

The Netherlands of 2040

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2040

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Times Are a-Changin'



Times Are a-Changin'

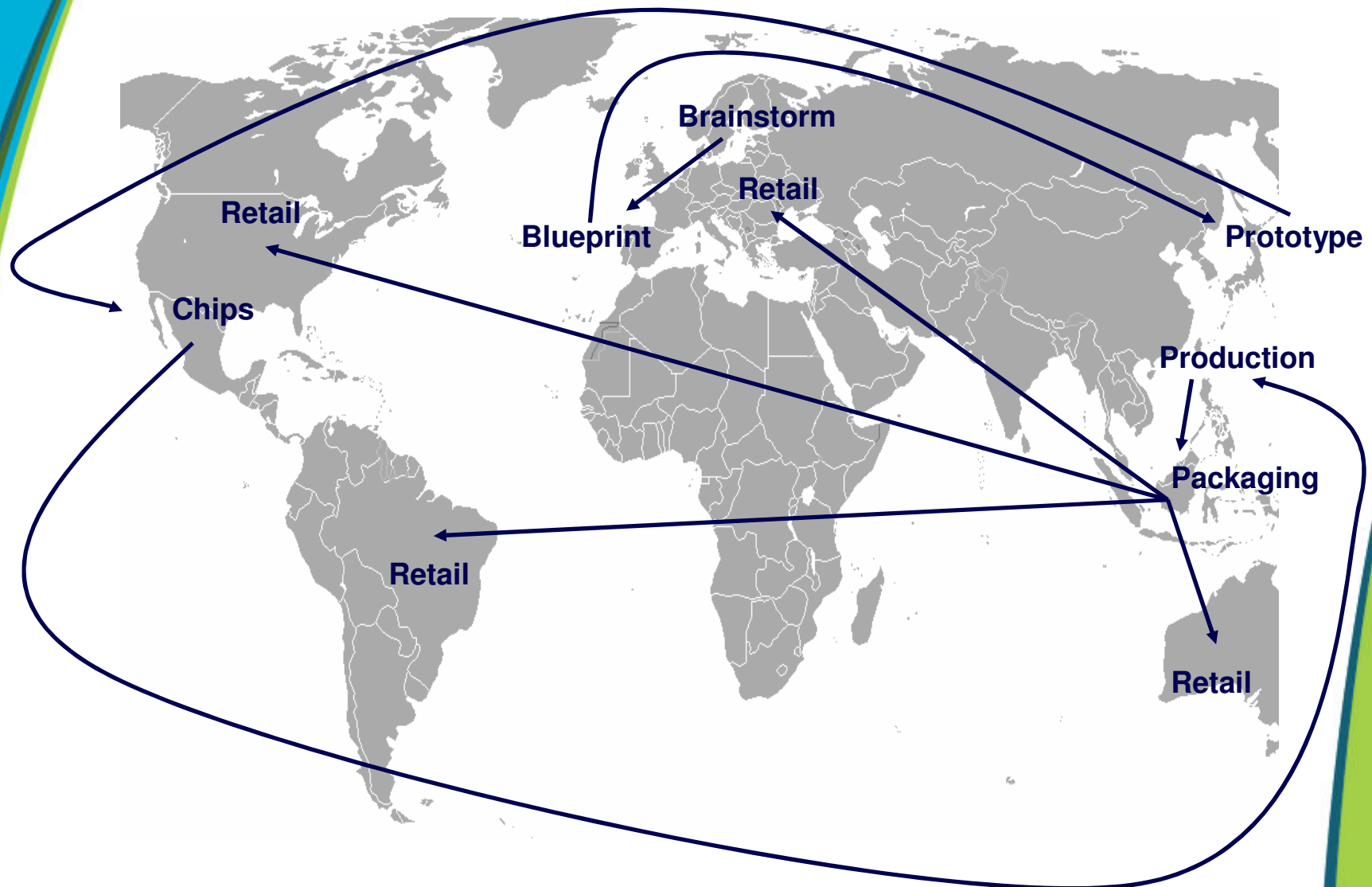
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New CPB Scenario Study

- Question
 - How will we earn our daily bread in 2040?
- Approach
 - Scenarios to deal with uncertainty
- Answer
 - Smart people
 - Strong cities
- Policy

Specialisation of Work ...

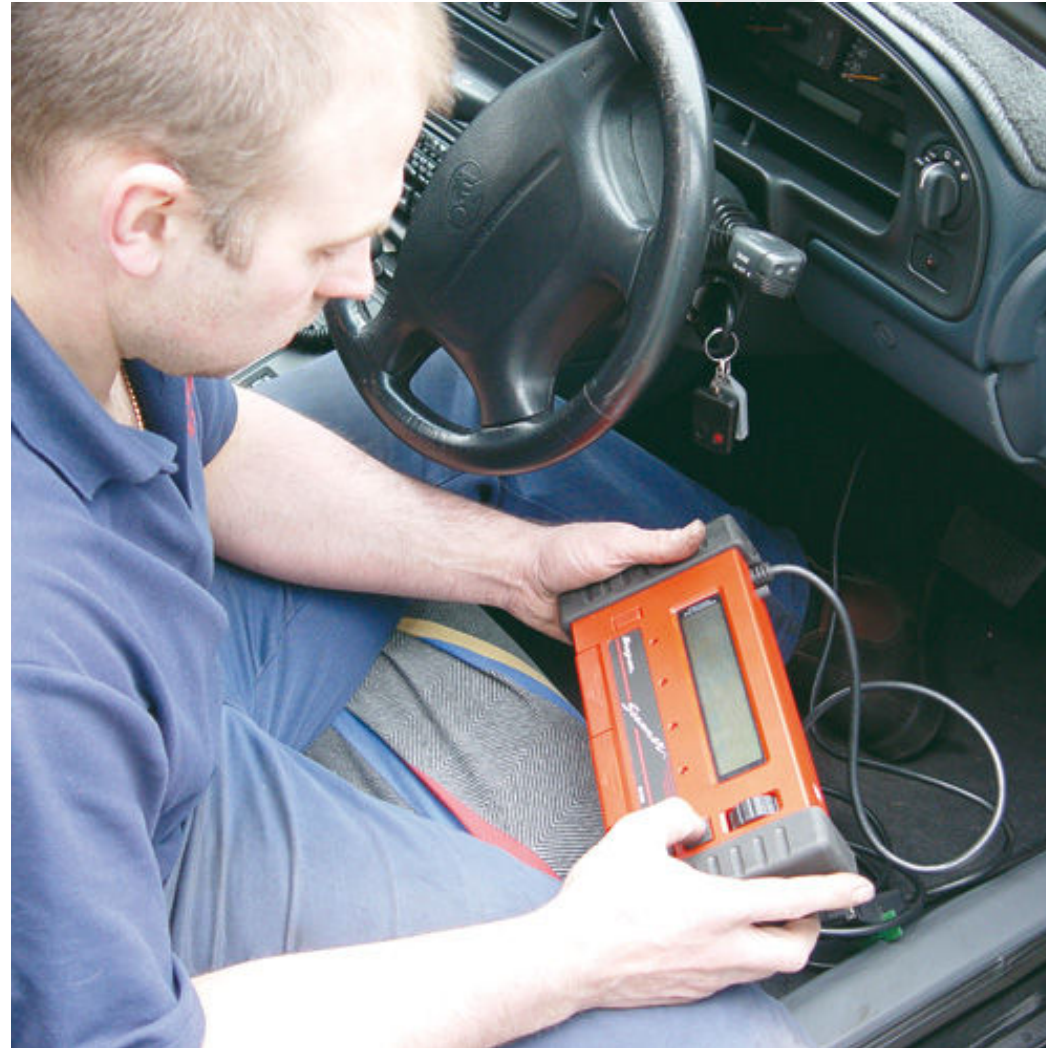


Smart People

• Specialisation

- Communication technology ...
- ... leads to unbundling of tasks ...
- ... global knowledge exchange ...
- ... and production by specialist workers

Generalisation



Smart people

- ... or generalisation
 - Mechanics masters more complex systems
 - Insurance agents with broad portfolio
 - Expert system to diagnose illness
 - Design programmes
 - Write your own emails

Smart People

• Specialisation

- Communication technology ...
- ... leads to unbundling of tasks ...
- ... global knowledge exchange ...
- ... and production by specialist workers

• Generalisation

- Information technology ...
- ... bundles tasks ...
- ... performed by autonomous workers

Cities Are the Place to Be



Concentration of Economic Activity ...



Strong Cities

- Concentration
 - Economies of scale ...
 - ... with face-to-face interactions ...
 - ... to develop new technologies

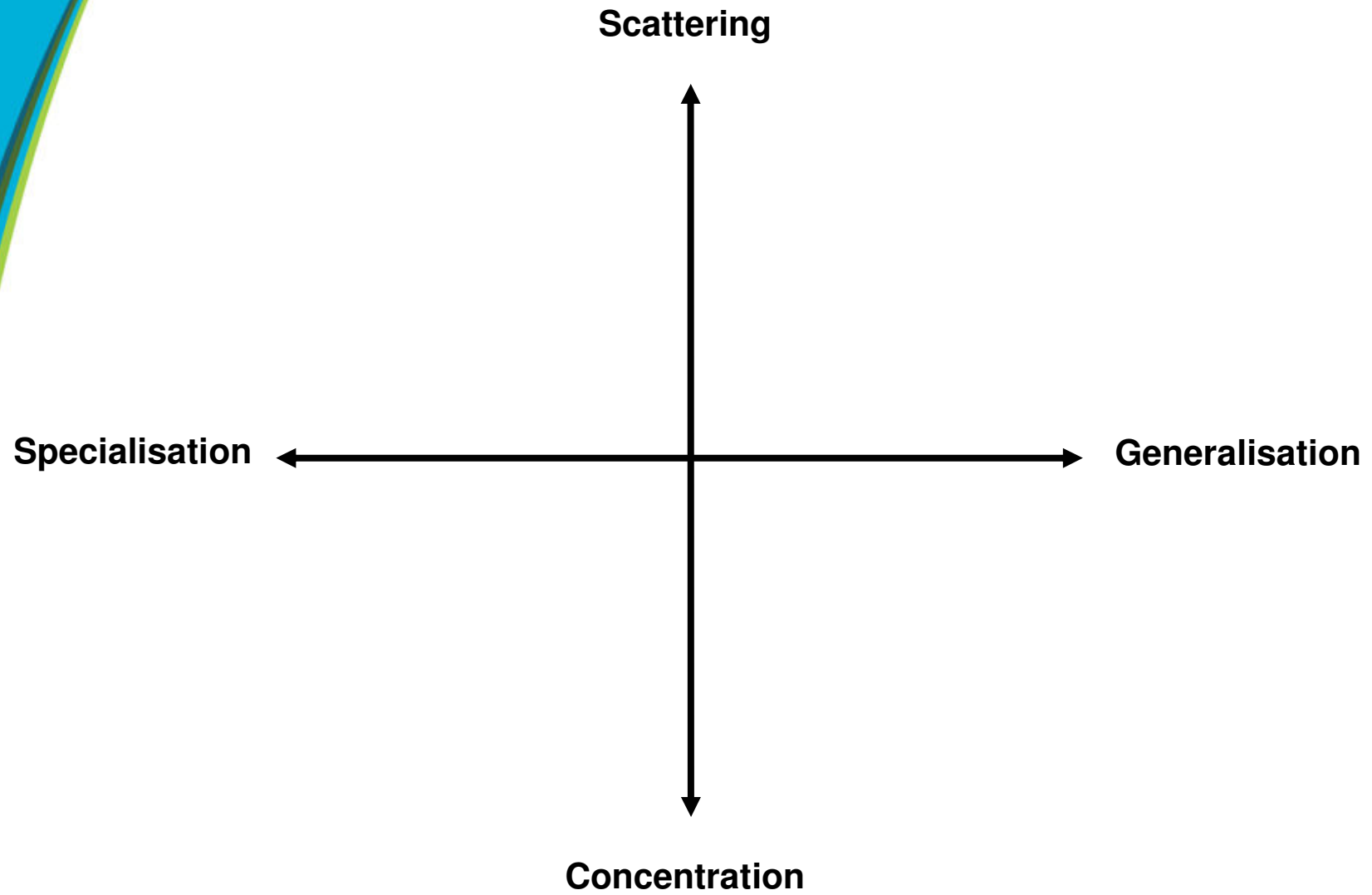
... or Scattering of Economic Activity



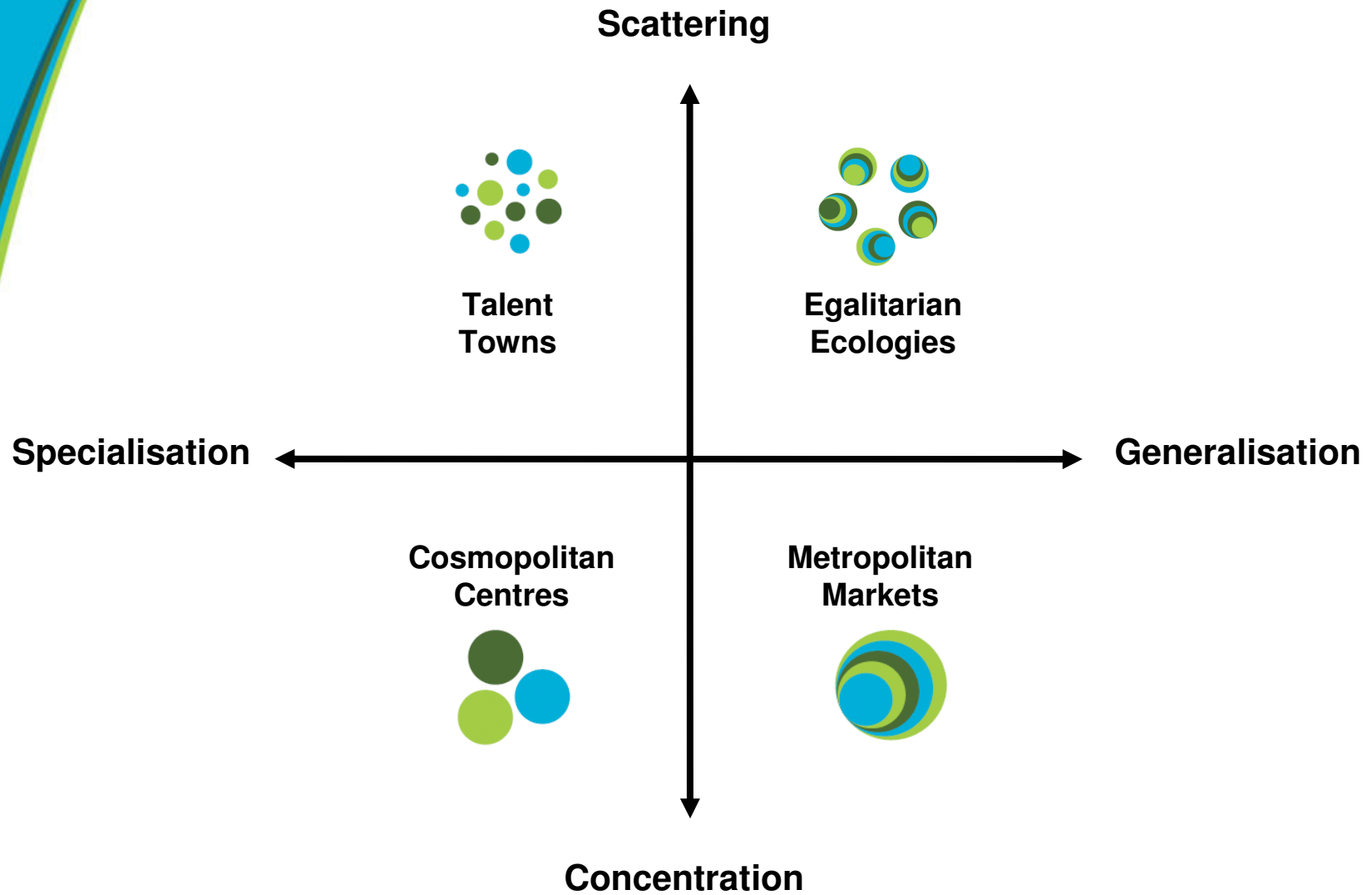
Strong Cities

- Concentration
 - Economies of scale ...
 - ... with face-to-face interactions ...
 - ... to develop new technologies
- Scattering
 - Networks of small cities ...
 - ... with excellent connections ...
 - ... facilitated by ICT

Two Uncertainties



Four Scenarios



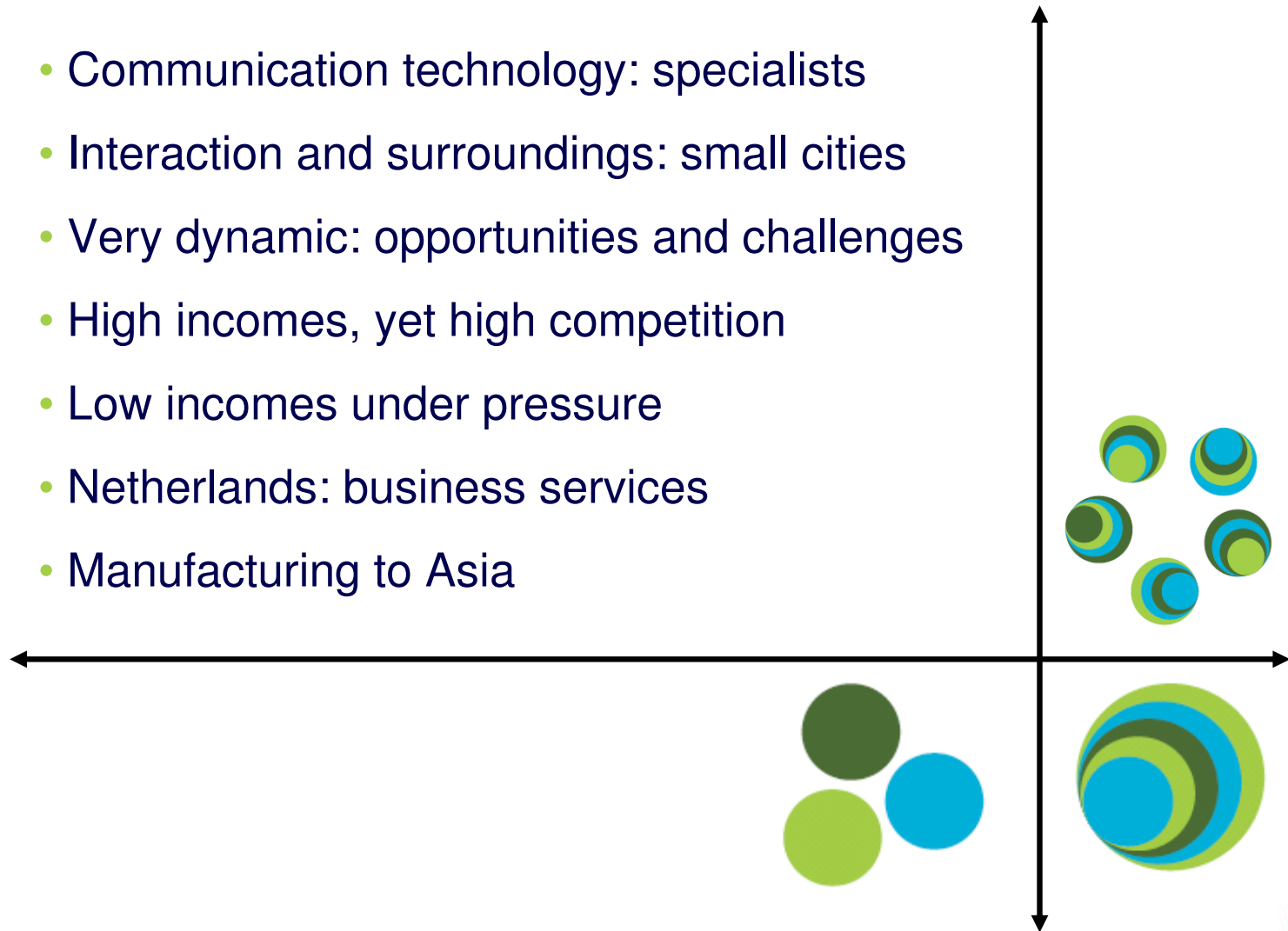
Talent Towns



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Talent Towns

- Communication technology: specialists
- Interaction and surroundings: small cities
- Very dynamic: opportunities and challenges
- High incomes, yet high competition
- Low incomes under pressure
- Netherlands: business services
- Manufacturing to Asia



Cosmopolitan Centers

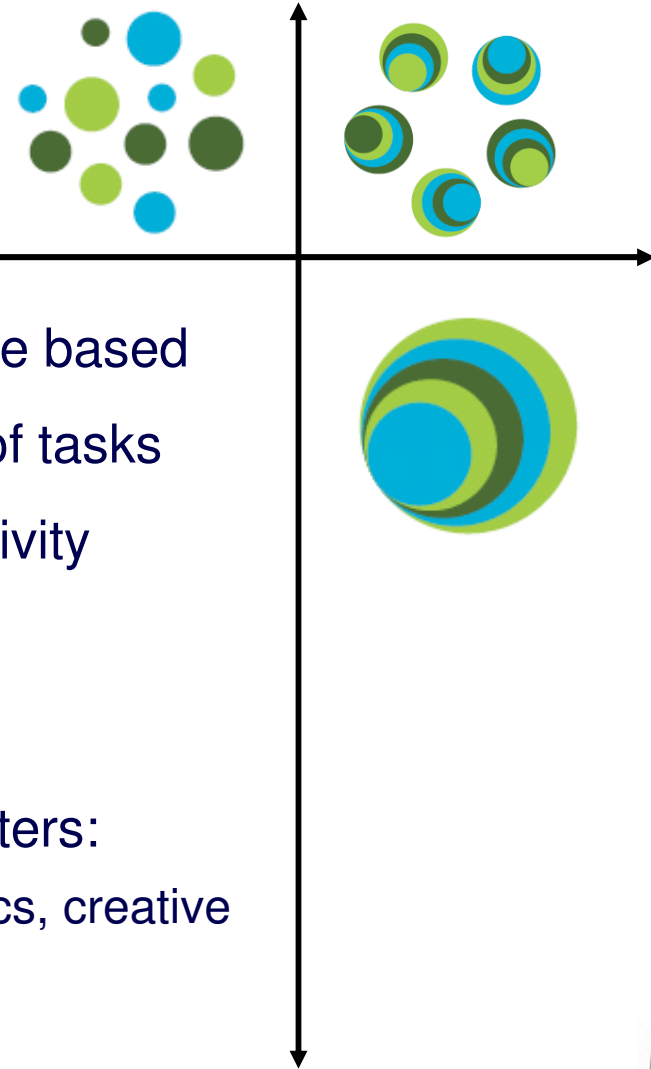
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Cosmopolitan Centers

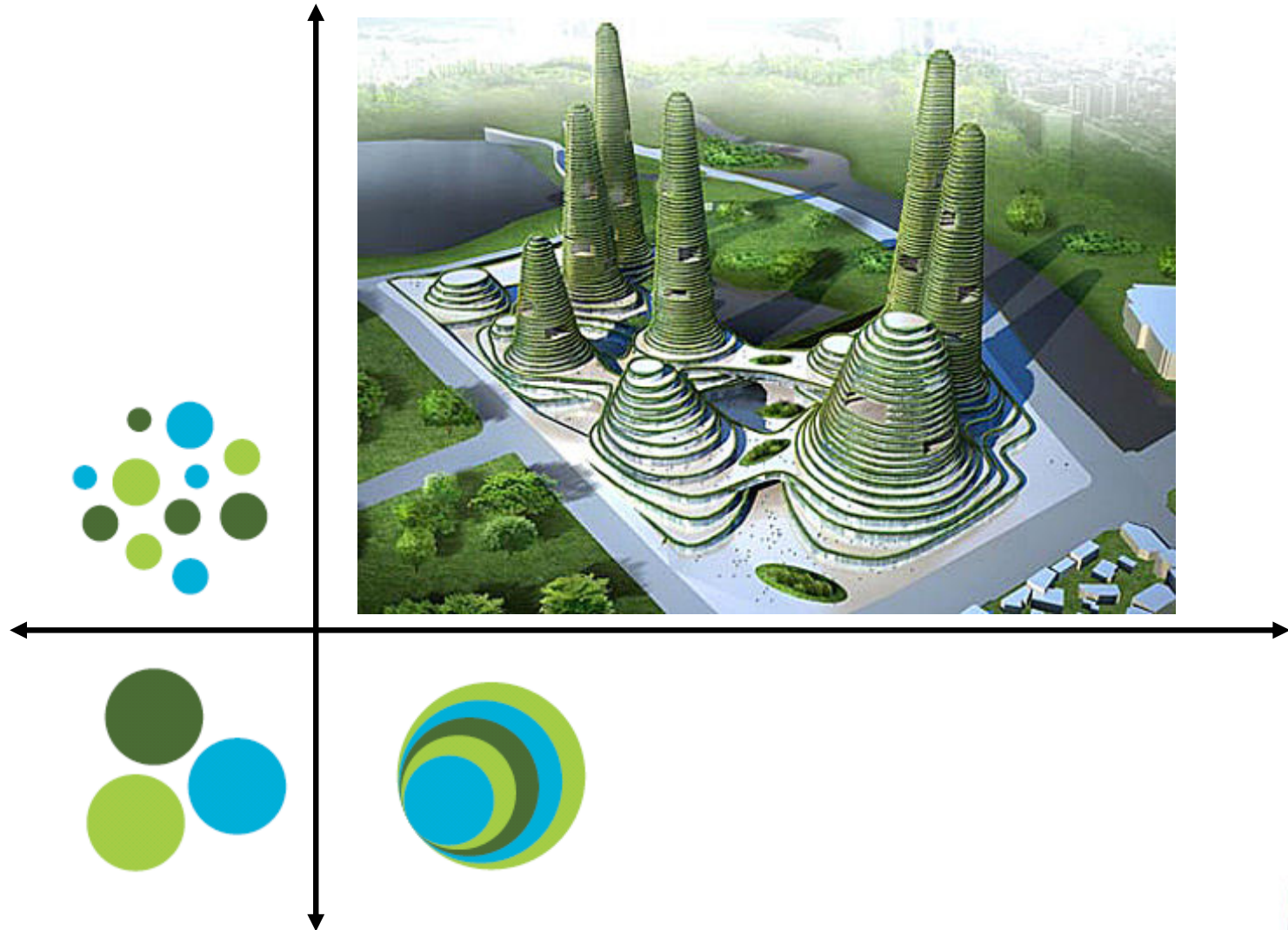
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- Bio- and nanotechnology: science based
- Communication: global division of tasks
- Cities: clusters of specialised activity
- Risk: other city takes over
- Substantial income inequality
- Examples of possible Dutch clusters:
 - water, biomass, medical, logistics, creative

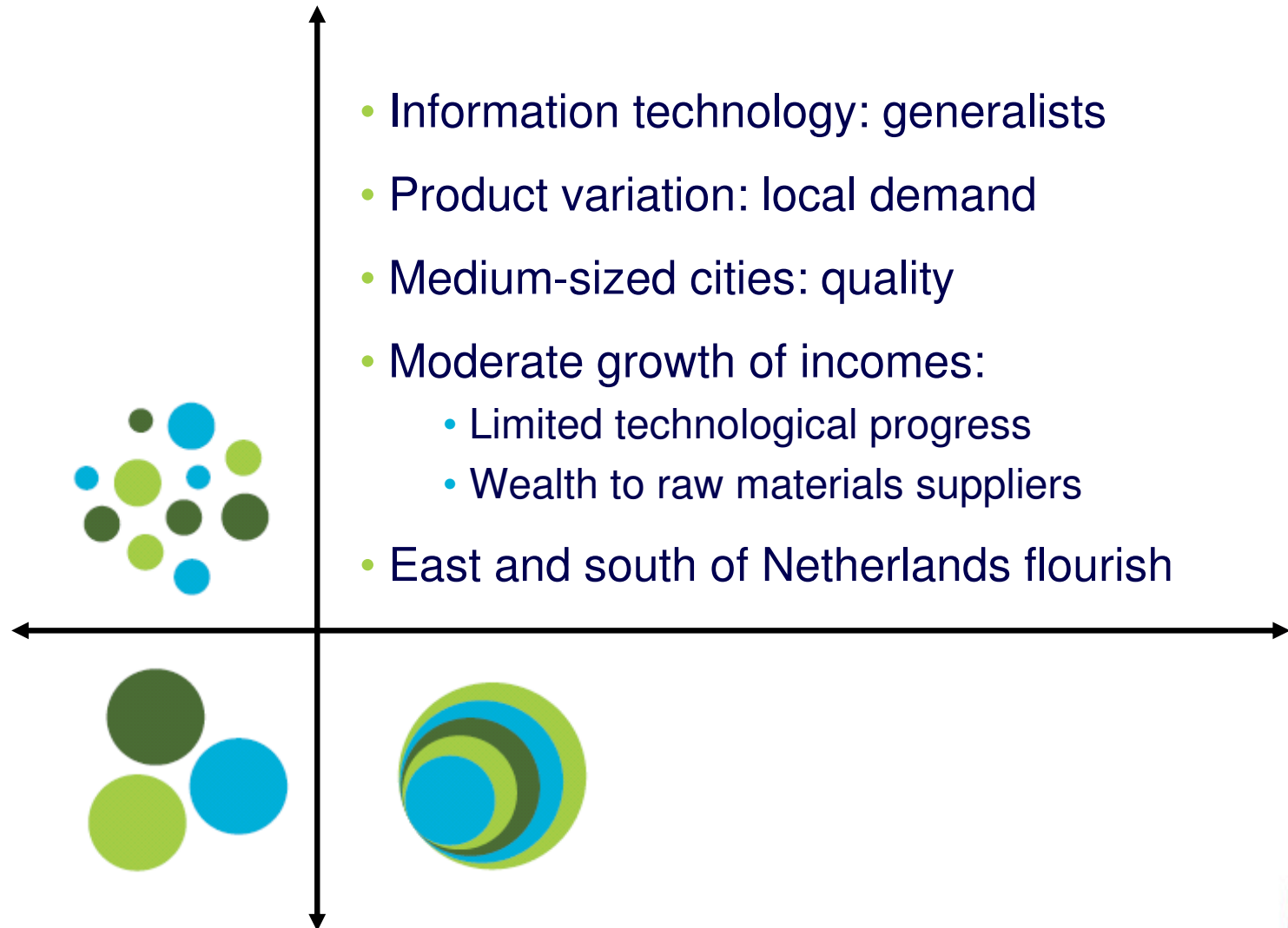


Egalitarian ecologies

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Egalitarian ecologies

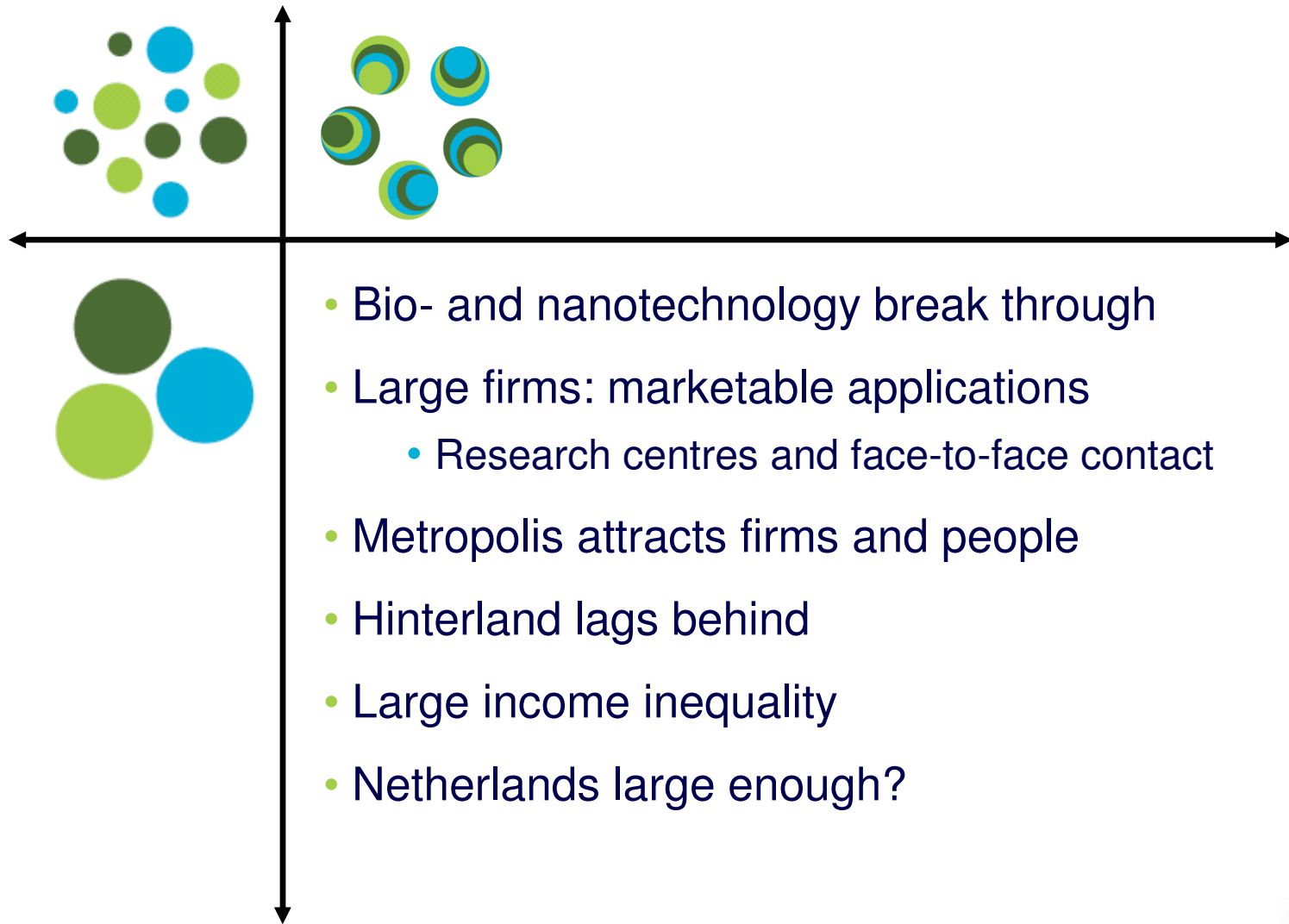


Metropolitan Markets



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Metropolitan Markets



The Magic Circle of Policymaking



Attractors (A) and mobile production factors (M)



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MM

Workers

M

A

M

A

Ideas

M

A

M

A

Demand

M

M

A

A

High Tech Campus
attractor

weak

needs scale

local variety

absorbed

Connections

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MM

Workers	continental	local and global	national	local
Ideas	global	local and global	global	local
Final goods	global	global	continental	limited
High Tech Campus	part of network	part of local infrastructure	link to global knowledge	link to Randstad

The knowledge economy



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MM

	TT	CC	EE	MM
GPT	0	research oriented	0	application oriented
Knowledge	specific	specific	general	general
Spillovers among	similar workers	similar workers	different workers	different workers
Innovation	direct applications, strong competition	radical, firm-university linkages	applied and incremental	fundamental and applied, within firms
High Tech Campus	specialisation, competition	GPT research, firm- university	applied, differentiation	large firms

Innovation policy



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MM

	TT	CC	EE	MM
Policy scope	limited	high	limited	hardly
Policy orientation	specific	specific	generic	generic
Public – private cooperation	0	+	0	0
Company size	small	large	small	large
Company market position	entrants	both	incumbents	incumbents
Intellectual property rights	+	++	+	+
Innovation subsidy	+	++	+	0
Innovation credit	+	0	+	0

High Tech Campus Eindhoven: summary



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EE



MM

Attractor	weak	needs scale	local variety	absorbed
Connections	part of network	part of local infrastructure	link to global knowledge	link to Randstad
Knowledge	specialisation, competition	GPT research, firm - university	applied, differentiation	large firms
Policy support	limited	high	limited	hardly
Policy focus	IPR, subsidy and credits	PPP, IPR, subsidy	IPR, subsidy and credits	IPR

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