The Greater South East

No Science City - No Problem?
(The State of the Knowledge / Innovation Economy of the GSE
An exploration in the Dark)

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Structure of the Presentation

• Importance of the ‘Region’ in the Innovation Economy
• Importance of the GSE to the UK’s Innovation Economy
• Challenges facing the GSE
• Possible Solutions:
  ▪ Focus on Innovation Industrial platforms
  ▪ Governance – what is needed to respond to the way the KE / innovation economy operates today / tomorrow? - Platform Governance
  ▪ Examples from Europe
  ▪ Suggestions for the GSE
(City) Regions are Powerful Players in the Innovation Economy

- Complexity of innovation too great for any one player, firm or city.
- City Regions of 4-8-10 million:
  - Large enough to build an innovation ecosystem (range of innovation assets; agglomeration effects; diversity; natural home of open innovation.)
  - Large enough to be connected globally (effective channels to markets; enabling firm to go to scale)
  - Large enough to allow players to respond to the imperatives of the Innovation economy – (e.g. networking, collaboration, open innovation, trans-disciplinary research and economic activity, creativity)
  - Yet - Small enough for communality of sentiment
  - Yet - Small enough for effective governance?

Silicon Valley’s View of the World:
Spiky Hotspots linked - Reciprocal Upgrading

The Greater South East - Europe's and the UK's 'super' innovation region?
GSE- Super Region

- **Conflicting views:**
  - **GOOD:** Keep the Goose Fat – Martin Wolf (FT)
  - **BAD:** A Pestilence and a Plague – Profs Amen and Massey
  - **INDIFFERENT:** ‘they’re rich enough; they don’t need a science city’ (PM ‘overheard’?)

- **But - as you know:**
  - 21 million people, some 35% of the population of the UK.
  - 42% of UK GDP; the 10th largest economy in the world (just behind Canada).
  - Attracts some 60% of all UK private R&D investment.
  - 70% of UK venture capital investment (and UK VC tops the European league)
  - Accounts for around 46% of the UK’s VAT registered businesses.
  - Home to 71 of the UK’s 131 Higher Education Institutions, with 4 in the world’s top ten, and
  - Has the highest concentration of Knowledge-Intensive Business Services (KIBS).
  - Home to Europe’s largest clusters of biotechnology and health care companies.
  - Leading financial centre (still) and centre of creative industries.
  - The UK’s ‘gateway to the world’; some 60% of all container ships docking at UK ports arrive in the Greater South East, and Heathrow, Gatwick and Stansted airports dominate ATMs.

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The UK’s ‘super-saviour region’ - the nation’s economic driver; the engine of the nation; the golden goose; the nation’s star region; the nation’s world-class region; Europe’s mega-region.......
The GSE is, in effect, the London super region: (London +70-100 miles)
Drivers of Importance

Past critical success factors
- The development of an economy that could win in the global economy (WB 1976 memo).
- An economy characterised by market deregulation + 'financialisation'.
- Process far deeper and more effective in GSE than anywhere else in the UK.

Recent disruptive processes
- Economy - Knowledge soaked, but difficult
  - Easier to invent the steam engine in your shed than clone genes
- Inter-disciplinary - open innovation
  - Key intersections: nano-genetics-bio-informatics etc
- Service-manufacturing fusion
  - Nokia – content manager - Rolls-Royce - energy supplier 24/7
- Producer – user blurring (use driven innovation – ‘crowded house’)
- ‘Non Linear’ + moving from the heavy metal fixation (Design London – Imperial College and RCA – Cranfield doing the same thing...etc). Importance of symbolic knowledge

Changes in the KE/Innovation Economy

Rise of networked firms
- Value networks compete NOT individual firms (rise of network hunting)
- Innovation ecosystems compete
- People [talent] from anywhere are located anywhere deemed the best location for the delivery of the business proposition in question

Collaboration is increasingly the name of the Game (the world is too complicated and inter-connected for any one firm or nation to go it alone):
- Between / amongst firms, universities, user groups......etc
- BUT often concentrated in key city-regions / innovation ‘hotspots’ (why - diversity and size; creative interactions; global links and channels to market – scaling assets knowlege a ‘social process’ concentrated within city regions)
- Within innovation regions (within borders -importance of ecosystem)
- Between innovation regions (cross border)

PLACE matters in the new geography of innovation. The World is NOT Flat – it spiky and likely to get spikier! Quality of Place matters – attracts and nurtures the ‘creatives’

Business / Economic Success – often f (privileged position within national /global value networks - innovation-industrial platforms)
Innovation increasingly looks like this!

“Innovation is 99% shared technology and 1% exclusive technology” Philips CEO

Tearing up the ‘stand alone’ past

Is there an identity between the institutional re-composition happening in the private sector innovation economy and that required in the public sector?

The Knowledge Economy Cycle

First 20-30 years: INSTALLATION PERIOD
- Linear (Closed) Innovation
- New Technologies
- In-house R&D
- Contract Research

Second 20-30 years: DEPLOYMENT PERIOD
- Open Innovation
- New Business Models
- Networks
- Collaborative Research

We are here

Adapted from Perez
Challenges

- Recession; yes, but even longer ‘plays’ are:
  - Rise of East (BRICs+)
  - Resilience of USA
  - Squeezing process (BRICs+ v USA) leading to (relative) decline of Europe and UK
  - Responding to the new Knowledge economy (Policies – governance structure – educational regimes?)

- Critical mass problem
  - UK firms (increasingly) don’t dominate leading technologies. (Plastic Logic –Vistec)

- Indicators and Signposts:
  - Slipping in world rankings (UK and the GSE)
  - Value capture elsewhere and ‘by others’ (value destruction US / other firms waiting to pounce on good ideas – aggressive defensive (and entirely rationale) business strategy)
  - 80% Oxford Biotec start-ups exist to the US1 (source Espire VC)
  - GSE not used as best practice case studies by others (e.g. WB to Holland and Germany)
  - Weighly and creaking governance
  - Overheated and increasingly costly
  - Physical infrastructure constraints (e.g. transportation; premises)
  - Economic infrastructure constraints (e.g. skills – all types)

- Conclusion: GSE Adaptive structural environment needs a revamp, not just a re-balance (There is momentum in the system; collapse overnight out of the question, but............)

And Governance structures are inappropriate:
(The sad cases of O2C and GMEC)
And Governance structures are inappropriate
A complete MESS!

Possible solutions

• Promote smart niche plays within global innovation-industrial platforms
  ▪ No need to ‘out innovate and out-compete’ the competition (Gordon Brown 2006). Unlikely due to critical mass problem.

• Build defensible niche positions within innovation-industrial platforms
  ▪ Success → f (privileged position within national /global innovation-industrial platforms)

• Build an ecosystem around these positions that secure (and expand) these niche positions.

• Build a governance structure that is focused on this task.
Phil’s CSFs!

- Regions with Opportunities for Combinatory Knowledge Dynamics are advantaged.
- Related Knowledge Variety’ defines that Advantage.
- Distributed knowledge networks in ‘open innovation’ platforms are key to economic well-being.
- Policy at regional level should focus on supporting platforms.
- Such platform policies are ‘joined-up’, flexible and involve ‘distributed governance’.
- Build interactions among Clusters.
- Establish ‘related variety’ ‘aggregator’ agency.
- Implement ‘lighthouse’ projects – lead markets (e.g. Solarpark; ‘green’ fleets; SolarMesse; ‘renewable energy leader status’ ICT in eco-tech; bio-ecotech demonstration projects etc.)

SIGNPOSTS FROM AROUND THE WORLD
Bayern Innovativ: Technology Platforms
(Bayern Innovativ - http://www.bayern-innovativ.de/2009)

Field of Activity

European Research on Combinatory Knowledge Dynamics and Regional Advantage
'Collaboration and not competition is what made us successful,'
Linda Nielsen, Chair of Øresund University.
Regional development

Global cluster cooperation
The Land of Richard Florida! Creative and Innovative Toronto

- Discovery District
- Financial District
- Creative & Arts District

- The MaRS Centre
- UHN Toronto General Hospital for Sick Children
- Gardiner Museum of Ceramic Art
- Royal Ontario Museum
- Women’s College

- University of Toronto
- UHN Princess Margaret Mount Sinai
- Art Gallery of Ontario
- Canadian Opera House
- Entertainment District
Network Oasis – Jeonsuu Science Park FINLAND
Back to the GSE

• No Science City - No Problem? But needs to respond to the way the innovation economy is evolving – includes governance changes.

• Prioritise innovation platforms
  ▪ Role of TSB – RDA – sector (Platform consortia)
  ▪ Platforms cross administrative boundaries and change over time.
  ▪ City regions important
  ▪ MAA movable – platform focused and change over time?

• Link into global platforms

• RDAs Focus on the Big Hit infrastructure interventions

• Be careful of place based and local innovation initiatives

• But a focus on local place making (quality of life) is vital

• More important than ever before – in times of economic stress

• Link into global platforms

• Need to Ground investigation into governance options in an understanding of how the regional economy is changing and positioned within the wider global arena.

Can we change the way we work in the GSE?
There's more in common between the present government and the GSE innovation economy than you might imagine!

THANK YOU FOR LISTENING

We don't know where we're going, but we're on our way.