## THE Smartest PLACES ONEARTH

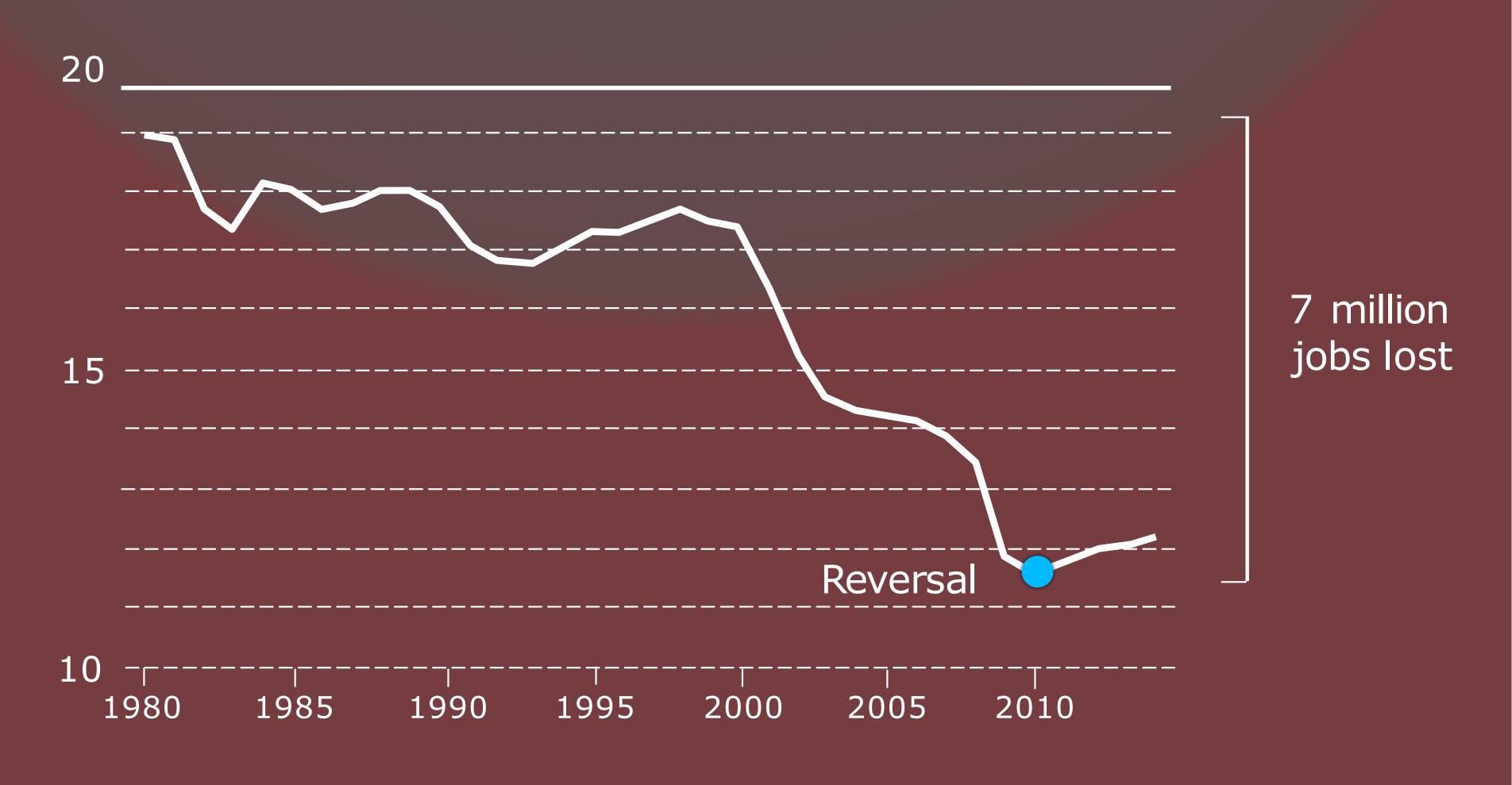
WHY RUSTBELTS ARE THE EMERGING HOTSPOTS OF GLOBAL INNOVATION



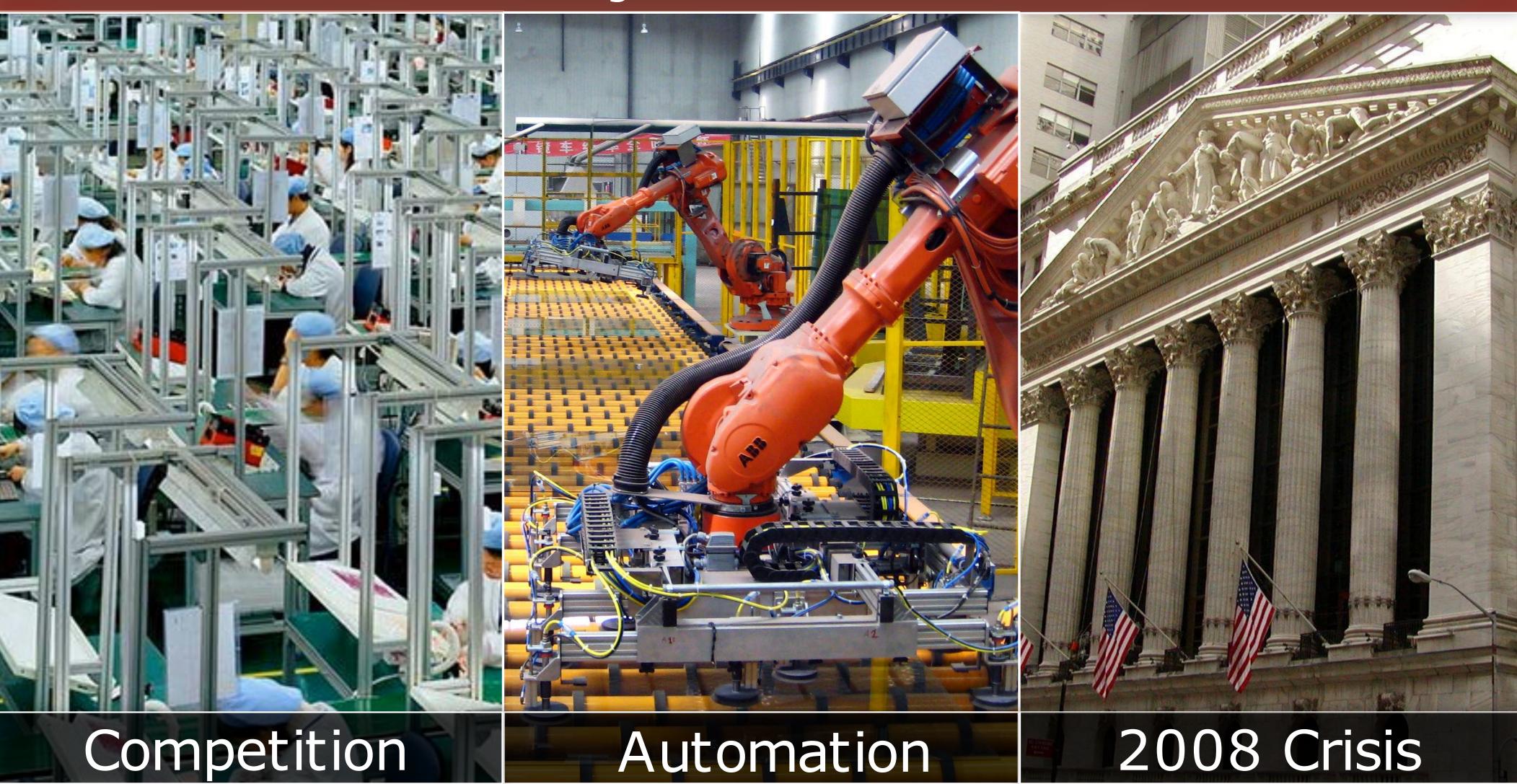
#### Looking in the rearview mirror

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



#### Looking in the rearview mirror



#### 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



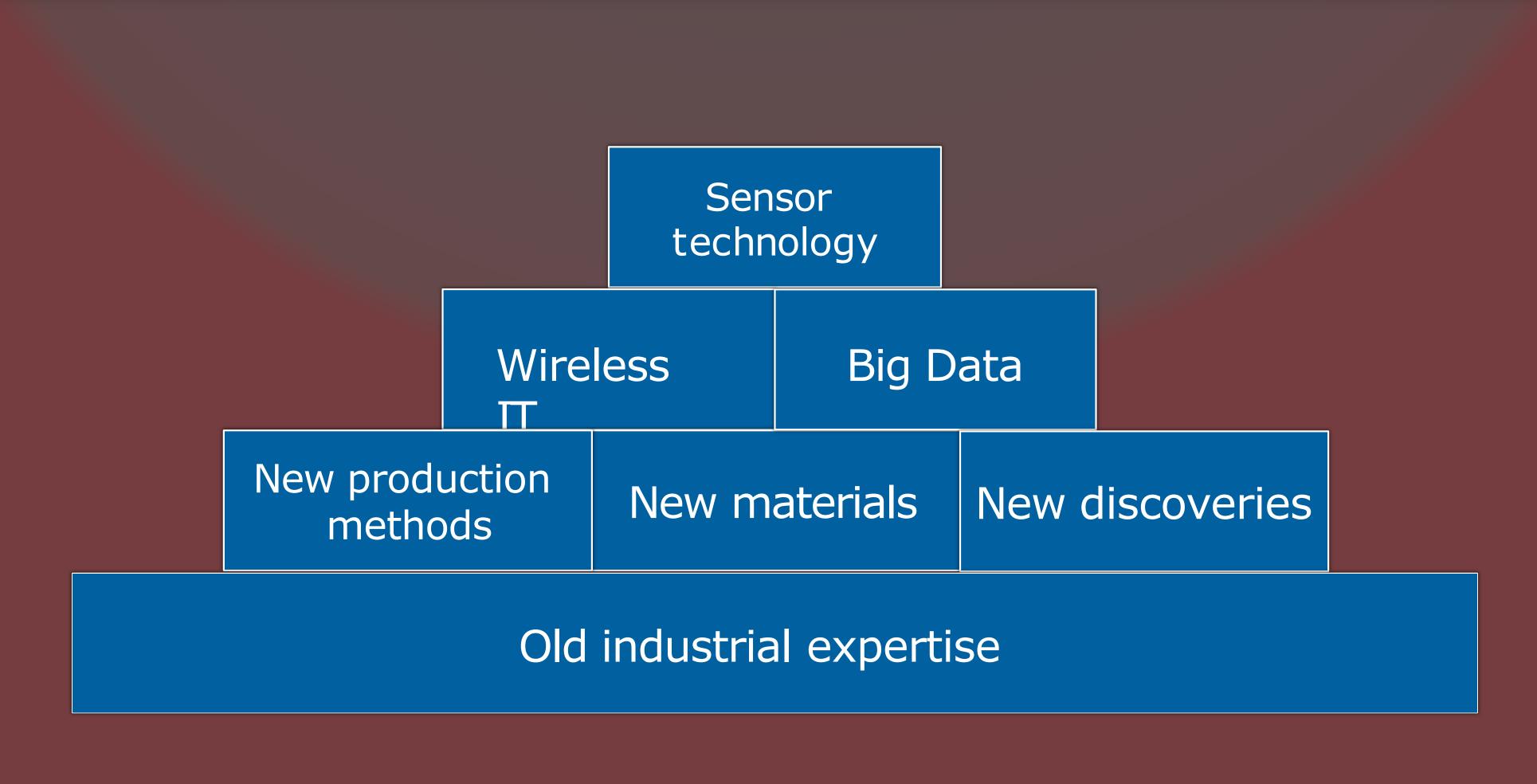
Urban innovation districts

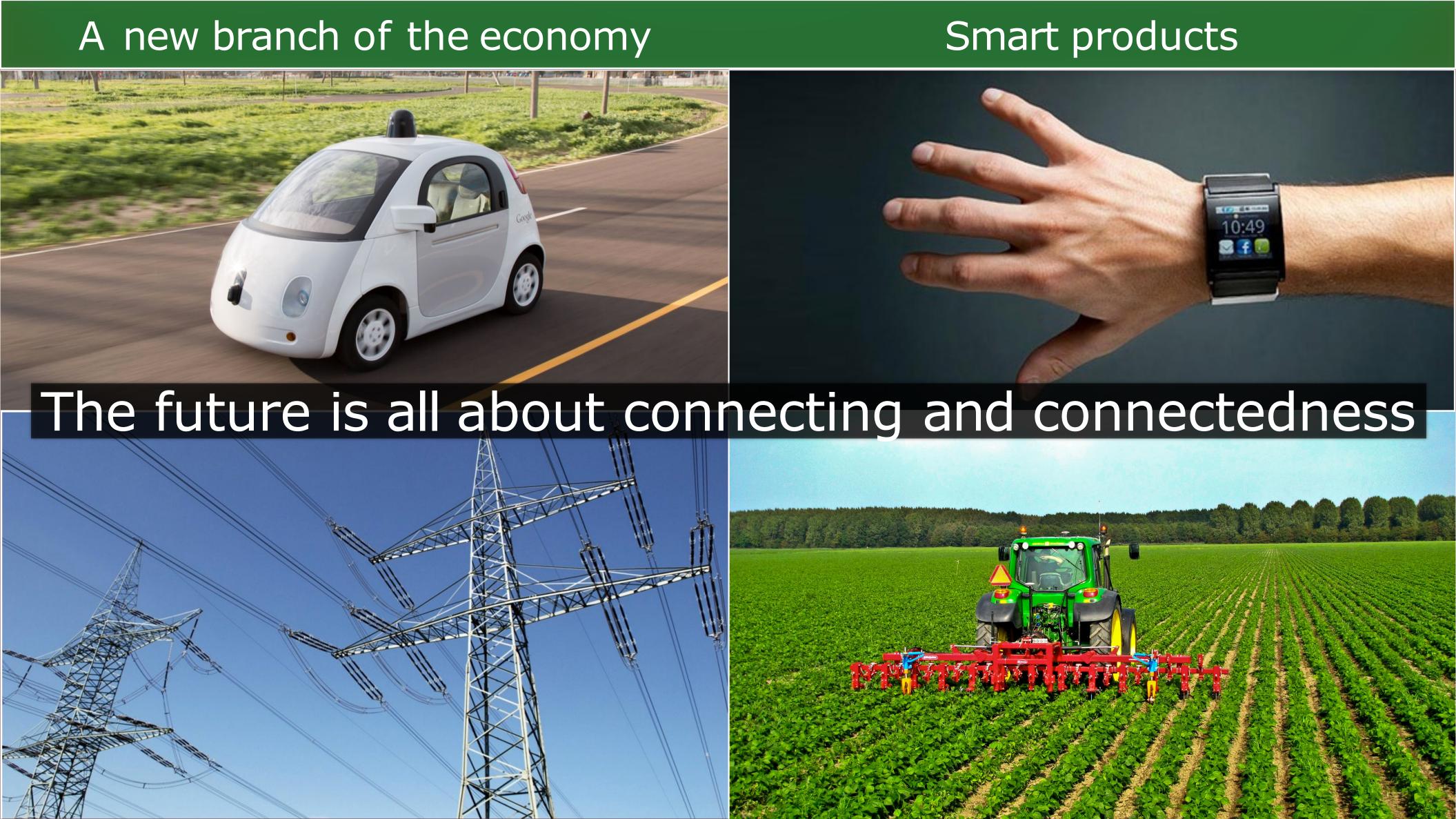
#### The new paradigm

#### Two pillars

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

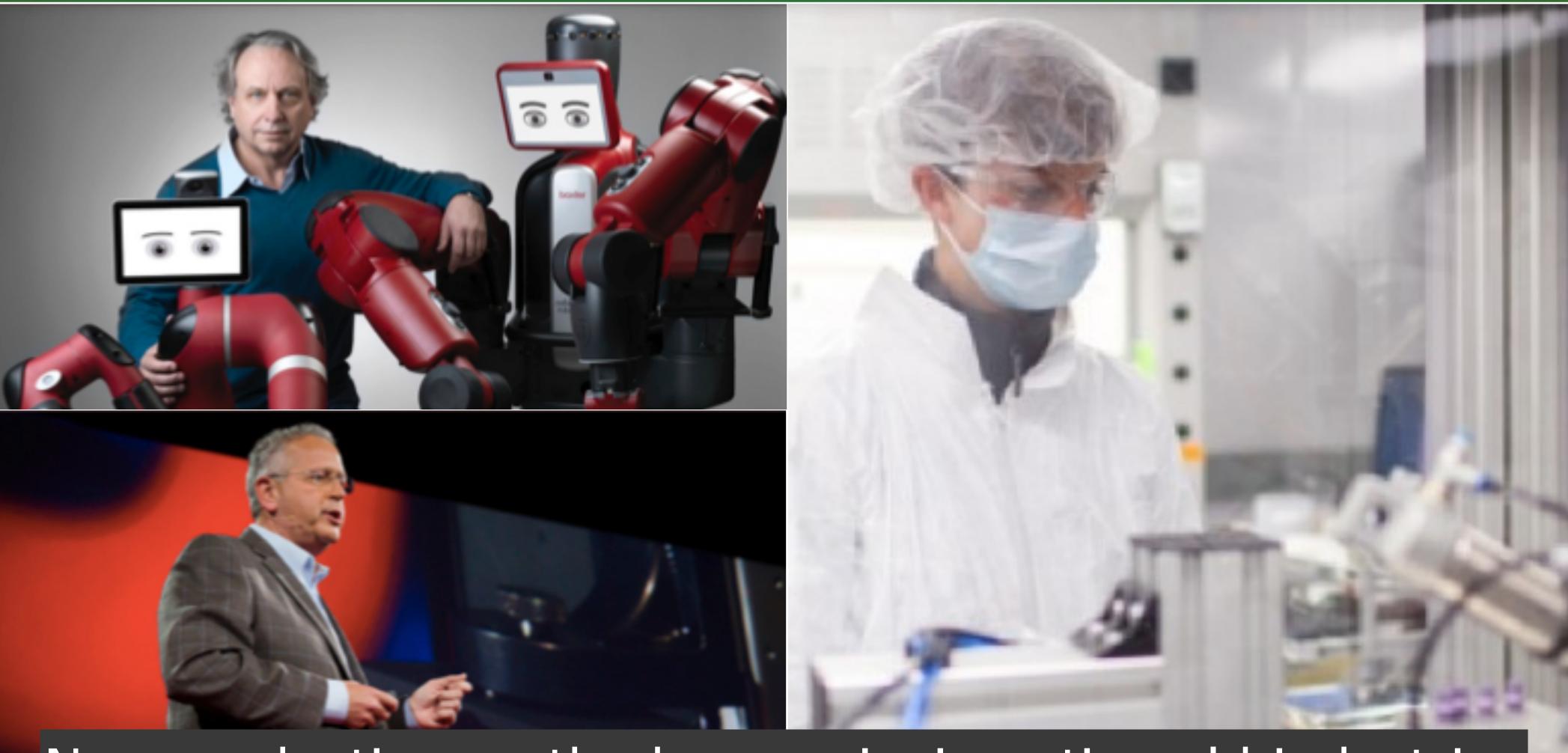
#### A new branch of the economy





#### A new branch of the economy

#### New production methods



New production methods are reinvigorating old industries

#### Akron, Ohio — From rubber capital to polymer city



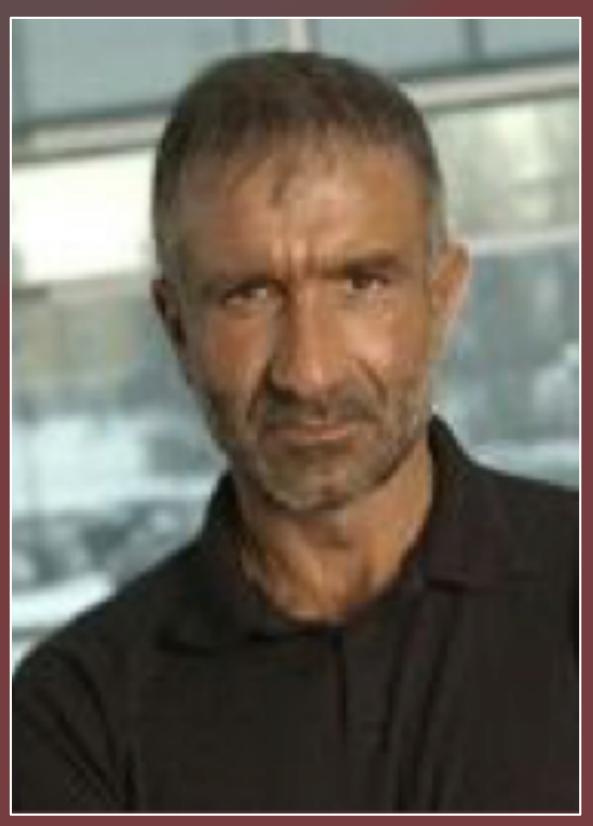


#### What makes a brainbelt?

- 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

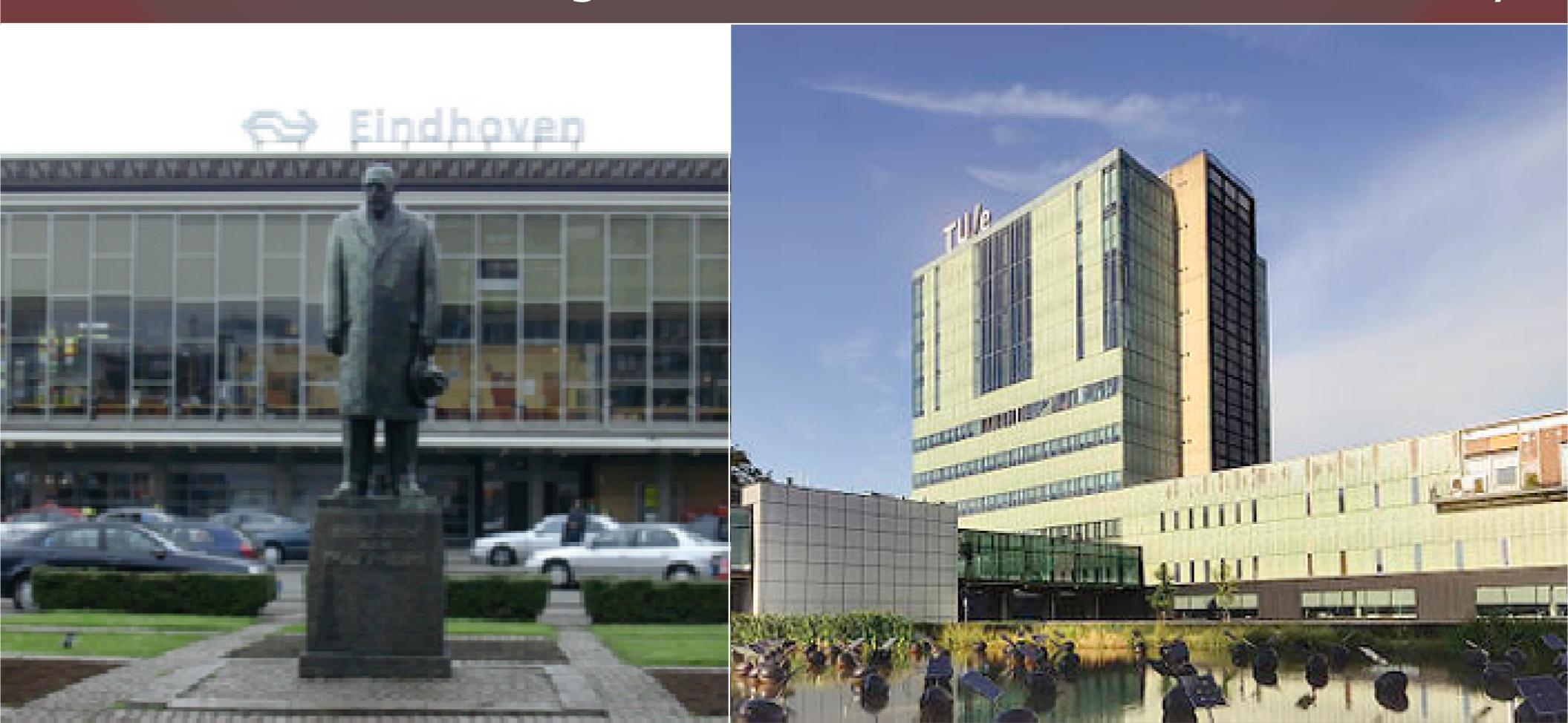
#### Albany, New York — Nanotechnology







#### Eindhoven — From lightbulbs to the world's smartest city



#### Zurich — life science brainbelt



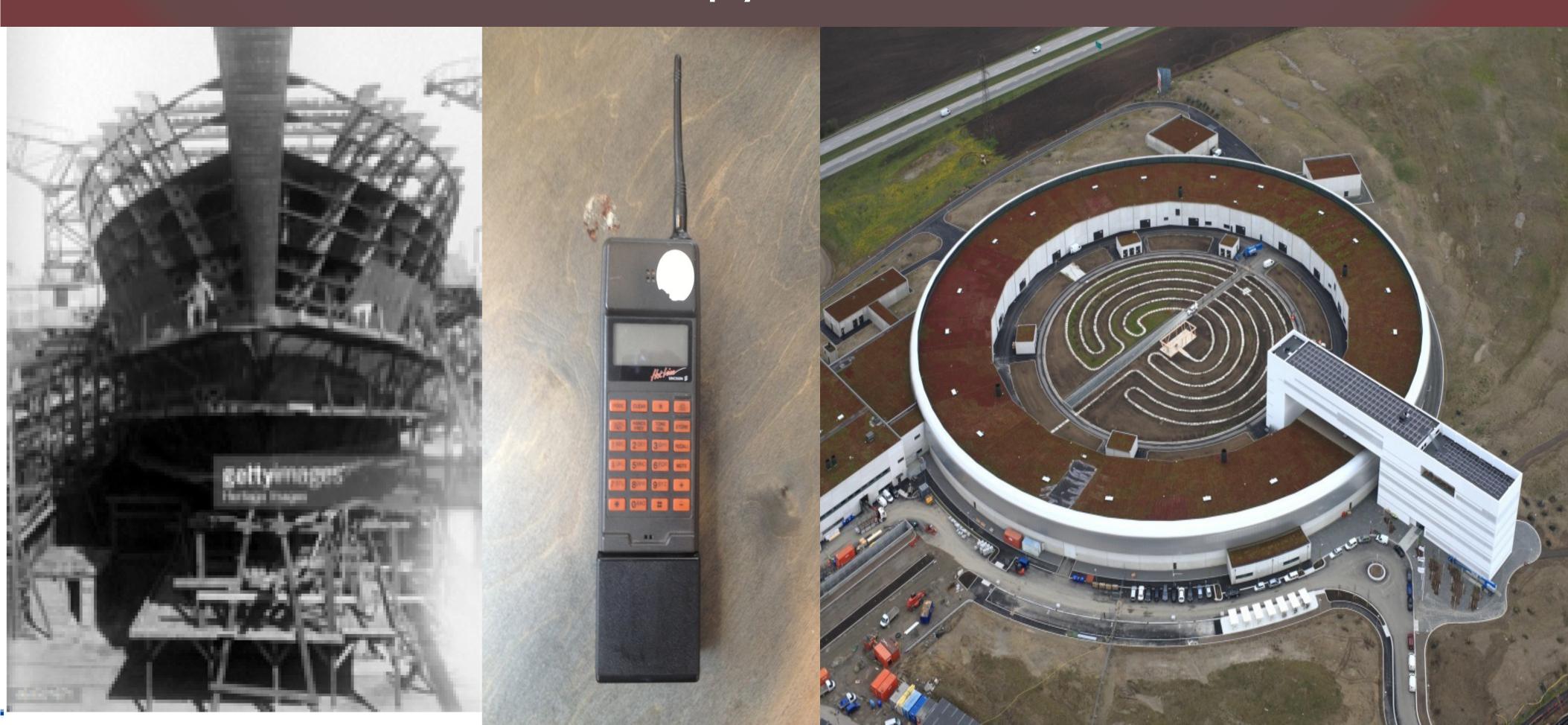


#### Dresden — Chips in former East Germany



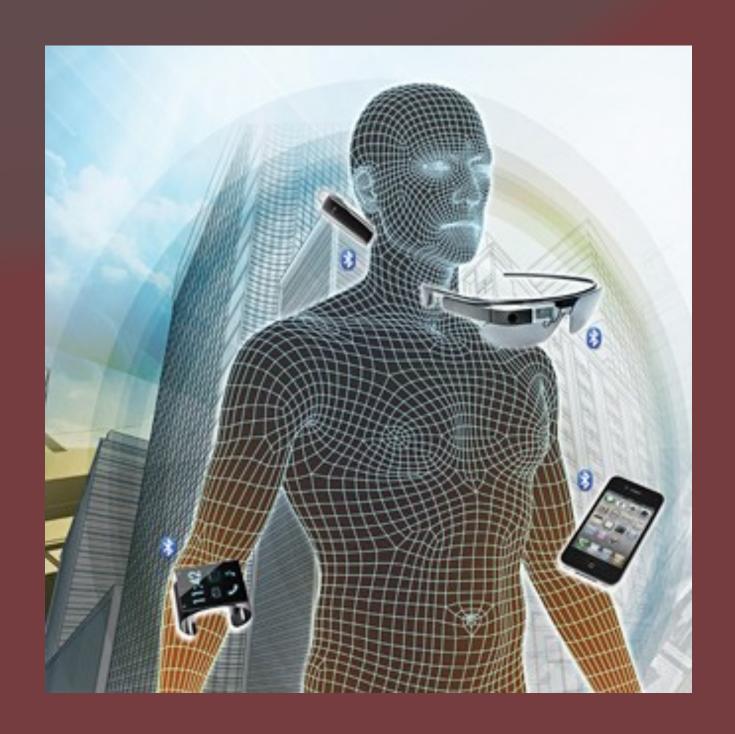


#### Lund-Malmo — From shipyards to Particle Accellerator



#### 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

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