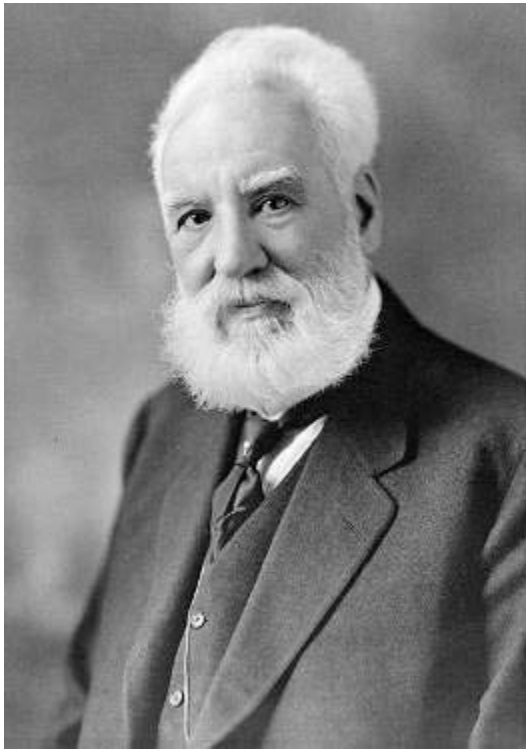
A prototype is anything that helps communicate the idea: e.g. mock-ups, models, simulations, role playing, experiences.

Prototyping early and often will save loads of time and effort. The goal is to get fast, insightful customer or end user feedback.

Strategies for established players



The ability to see opportunity depends on where you sit



Alexander Graham Bell



“The ‘telephone’ has too many short-comings to be seriously considered as a means of communication. The device is inherently of no value to us.”

— *Western Union internal memo, 1876*

The innovation path is not always clear



“In the early 1980s AT&T asked McKinsey to estimate how many cellular phones would be in use in the world at the turn of the century. The consultancy ... concluded that the total market would be about 900,000. At the time this persuaded AT&T to pull out of the market.”

— *The Economist*, 1999

Getting new growth right is hard

Trap 1: Failure to allocate resources



“I don’t really like hard disks--they’re not Sony technology. As an engineer, they’re not interesting.”



“There is no reason why anyone would want a personal computer in their home.”

Trap 2: Cram efforts into established models



Kodak DCS-100 (1990): \$30,000



“All the news that's fit to pixel.”

Quantitative methods for Choosing Projects

The difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyze the profitability of an investment or project.

NPV analysis is sensitive to the reliability of future cash inflows that an investment or project will yield.

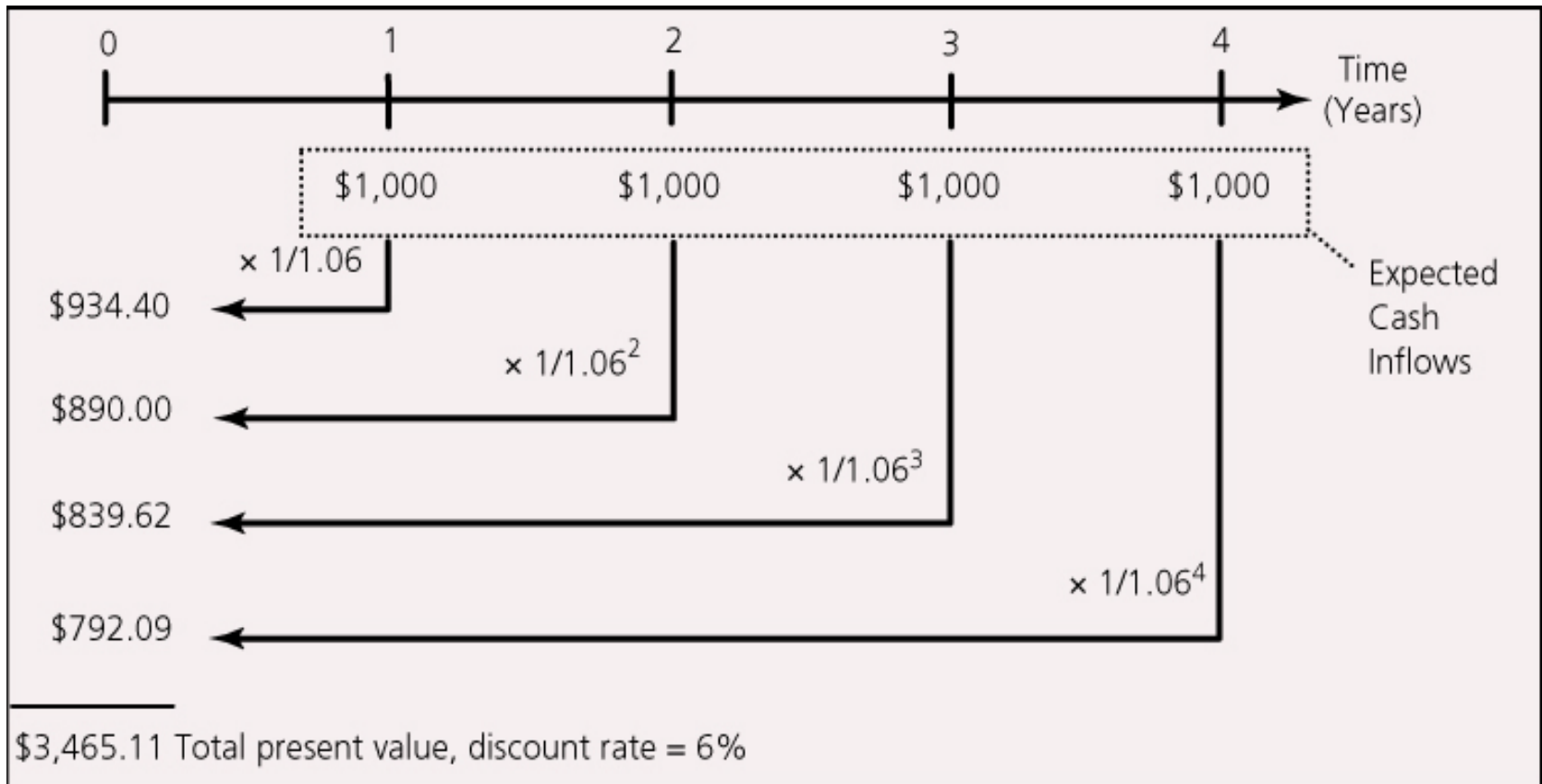
Formula:

$$NPV = \sum_{t=1}^T \frac{C_t}{(1+r)^t} - C_0$$

In addition to the formula, net present value can often be calculated using tables, and spreadsheets such as Microsoft Excel.

[NPV](#)

Net Present Value (NPV)



Internal Rate of return (IRR)

IRR is 'The discount rate that makes the net present value of all cash flows from a particular project equal to zero.

Typically, a VC invests a number of tranches initially, then develops the company over a few years before it is sold, Possibly with an earn-out element.

33% Investment year 1	-4000
Investment year 2	-6000
Investment year 4	-3000
Exit year 7	21000
Earn-out year 8	4000

Investment process – Term sheet & Due dil

- Legally non-binding LOI
- Strong commitment to invest...
- ...providing Due diligence process
 - Legal
 - Technical
 - Personnel
 - Financial
 - Patents

Investment process – Venture terms

- Term-sheet will outline principles and mechanisms for:
 - Valuation (pre/post)
 - Size of investment
 - Lock-up of key personnel
 - Drag and tag
 - Redemption
 - Liquidation preference
 - Anti-dilution
 - Board representation
 - Conditions for closing

Investment process - closing

- Term-sheet will be "translated" into:
- SPA (Share purchase agreement)
- Shareholders agreement

Investment process – share purchase

- Term-sheet will be “translated” into:
- SPA (Share purchase agreement)
- Shareholders agreement

Shares

- A unit of ownership interest in a corporation or financial asset.
- Price
 - Nominal value
 - Market price
 - Difference (market price-nominal value) can be used by company for development
- Share issue
 - Pre/post
- Valuation
- Terms, classes, voting rights....

Example:

- A company has 10.000 shares
- Nominal value is 10 kr
- Total share capital is 100.000 kr (legal minimum in Norway)
- Investor is offered 20% of company for 200.000 kr.
- Pre-valuation: 800.000
- Post-valuation: 1 mill
- 2.500 new shares are issued at price 80 kr.
- Surplus 70 kr.
- Founders are diluted in %, but the company gets $2500 * 70kr = 175.000$ for development

Why VC?

- Share risk, limit responsibility
- Foundation for raising more/other capital
- Active partner, network
- BUT:
 - Specialized financing
 - High growth companies with international ambitions
 - More important to conquer a market, than to keep control
 - If you accept VC you will be a minority shareholder (but possibly a rich one ;-)

What does it "cost" to use VC?

- 90% of companies declining an offer for VC money are bankrupt after 3 years
- Approx. 1/3 of total listed company value in the US are created by VC-backed companies
- VC-backed companies grow faster, get to IPO faster, and have better results
- BUT:
 - Exit
 - Portfolio considerations
 - Do not "throw good money after bad money"

When should entrepreneurs seek VC financing?

- Not too early
 - Too strong dilution
- Start of growth phase
 - Product portfolio
 - Paying customers
 - Start of internationalization