

*UTEN workshop*

# **International comparisons: Who is doing a good job; what can we learn from them**

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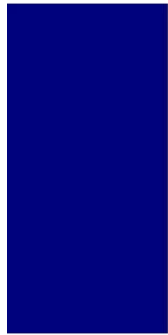
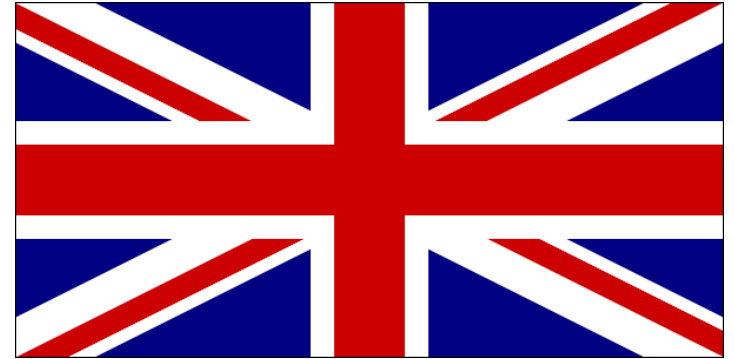
# *Contents*

- Who is actively engaged in this area
- What are the key issues of differentiation
- How easy is it to apply these ideas

# ***So....what is different***

- Different countries
- Different government policies
- Different universities
- Different tech transfer offices
- Different academics
- Different systems and processes
- Different cultures and values

# *Different countries*



# *Government policies*

- US - Bayh-Dole act 1980
- UK – 1987 universities allowed to exploit IP
- ‘The Impact of Innovation’ 1996
- UK – 1998 Education White Paper - Third Stream funding
- 2003 – UK – Lambert report
- Ireland – 2008 active focus on spin-outs in preference to licensing

# ***Different universities & tech transfer offices***

- MIT focus on licensing
- Stanford focus on spin-outs
- Cambridge focus on licensing
- Gotenburg focus on spin-outs
- Leuven active research for licensing
- Ireland focus on spin-outs

# *Who is good at.....licensing*

- Leuven
- MIT
- Stanford
- Cambridge
- Imperial College



What makes the difference

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# *Who is good at.....spin-outs/start-ups*

- Stanford
- MIT
- Cambridge
- Chalmers (CIT)
- Oxford



*Akamai*



What makes the difference?

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# ***Who is good at..... funding***

- Stanford
- MIT
- Imperial College
- Cambridge
- Gothenburg
- Stockholm

What makes the difference?

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# ***Who is good at.....culture of entrepreneurship***

- US – most universities
- UK – some universities
- Sweden – some universities
- Germany – low but increasing
- Belgium - in places

What makes the difference?

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# *Who is good at particular things*

- MIT, Stanford, Austin    entrepreneurial culture, spin-outs
- KU Leuven:                    licensing and contract research
- TU Delft:                      spin-outs and incubation
- Cambridge, Oxford:        leading edge technology, spinouts and start-ups
- Chalmers:                    incubation and seed funding

# ***Who is good at particular things (2)***

- Imperial College:           licensing and funding

# ***New EC research strategy***

- Move from focus on ‘competitiveness’
- ....to a focus on ‘societal grand challenges’
  - Sustainable energy
  - Urban mobility
  - Ageing
  - Food and water safety
- Impact on EC and MS funded research programmes

# ***International Comparisons***

Can We Adopt & Adapt US Experience?

# *US VC: Unique, Scale*

- 3000 firms funded each year
  - 500 are start-ups
  - Many in ICT, health, info/comms, clean tech
- 1.9% of start-up funding in US
- Returns heavily favour top quartile
  - Lumpy; lessons don't translate top to bottom
- 500-800 investable tech firms per year in US
- = 50-60 in UK = 10-12 in Portugal
  - 1/10 becomes a major success
  - = 1 per year in Portugal

# ***US VC Model Also Unique***

- UK experience since 1945: drift from VC to PE
- US experience: make classic VC work
  - Scale of funds, many > \$1bn
  - Initial and 2, 3 follow-on rounds, limited crush down
  - Technically and commercially well resourced VCs!
  - Active management of portfolio firms
  - STRATEGY for sectors, corp fin, and exits
- Today, even best VCs struggling for exits?

# *Thin vs Thick Markets*

- Govt = 20-25% of all funding into new tech firms
- Angels = 20-25% of all funding “ “ “ “ “ “ “ “ “ “ “ “
  - Steady stream of risk funding
  - Govt + angels = 8x VC funding
- Ready supply of high quality/potential firms WORTHY OF INVESTMENT
- Knowledgeable, well-resourced VCs, rare skills
- Supportive environment: advisors, venturesome consumers
- Viable exit routes

# ***NESTA Report 09/09***

- “SBIC, Advanced Technology Program, SBIR, which are often seen as exemplars, have all suffered major operational problems which have resulted in either major programme changes or cancellation”
- “Unrealistic to expect US-style institutions to be easily transferable to other countries.” (page 12)

# *Summary*

- Developing an effective TT takes time!!
  - You **must** be clear about the purpose of TT in your university
  - The purpose will affect the structure and activities
  - Manage research contracts consistently and professionally
  - Develop good relationships with academics and researchers
  - Design/agree revenue sharing agreements
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# *Key messages*

- Central contracts office and TT office
- Build skills and experience in TT office
- **Select** best inventions with best options for commercialisation
- Enterprise Champions in Departments
- Entrepreneurship education
- Guidelines on equity ownership
- Firm revenue share agreement on licence income
- Access to finance:
  - In-house PoC or seed-fund
  - Relationship with VC community