Recognising Opportunities

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Tell-tale Signs

- Big fast growing market
- Star team
- Defensible technology
Why do Miracles happen?

- People
- Disruptive Technology
- Clusters and Venture Capital
- Community
From R to D

Old: AT&T
  University

New: CISCO
  University

Research → Technology Development → Product Development

Corporate Research, Consultancy

Start-ups

M&A, IPO

Big Company

Slide 4
European Miracles

- ARM
- CSR
- Solexa
- Plastic Electronics
ARM

• Acorn Team plus Sir Robin Saxby
• Acorn Risc Machine
• Value: Low Power, Low Cost, Instruction set
• ARM Platform: 2 BILLION in 2005
• De Facto Standard:
  – Mobile Phones
  – PDAs
  – iPod
  – Gameboy
• ARM Community
• Market value $3bn
CSR

- CCL team spun out in 1999
- First Single chip Bluetooth: low power, low cost, small form factor
- First single chip 802.11: low power, low cost, small form factor
- Fabless Chip company
- BT, 802.11 WIFI standard
- Mobile phone community
- 2007: Revenues:$800m, Profits: $100m
- Market value $1bn
Solexa

- Ultra-fast Gene-sequencing
- Origin: Chemistry Dept. David Klenerman, Balasubramanian
- CEO: John West
- Whole Genome in less than one Week, for less than $100,000
- Personalised medicine
- Camp: Sanger centre, Lynx
Cambridge

• University ranked #3 in the world
• 72 Nobel laureates:
  – global #1
  – More than any country except US and UK
• High-tech cluster: #1 in Europe
  – 1,000 high-tech companies
  – 40,000 employees
• ARM, CSR, CDT, Plastic Logic
Cavendish Laboratory

- Maxwell: useful equations
- JJ Thomson: electron
- Earnest Rutherford: Proton
- Chadwick: Neutron
- Crick & Watson: DNA
- Richard Friend, Jeremy Burrows: OLEDs
- Henning Sirringhaus: Plastic transistors, C-mos
Plastic Electronics

- Richard Friend, Henning Sirringhaus, + Ink-jet cluster
- Plastic transistors: low cost, flexible, large area
- New Value stack for Plastic Electronics
- Flexible displays
- Cambridge Ink-jet, polymer community
First Transistor
20th Century

Printed Transistor
21st Century

Slide 13
Silicon vs. Plastic...

Conventional Semiconductor

Photolithographic patterning, high temperatures & vacuum processing

Printed Plastic Electronics

Direct printing & solution processing
To view this video visit:
http://uk.youtube.com/watch?v=0znv3V-GsNk
Corporate Venture Capital

- ICT: Intel, Cisco, Siemens
- BIO: more UK activity
- Most important MISSING link
When is Innovation Successful?

When a defensible break-through connects with a large market.
Where does Innovation happen?

In Clusters like

Silicon Valley, Route 128, North Carolina
Cambridge, London
Munich, Paris, Stockholm, Helsinki,
Clusters

- World Class University
- Entrepreneurial Spirit
- Venture Capital
- Supportive Government: CGT, R&D credits, Immigration
- Close Relationship with Lead Companies
- Infrastructure: Legal, Accounting, Leasing
- Real Estate: Availability, Short Leases
- People Network!
Venture backed IPO’s

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Source: VentureSource

Graph showing the total number of IPOs over the last 12 months for US and Europe.
Average Deal Size, Seed & First stage

Slide 22

Note: Later Rounds include Second, subsequent Rounds & Restarts.
Europe shown as percentage to US
Source: VentureSource, Amadeus Analysis

* 06 estimate is based on Q1-Q3 2006
Serial Entrepreneurs

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<th>AM I</th>
<th>AM II</th>
<th>AM III</th>
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<td>17%</td>
<td>41%</td>
<td>90%</td>
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Source: VentureXpert
Conclusion

• Big growing markets
• Star teams
• Defensible technology
• High-tech VCs
• High-tech Clusters