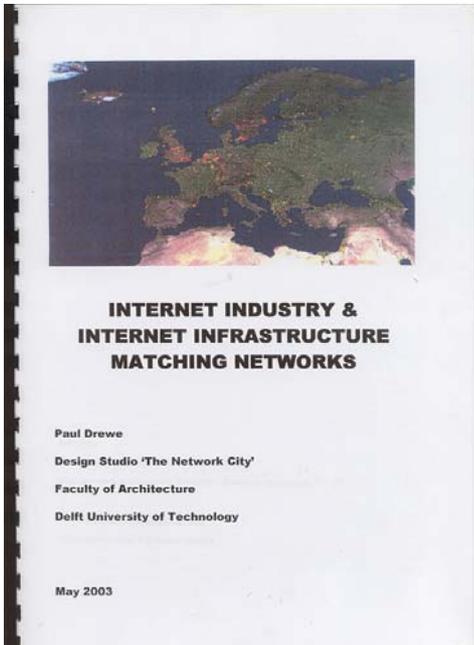


Knowledge-based urban and regional development in the ICT age - The rich and the latecomers

Paul DREWE

Prof.Dr. P. Drewe, Design Studio 'Network City', Faculty of Architecture, Delft University of Technology, P. Drewe@bk.tudelft.nl

1 THE RICH GET RICHER OR 'NOT EVERYBODY PLAYS IN THE CHAMPIONS LEAGUE'



This recent study shows that, with the rise of ICT, the regional distribution of both the Internet industry and the Internet infrastructure is not substantially changing. It is the rich regions that get richer.

Moreover, innovative capabilities are concentrated in a few regions and there are 'islands of innovation in Europe'.

If the rich get richer others must be classified as **latecomers**. A realistic positioning of regions is preferable to the unqualified claim that one's region is 'playing in the Champions League' as this claim may lead to misplaced (public) investments.

1.1 The Internet Industry

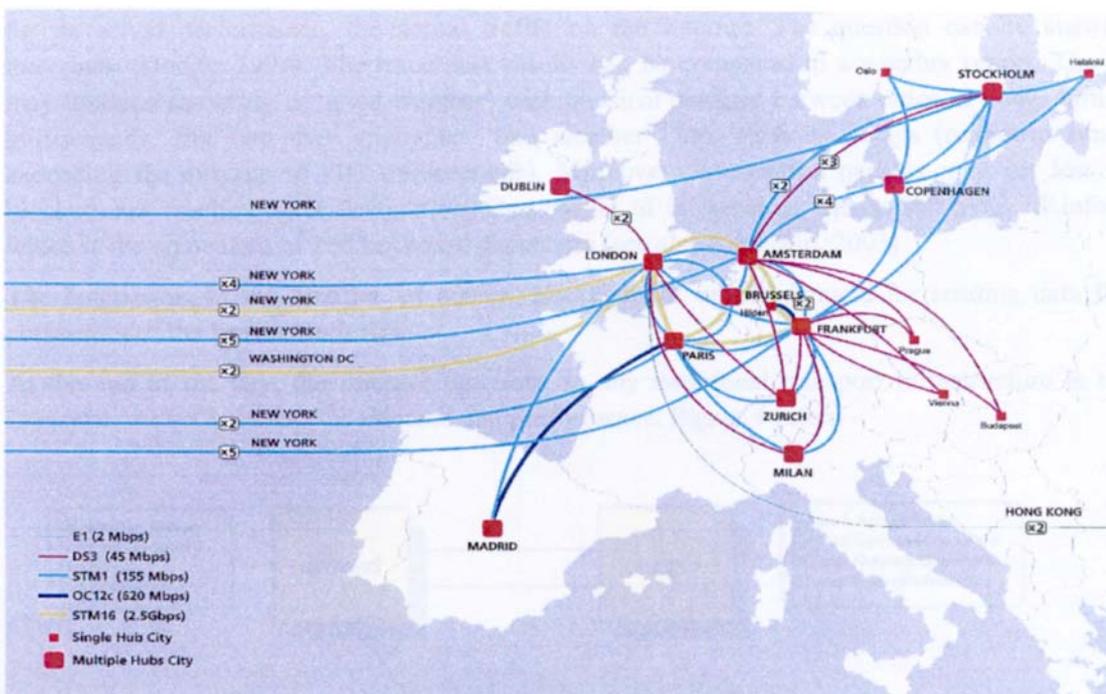
It would be erroneous to refer to the Internet industry in terms of 'new economy' as opposed to 'old economy': '... the new economy appears less like a new economy than like **an old economy that has access to a new technology**' (Porter, 2001).

'The hype is over, but the' ... real legacy of the Internet is not the birth of thousands of new online companies but **the transformation of existing businesses**' (Barabasi, 2002).

1.2 The Internet Infrastructure

There are many nodes with only a few links and only a few hubs with a large number of links.

The European transit backbone of MCI



1.3 Innovative Capabilities:

See for example the 2002 European Innovation Scoreboard

Table 2. 'Local' EU innovation leaders

Rank	Region	Country	RRSII ^{1 2}
1	Stockholm	Sweden	225
2.	Uusimaa (Suuraleu)	Finland	208
3.	Noord-Brabant	Netherlands	191
4.	Eastern	United Kingdom	161
5.	Pohjois-Suomi	Finland	161
6.	Ile-de-France	France	160
7.	Bayern	Germany	151
8.	South East	United Kingdom	150
9.	Comunidad de Madrid	Spain	149
10.	Baden-Wuerttemberg	Germany	146
17.	Wien	Austria	126
21.	Vlaams Gewest	Belgium	112
22.	Lombardia	Italy	112
31.	Southern and Eastern	Ireland	108
49.	Lisboa E Vale Do Tejo	Portugal	94
50.	Attiki	Greece	93

2 HOW CAN LATECOMERS MAKE IT IN A WORLD WHERE THE RICH GET RICHER

Will only fittest regions survive, facing the external shock of globalization?

No, because there are different degrees of fitness. As far as the match between the Internet industry and the Internet infrastructure is concerned, it is important to achieve a balance between demand and supply at **all** levels. Demand is the driving force for the growth of the networks involved. See the French experience (Dang Nguyen, 2000).

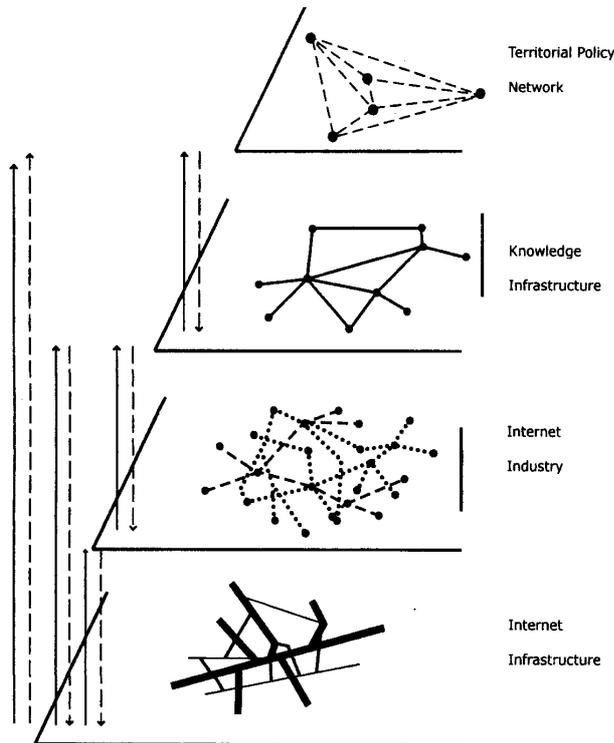
A Glocal scenario holds. Glocal refers to a dual world of top companies and local innovative milieux or environments. **Innovative milieux**, in brief, are based on the synergy of business firms (in particular small and medium-sized enterprises or SMEs) territorial authorities and knowledge centers. Milieux are about local interactions, which promote technological innovations. See the work of GREMI, the 'Groupe de Recherche Européen sur les Milieux Innovateurs' (for example, Crevoisier and Camagni, 2000).

1 The RRSII (revealed regional summary innovation index) is calculated as the average of the RNSII and the regional European summary innovation index (REUSII). The REUSII is calculated as the average of the indicator values indexed to the EU mean.

2 In total there are 148 regions for which a RRSII could be calculated.

With the introduction of innovative environments, two networks are added to those of the Internet industry and infrastructure:

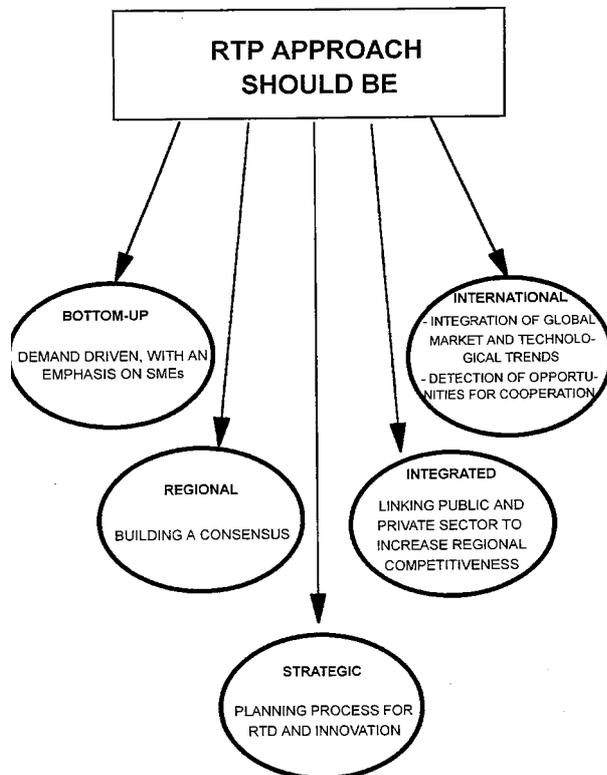
- **Territorial policy networks**, and
- Networks of knowledge centers or the **knowledge infrastructure**.



This complicates the task of matching. It may help to do this per cluster of economic activities.

There are lessons to be learned from the Flevoland Regional Technology Plan (RTP) from 1996, updated in 2002 as Regional Innovation and Technology Plan.

According to the European Commission (1994) a RTP approach should be:



While **REGIONAL** refers to innovative milieux, **BOTTOM UP** and **INTERNATIONAL** are singled out here for further explanation.

This means that the assessment of regional R&TD and innovation **demand** should be tackled **before** the analysis and assessment regional technology **supply**.

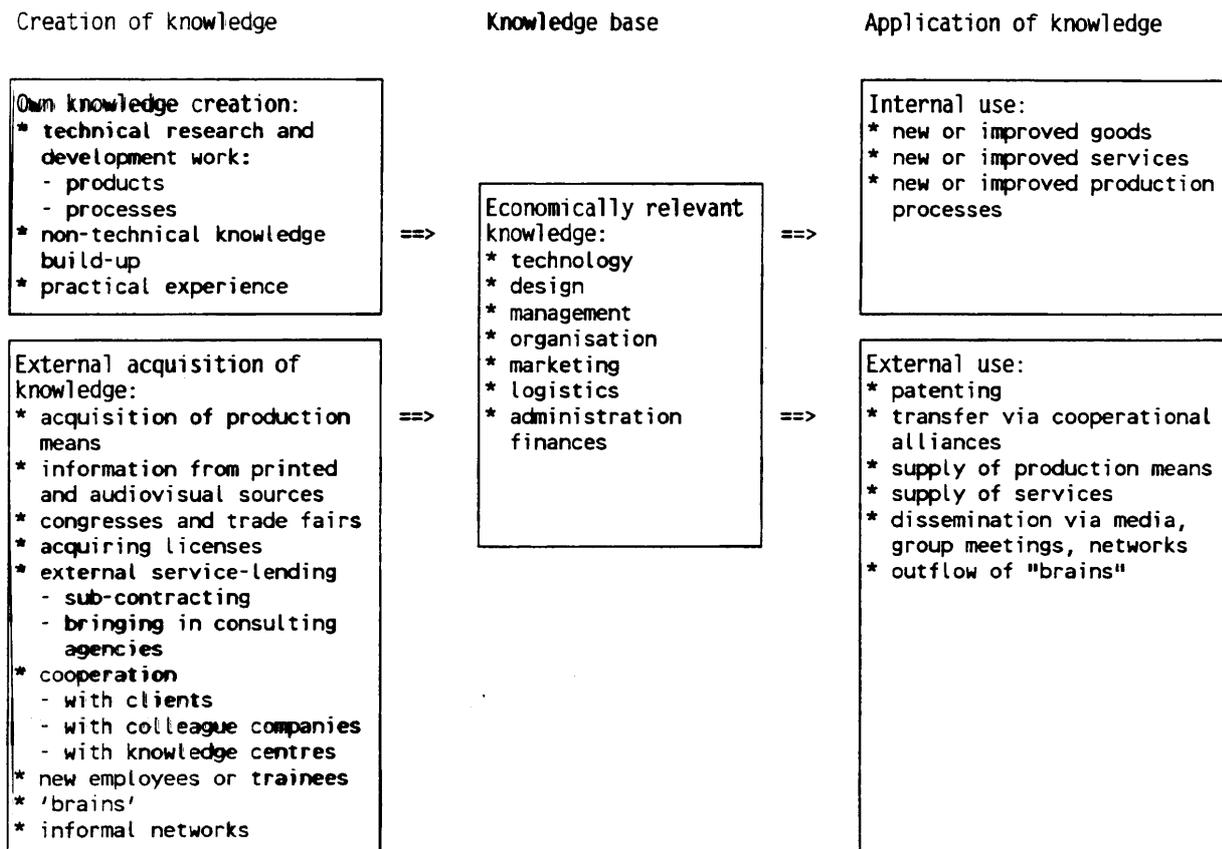
‘Various studies have pointed out that the approach followed in many regions was a top-down (and technology push) approach rather than a more bottom-up (and demand pull) approach which takes into consideration the R&TD needs of local firms’ (European Commission, 1994).

The problem is that knowledge centers and universities in particular tend to favor an approach that is supply-led.

Drawing the picture of a regional cluster of economic activities, it should comprise research laboratories as well as manufacturers and subcontractors.

The essence of innovation lies in new or improved goods, services and processes. However, studies and policy papers seldom measure those. See for example the national indicators for Europe (European Commission, 2003) or <http://www.cordis.lu/indicators>

And to produce those innovations the economically relevant knowledge goes far beyond ‘technology’.



Neither the Internet industry nor the Internet infrastructure has territorial boundaries. And knowledge centers, too may engage in transnational networking.

Therefore it is important for territorial authorities to follow in lockstep. As a consequence, successful city marketing is going to rely more on ‘a specialized “politics of flows” than a place-based politics of competition’ emphasizing indigenous factor endowment such as the presence of ‘critical infrastructure’ (Doel and Hubbard 2002).

Note that knowledge, can be imported as well as exported.

There are various European programs to promote international cooperation in particular focusing on ‘latecomers’ (and SMEs) involving the four networks mentioned above.

The policy of the European Union is increasingly focusing on ‘**Regional programmes of innovative actions**’ in an attempt to match the four networks:

There are three priorities:

- To encourage regional economies based on knowledge and technological innovation
- To stimulate the information society at the service of regional development
- To strengthen regional identity and sustainable development.

The innovative actions favor ‘latecomers’ as innovation, too, is ‘a rich-get richer phenomenon’. (European Union, 2003).

Ideally, international cooperation should involve all networks functioning as synergetic innovative milieux as envisaged by 'Erik', the new network program of innovative actions (jointly submitted by the regions of Toscana and Emilia Romagna): <http://www.eriknetwork.net>

As always: the proof of the pudding is in the eating.

LITERATURE

Barabási, A.-L. (2002) *Linked, the new science of networks*, Perseus Publishing, Cambridge, Mass.

Crevoisier, O. and Camagni, R. (eds) *Les milieux urbains: innovation, systèmes de production et ancrage*, EDES, Neuchatel.

Dang Nguyen, G. (2002) *Entreprises et hauts debits, le role des collectivités territoriales*, Observatoire des télécommunications dans la ville, Paris.

Doel, M.A. and Hubbard, P.J. (2002) *Taking world cities literally: urban competition and the spatialities of a global space of flows*: <http://www.lboro.ac.uk/gawe>

European Commission (1994) *Regional Technology Plan Guide Book*, CM International, Velizy-Villacoublay.

European Commission (2002) *2002 European Innovation Scoreboard*, Brussels.

European Union (2003) *Regional programmes of innovative actions, inforegio panorama*, No. 11, 4-5

Porter, M. (2001) *Strategy and the Internet*, Harvard Business Review, March, 63-78.

Province of Flevoland (1996) *Regional Technology Plan*, Assen/Utrecht.

Province Flevoland (2002) *Regionaal Innovatie- en Technologieplan Flevoland*, Lelystad