The Smartest Places on Earth: Why Rustbelts Are the Emerging Hotspsots of Global Innovation

Antoine van Agtmael and Fred Bakker
Looking in the rearview mirror
Looking in the rearview mirror

U.S. Employment in Manufacturing Industries (in millions)


20 15 10

7 million jobs lost

Reversal

7 million jobs lost
Looking in the rearview mirror

Competition
Automaton
2008 Crisis
Not the whole story
The American (and Northern European) economies are NOT on the decline but regaining competitiveness.
The new paradigm
The era of cheap is over

The era of “smart” has begun

Manufacturing is not coming back...
...it is being reinvented
The new paradigm

Two pillars

1. Sharing brainpower
Sharing brainpower

**In the past**
- Hierarchical
- Closed/IP-oriented
- Siloed
- Top-down
- Lone ranger
- Suburban, isolated research labs

**Today**
- Collegial
- Open
- Multidisciplinary
- Bottom-up
- Collaborative
- Urban innovation districts
Two pillars

1. Sharing brainpower
2. A new branch of the economy
A new branch of the economy

Sensor technology

Wireless IT

Big Data

New production methods

New materials

New discoveries

Old industrial expertise
The future is all about connecting and connectedness.
A new branch of the economy

New production methods

New production methods are reinvigorating old industries
From Rustbelts to Brainbelts
Akron, Ohio — From rubber capital to polymer city

World-class research on polymers stayed

A connector: Luis Proenza
From Rustbelts to Brainbelts

What makes a brainbelt?

- A life-threatening situation
- Universities performing world-class research
- Complex, expensive challenges requiring a multi-disciplinary approach
- Openness to sharing brainpower
- A connector and supportive local officials
- Infrastructure that attracts and retains top talent
- Access to venture capital
From Rustbelts to Brainbelts

Albany, New York — Nanotechnology
From Rustbelts to Brainbelts
From Rustbelts to Brainbelts

Eindhoven — From lightbulbs to the world’s smartest city
From Rustbelts to Brainbelts

Zurich — life science brainbelt
From Rustbelts to Brainbelts

Dresden — Chips in former East Germany
From Rustbelts to Brainbelts

Lund-Malmo — From shipyards to Particle Accelerator
Oulu, Finland – from Nokia to wireless medicine
Rustbelt cities are building on forgotten strengths, transforming themselves into brainbelts. They are creating the smart products that the 21st century demands.