

Varying Paths to Success

With Special Reference to North European Bio-Locations

Changing Foresight Practices in Regional Development
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Structure of the presentation

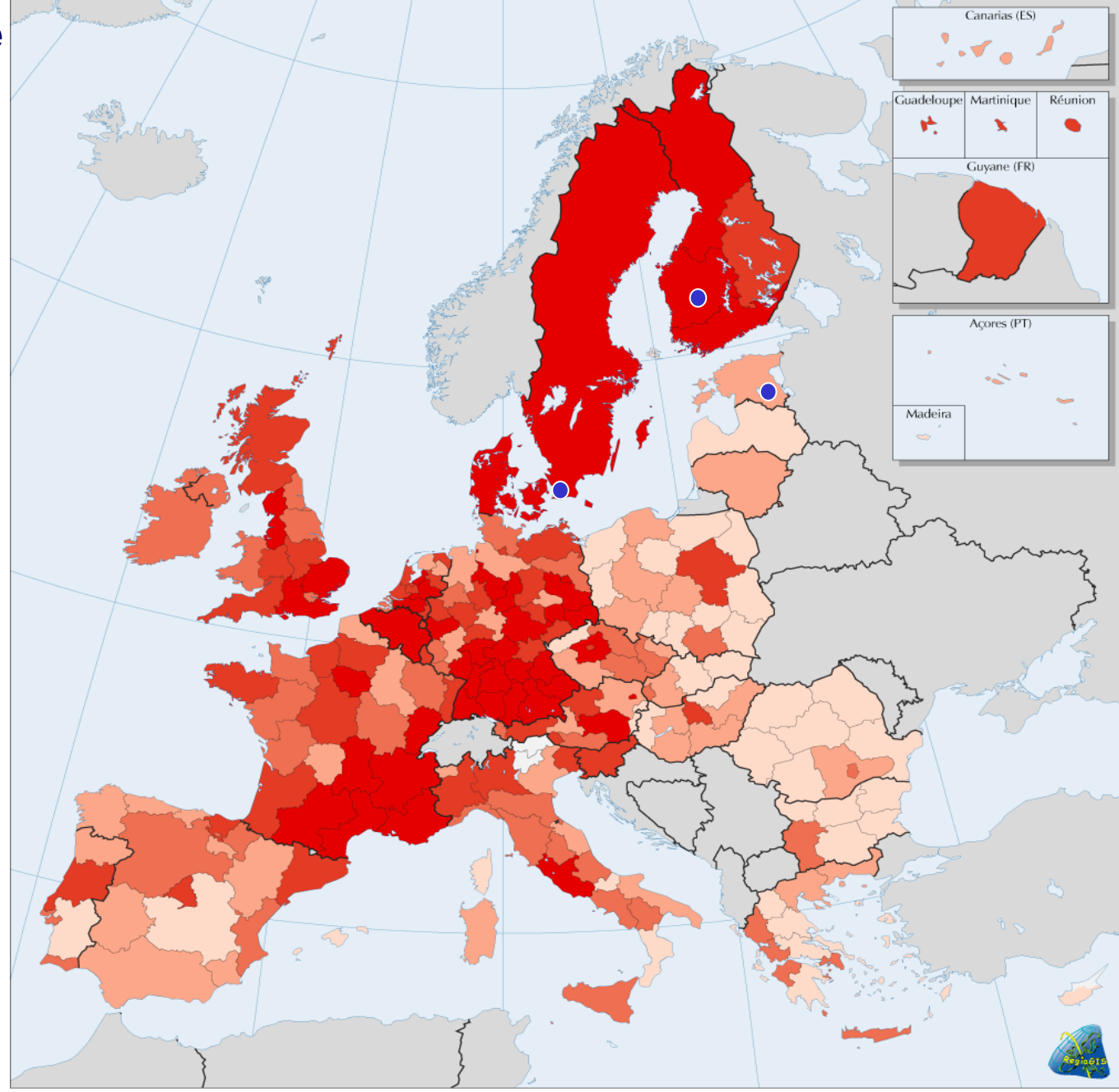
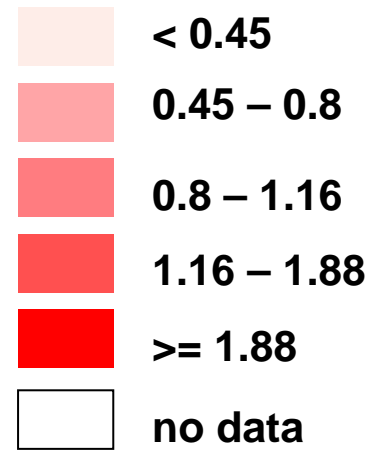
- Introduction
- Foresight practices in bio-sector
- Limits to path-dependence
 - > Sector-specific
 - > Region-specific
- Path-creation and endogenous growth
- Path forward

Introduction

- Part of a research in progress
 - Analysis of strategy documentation
- Three non-capital cities
 - Malmö (SE)
 - Tampere (FI)
 - Tartu (EE)
- Focus in
 - Concepts and sector-specific dynamics
- Focus not in
 - Formal (national) regulation
 - Predictions concerning the future of bio-sector

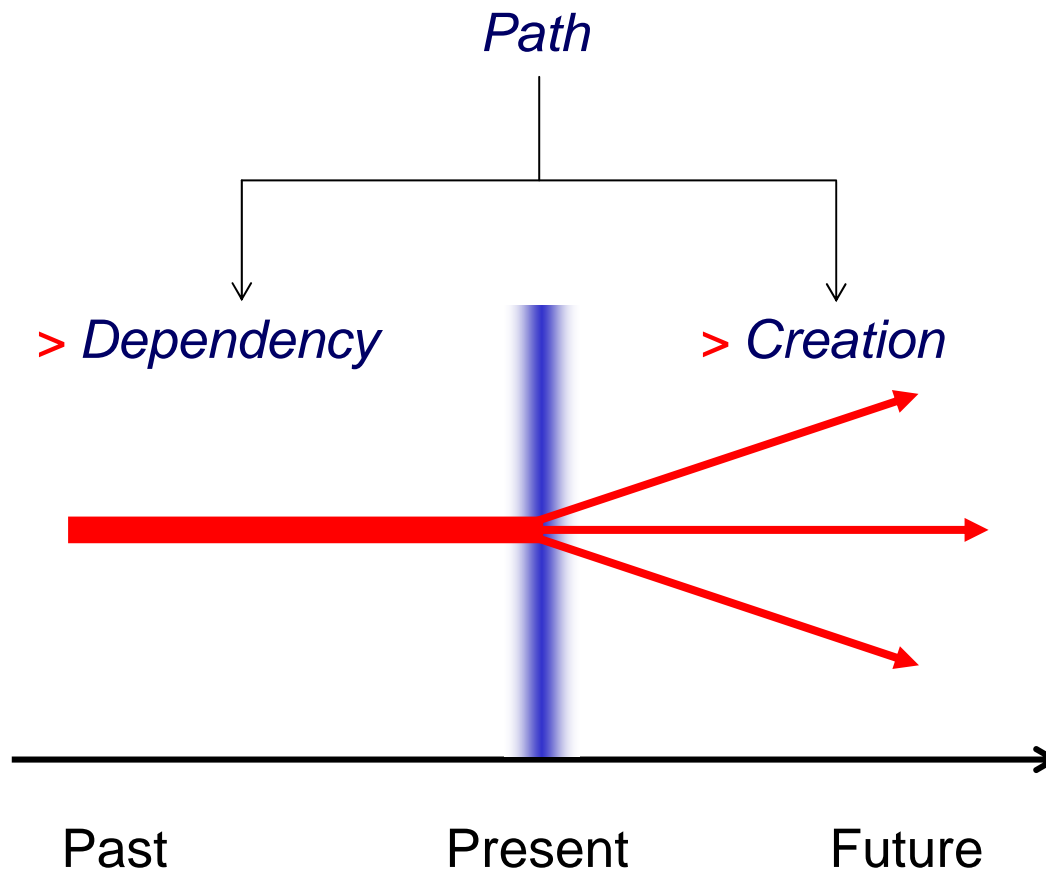
Regional Expenditure in Research and Development 2002 *in % of GDP*

EUR-27 = 1.92



Source: European Commission

Foresight practices in bio-sector



Limits to path-dependence

Bio-sector-specific

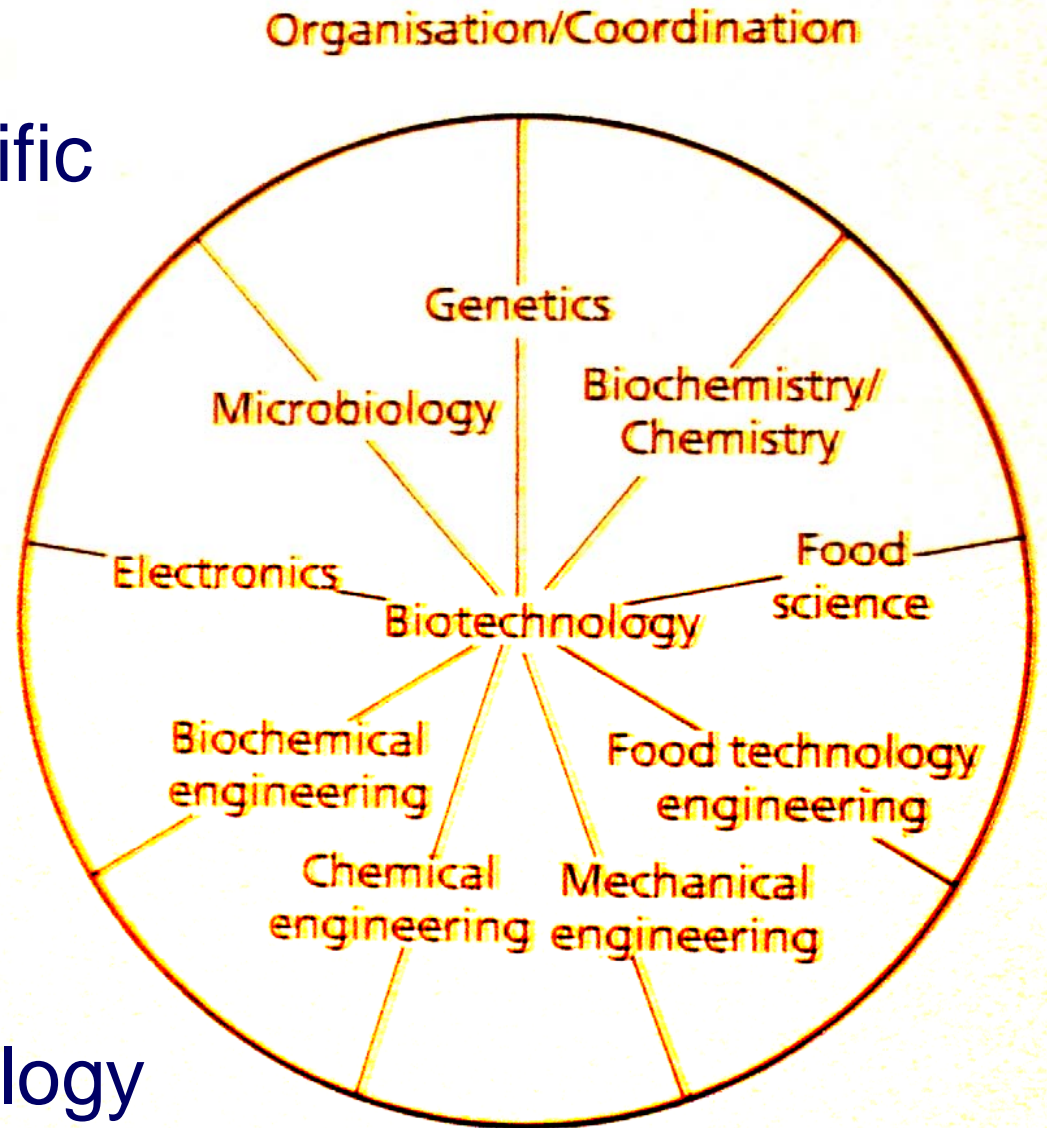
> Differences compared with the ICT boom

- consumer acceptance of e.g. genetic engineering
- ubiquitous industrial platform in food sciences or pharmaceuticals to facilitate new biotechnology

> Previously closed national markets facing opening-up

- WTO and extended trade changing the previously static setting in old industrial platform
- Financial market liberation: a possibility to find new "non-national" financing to boost new biotechnology

Existing scientific and industrial platforms that contribute to the potentially ubiquitous character of new biotechnology



(Source: Smith 2004)

Limits to path-dependence

Bio-sector-specific

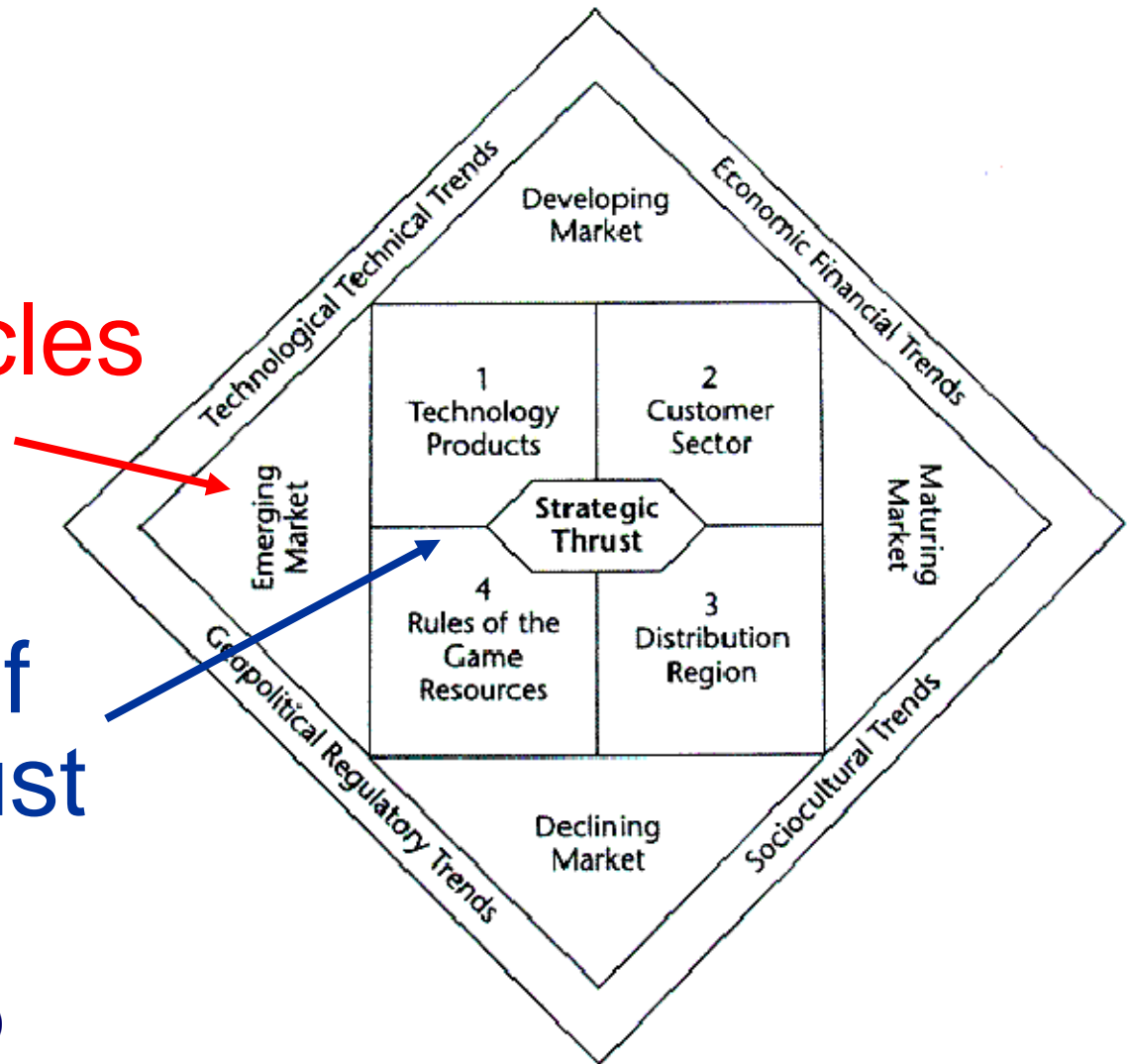
- > Requirements to see things differently
 - increasing computing capacity as a source of searching and finding within old industries
 - inter-industry convergence facilitating new combinations of existing knowledge
- > Requirements to create unique strengths
 - ubiquitous character of old biotechnology platforms and the need to create something particular
 - focus from development of the core technology to working on the rules of the game

How to locate ICT and Biotechnology?

market life-cycles

and

elements of
strategic thrust



(Source: Sussland 2000)

Limits to path-dependence

Region-specific

- path-dependence locally contingent and emergent
- co-evolving with other regions
- actors? a region's firms, industries, the regional economy as a whole
- the initial location of a new technology serendipitous?
- the evolutionarity of the process

Path-creation and endogenous growth

- *potentialia praesentatae* (Malaska, Kamppinen & Wilenius 1999)
- endogenous growth
 - capital, technology, labour
 - globally ubiquitous technical development
- intentionality (cf. De Jouvenel 1967)
 - > strategies
- different locational factors of biotechnology sectors
 - analytical and synthetic knowledge creation

Path forward

- Interview data still to be added
- Key argument still to be strengthened:
 - > Patterns of success in North European bio-locations combine several cumulative factors
 - Global industrial and scientific advancements
 - National and international regulatory frameworks
 - Locally specific strengths and commitments