



3i Venture Capital



Frühphase – Venture Capital

NanoEquity Europe 2006

Juli 2006

Achim Lederle, Partner

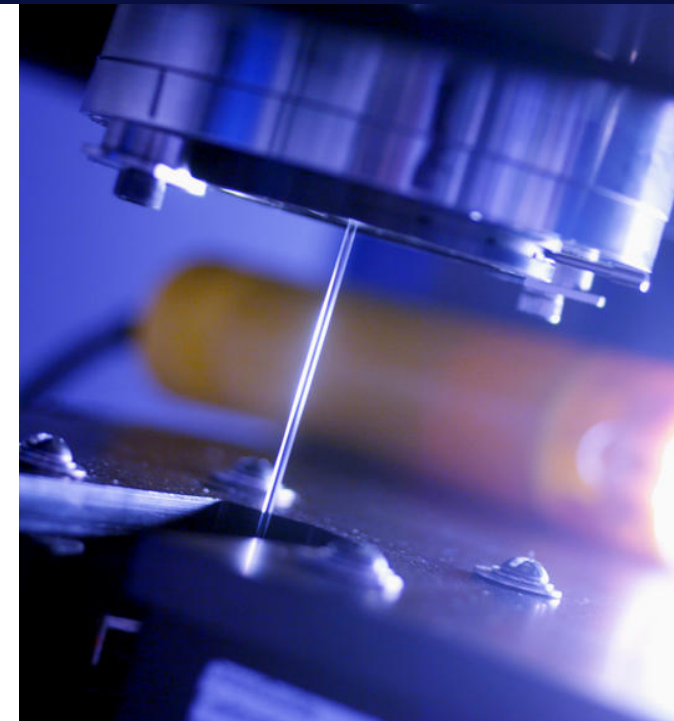
www.3i.com

What do all these companies have in common?





Overview of the European Venture Capital Market

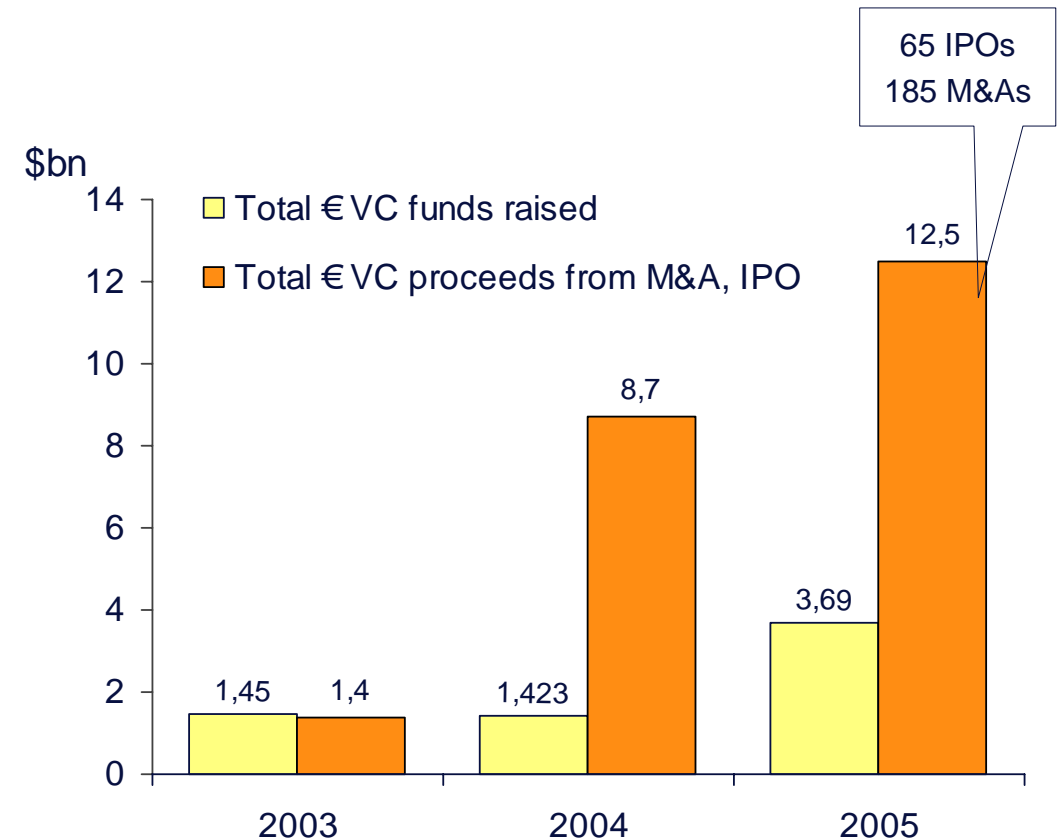


Strong fundraising and exit market in Europe



Consolidation continues but some VCs are raising new funds - money being re-cycled thanks to strong liquidity

- Europe VC market has created 3 **\$1bn+** companies in the last 2 years (**CSR, Skype, Q-Cells**).
- The **ecosystem has matured** and there is better understanding of the asset class
- Core group of **pan-European VC players** that syndicate in the best deals



* Total proceeds is the combination of M&A & IPO market caps of the VC-backed companies sold or IPOd during that particular year. It does not equal total proceeds for VCs but it's a good approximate for the level of liquidity in the market.

Source: VentureOne / PE Intelligence

Moreover, EU top quartile VCs have outperformed US average returns, making Europe VC an attractive asset for LPs

Europe – all Venture

Investment Horizon	Sample Size	Pooled IRR
5 years	623	-3.9
10 years	623	5.7

Europe – 1st quartile

Investment Horizon	Sample Size	Pooled IRR
5 years	170	2.7
10 years	170	32.0

US – all Venture

Investment Horizon	Sample Size	Pooled IRR
5 years	1158	-6.8
10 years	1158	23.7

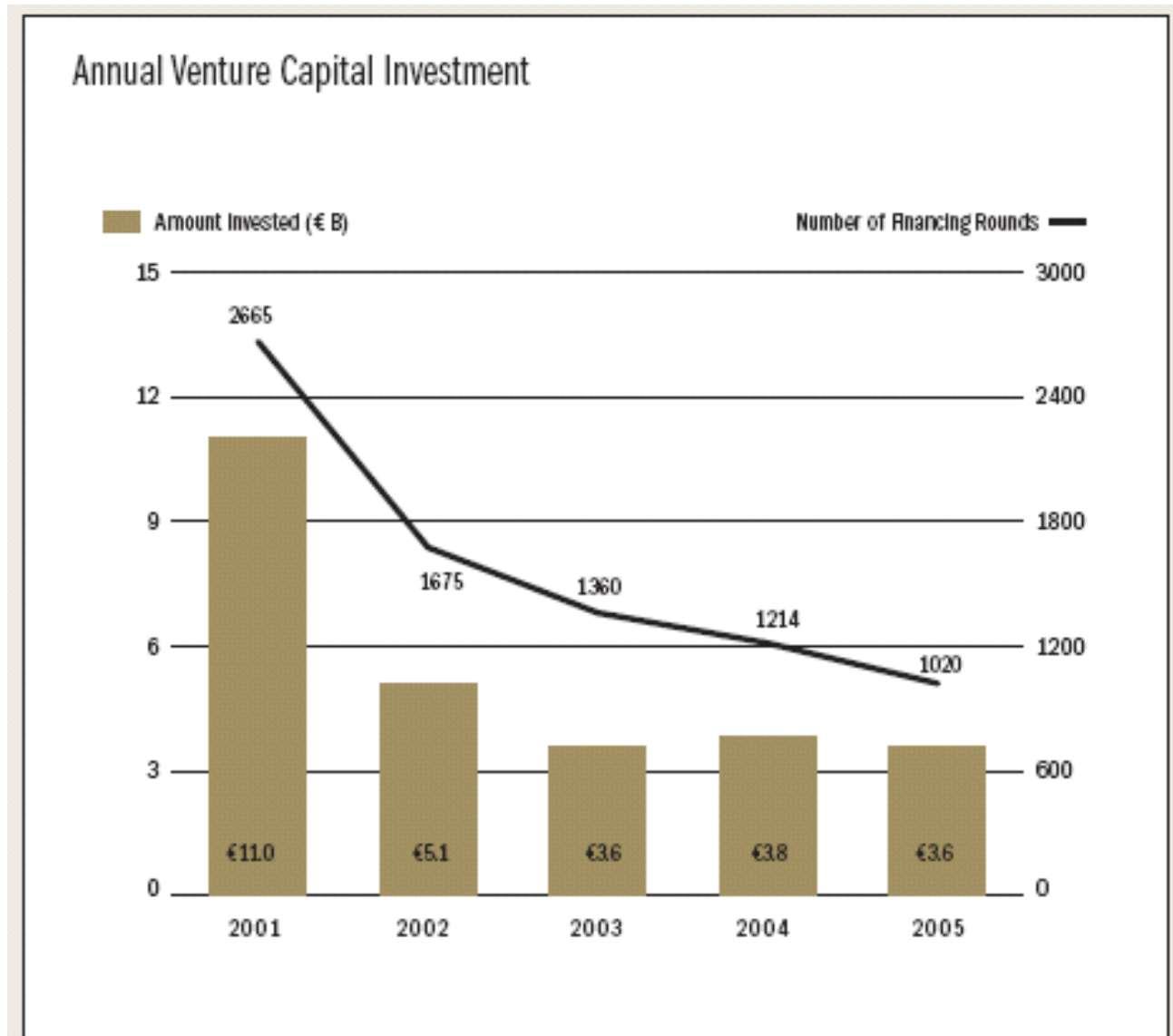
US – 1st quartile

Investment Horizon	Sample Size	Pooled IRR
5 years	292	0.5
10 years	292	70.4

Source: Thomson Venture Economics (NVCA / EVCA). Investment horizon summary: Pooled IRR as of 31/12/05

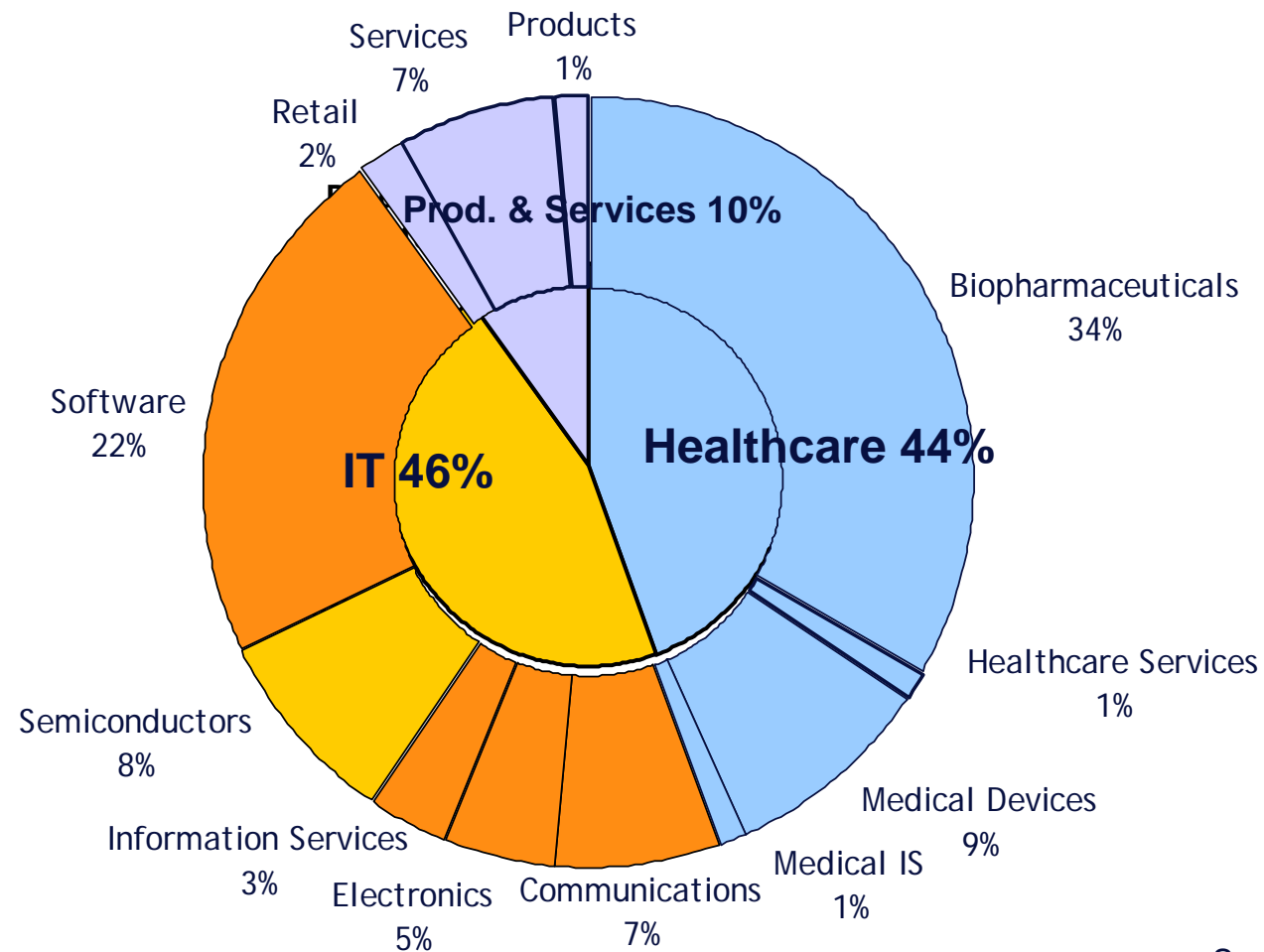
European VC investment hovering around €3.5bn for the past 3 years, but number of deals is down

- The trend is for **more sizeable sums into fewer financings** – it shows the influence of **globalisation** as VC-backed EU companies aim to expand internationally at an earlier stage
- **Late stage deals** reaching higher points (50% of total in 2005)



Source: VentureOne / E&Y

IT investment vs the rest of the VC market in 2005



Source: VentureOne / E&Y

Deal Pipeline



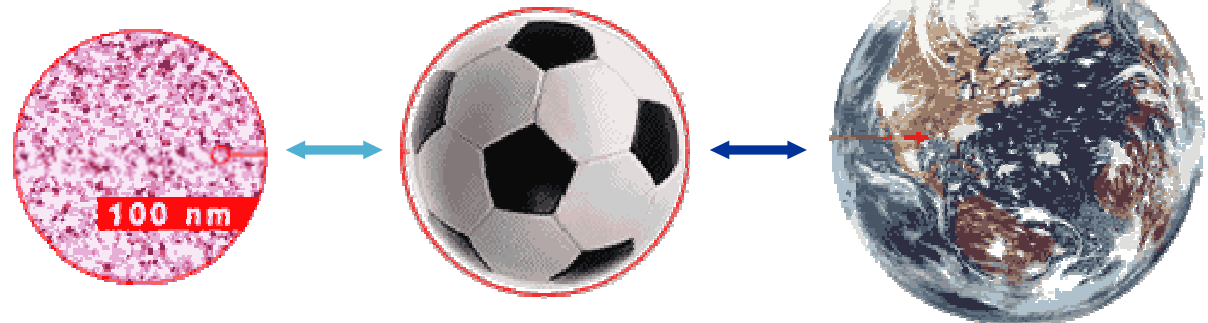
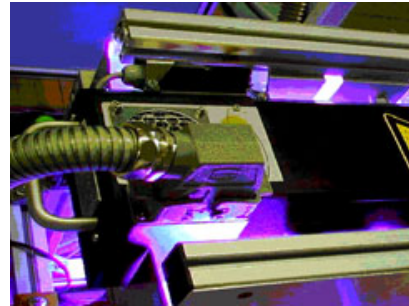
- Issues:
 - Is it important to have 10,000 ideas? (if so, cultural issue) ...
 - ... or rather to have the 100 fundable ideas only (VC-issue!)
- Hypothesis:
 - Founding culture is important...
 - ... but VC's can act as early stage corrective based on their market experience and competitive overview.



Venture Investments in Nanotechnology



- Micro system technology
- Laser technology
- Nano technology
- Renewable Energy
- Advanced Materials
- Environmental technology
- and lot's more



For VCs not only the substrates are interesting investment opportunities but also the capital equipment

Nanotechnology spans a wide spectrum of R&D



Areas of interest

Application areas

	Examples	VC Interest
Precision mechanics/optics/analysis	MEMS, Array optics, Diode lasers	Medium - High
Chemistry/Materials	Carbon nanotubes, functional coatings	Medium
Energy/Environmental technology	Hydrogen storage, Dye solar cells	Medium - High
Medicine/Life Science	Tissue Engineering, Drug Delivery, Lab-on-a-chip	Medium - High
Automotive construction	Nano-particles, anti-reflection coatings	Low
Electronics/Information technology	Spintronics, OLED, GMR sensors	Medium

Source: Bundesministerium für Bildung und Forschung

- Often interesting technology without real, large-scale market need
- Lack of proven business models
 - Materials production (difficult position in value chain, in-house manufacturing not easy for start-up)
 - Licensing (limited value capture)
 - Capital equipment (cash requirements!)
- Long timeframes from research via development to commercialization (40% IRR attainable?)
- Existence of exit markets (especially materials)
- Proven management teams willing to take risks and looking for rewards the VC environment can offer



An Overview of 3i



- Active since 60 years
- FTSE 100 company valued at about €7 billion
- Annual investments of about €1.4 billion
- Over 540 trade sales and 70 IPOs in the past 5 years
- Proven international, cross-border approach
- More than 250 market-facing investment professionals
- 27 offices in 14 countries in Europe, Asia Pacific and Northern America



Global network with long standing international experience and reputation

Investments in all phases with dedicated teams



Venture capital

Global partnership

Start-up, early stage & later stage financings

Total investments of
€ 2-50 million

€ 1.1 billion portfolio*

Growth capital

Global partnership

Minority investments in profitable businesses

Investments of
€ 10-150 million

€ 2.2 billion portfolio*

Buyouts

European partnership

Majority investments in mid-market buyouts

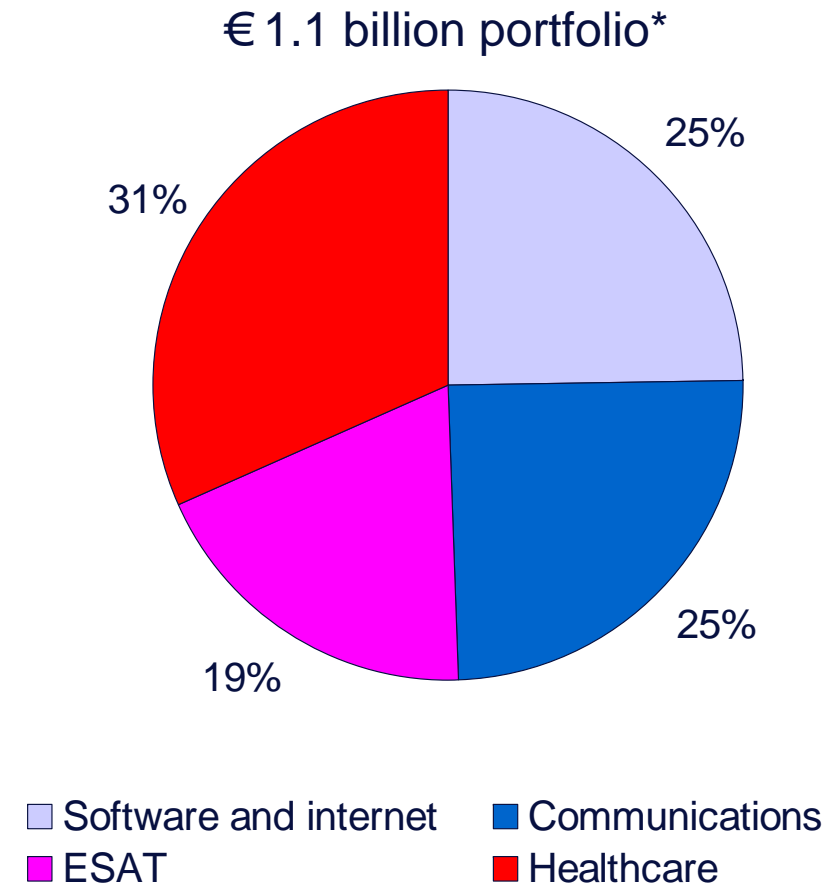
Transactions up to
€ 1 billion

€ 3.8 billion portfolio*

* Portfolio value including co-invested funds, as of 30 September 2005

An exceptional range of venture capital and private equity solutions

- Global partnership, international team of 50 investment professionals
- Start-up, early stage and later stage financings of €2-50 million in four sectors
 - Software and internet
 - Communications
 - ESAT
 - Healthcare
- €150 million global annual investment budget only for new investments
- Focus on companies with significant growth potential, disruptive technologies, and strong management
- International knowledge and contact sharing



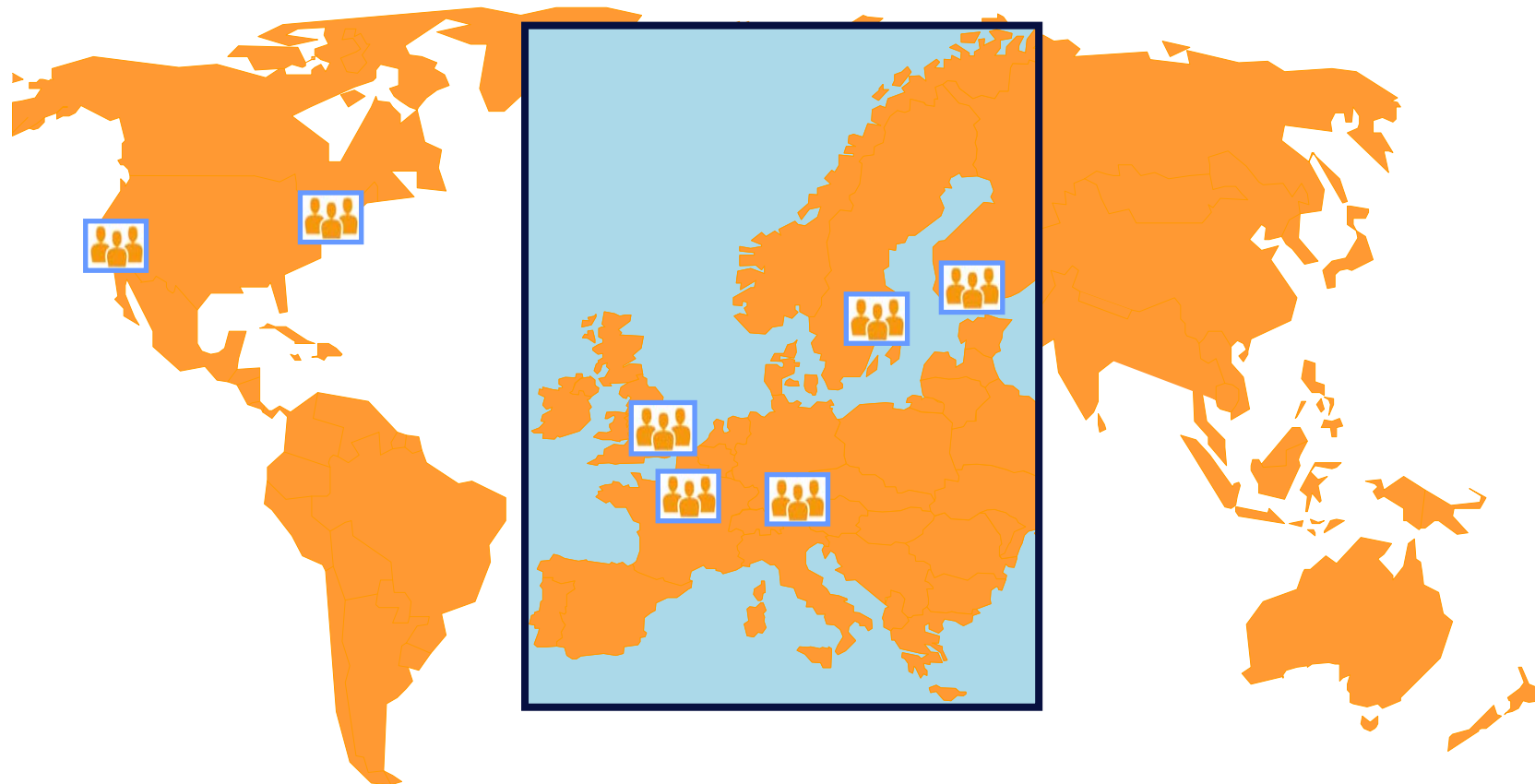
* as of 31 March 2005

Connected to 3i's Growth and Buyout network and integrated in 3i's sector teams

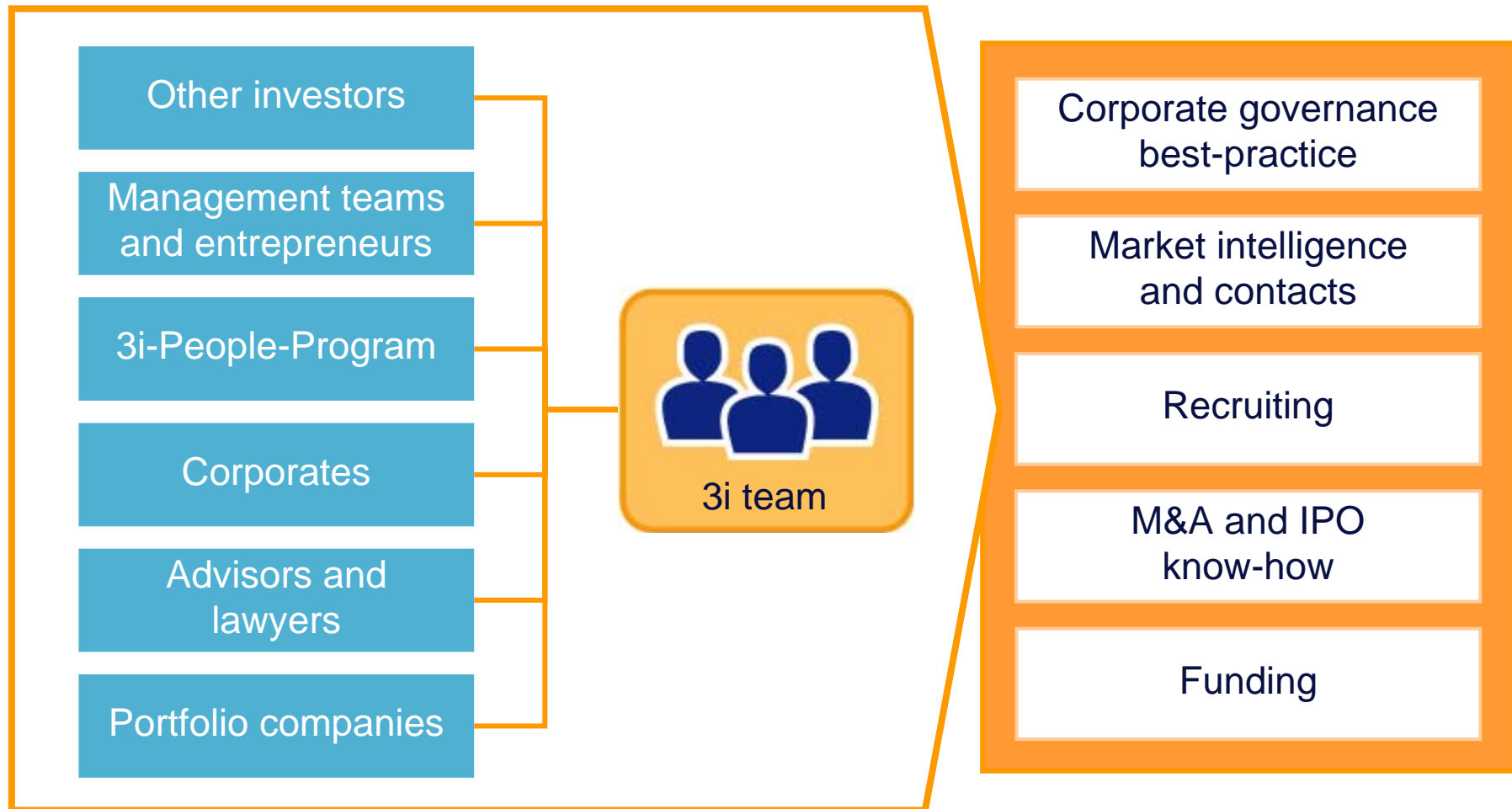
Venture capital: 3i investment criteria

- Investment range: €2m - €50m
- Strong, innovative business proposition
- Aligned shareholder and management ambitions
- Significant growth potential
- High quality founders and management team
- Clear opportunity for 3i to add value
- Clear opportunity for realisation of value

Global venture capital team



Menlo Park Boston London Cambridge Paris Munich Stockholm Helsinki



Spin-outs

- CoCreate (HP)
- ICIDO (Fraunhofer)
- Actelion (Roche)
- Arpida (Roche)

Co-investments

- EnOcean (Siemens)
- hte (BASF)
- Meridea (Accenture, Nokia)

Collaboration can be tailored to accommodate the corporate's needs



Sector overview

- The ESAT sector has 5-10% CAGR growth potential overall with niches having growth potential of over 15-20%.
- We have deep sector knowledge particularly in the semiconductor sector and can leverage our portfolio and industry contacts for due diligence and NXD roles.
- This is a global industry, our global presence in this sector is a significant competitive advantage in gaining deals.

Interests

- Semiconductors
 - Components/modules for mobile devices
 - Analogue IC's
 - IC packaging
- Electronics
 - Instrumentation
 - RFID
 - Security
 - Sensors/actuators
- Advanced technology
 - Clean technology
 - New materials
 - Industrial process innovations



Examples of 3i Advanced Materials Portfolio



Energy



Advanced Materials



Advanced Materials and Processes | High throughput experimentation services and equipment

- High throughput experimentation allows acceleration of catalyst development processes
- hte is providing high throughput to chemical and petro industry
- In addition, hte is working on an own line of blockbuster products such as Diesel catalyst
- Customer benefits:
 - Substantial R+D and manpower savings
 - Full offerings of service, know-how and equipment
 - Reduction of development time by a factor 100 to 1000
- Target Markets: Oil & Gas Industry, Chemical Industry, Automotive.



Location: Heidelberg, Germany

Website: www.hte-company.de

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Advanced Materials and Processes | Nanotechnology

- Nanogate concentrates on inorganic-organic nanocomposites as well as self-organising nano-structures based on chemical nano-technology
- As a complete-services provider Nanogate provides ranges from innovation consulting to materials engineering, production, applications support and marketing all the way to high-availability service.
- The company's focus lies on materials-based processes to develop, manufacture and market multifunctional materials.



• Location: Saarbrücken, Germany

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Thank you

For further information visit our website www.3i.com



Achim Lederle

Achim has nine years of international investment experience in the field of telecoms, electronics, new materials and advanced technologies. Prior to joining 3i he was an investment manager with Technologieholding, a German VC firm acquired by 3i in 2000. Achim started his career as a strategy consultant with Deloitte Consulting. He holds a graduate degree in economics from the University of Augsburg.

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Hansjörg Sage

Hansjörg joined 3i in 2004 and focuses on electronics, semiconductors and advanced technology investments. Prior to 3i he has been with Lehman Brothers' Private Equity division for three years. Hansjörg started his career as a strategy consultant with the Boston Consulting Group. He holds a master's degree in electrical engineering from the University of Karlsruhe and a PhD from Strasbourg University in control theory and robotics. In addition, Hansjörg obtained an MBA from INSEAD, Fontainbleau.

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