

FUTURE IS NOW

The background features a light blue geometric pattern of interconnected lines forming various polygons. A central, more complex polyhedral shape is highlighted in a slightly darker shade of blue.

# Future Innovations in Europe

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# The World and (in) Transitions

- **Economy**  
Circular, Shared, Digital
- **Technology**  
3D, Nano, DNA, Big Data
- **Society**  
Horizontal, Community
- **Power**  
Glocal, Small and Big, Horizontal



# A few European Issues

- Too big variety of Economic “Health” of different European countries.
- Radicalization creates gap between local interest and European goals.
- The European competitive position in the global economy is slowing down.
- The innovation power is slowing down.
- The need for increasing productivity in service industries.



# European Challenges



- We should use the (inner) European diversity much better: looking for differences and not for the “average”.
- To strengthen the productivity we need innovations across industries and a multi disciplinary approach with a sustainable societal impact.
- Increased productivity will lead to economic growth, lower costs of social services / support.
- There is a need to demonstrate the European relevance (public opinion); people do not accept nice stories anymore; they want to see and to experience results.

# What does this mean for Innovation in Europe?

- It should break traditional paradoxes: cheaper and better and sustainable and profitable (transition of business models).
- It should direct be related to society: a system approach towards business innovation and societal progress (transitions in society).
- It should stimulate the traditional European competitive position of the continent of the global premium “brands”.
- It should attract the future talents as experts and leaders in the world.



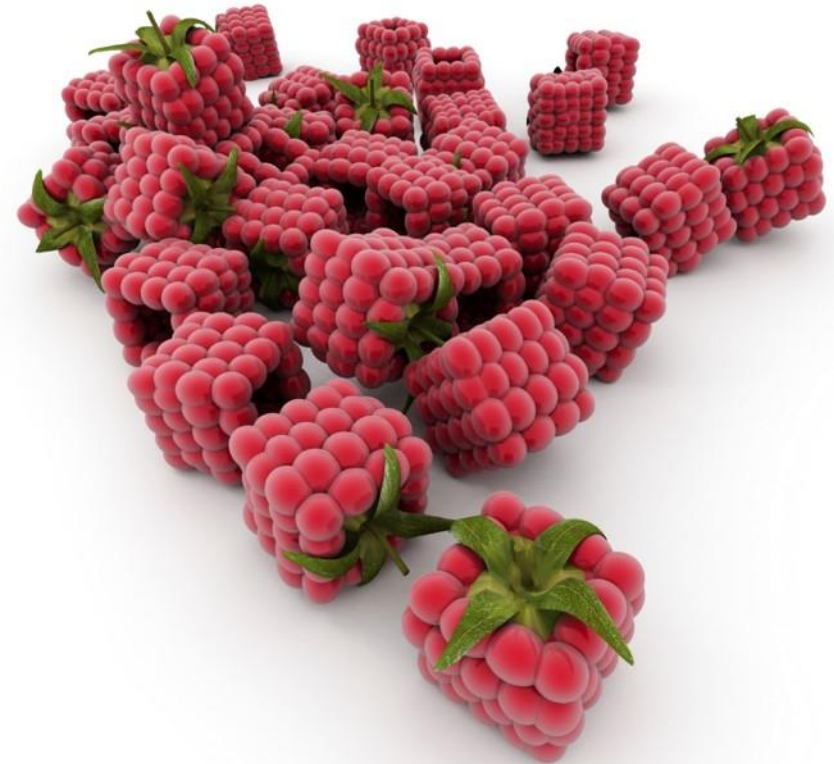
# European Transitions powered by innovation

- **Technological transitions**
  - Better, cheaper and sustainable
  - The key to a profit and prosperity
- **Social transitions**
  - Different need in society
  - Changing roles and responsibilities
  - Supported by Technology (Digital Economy)



# Transition 1: Agro - Food

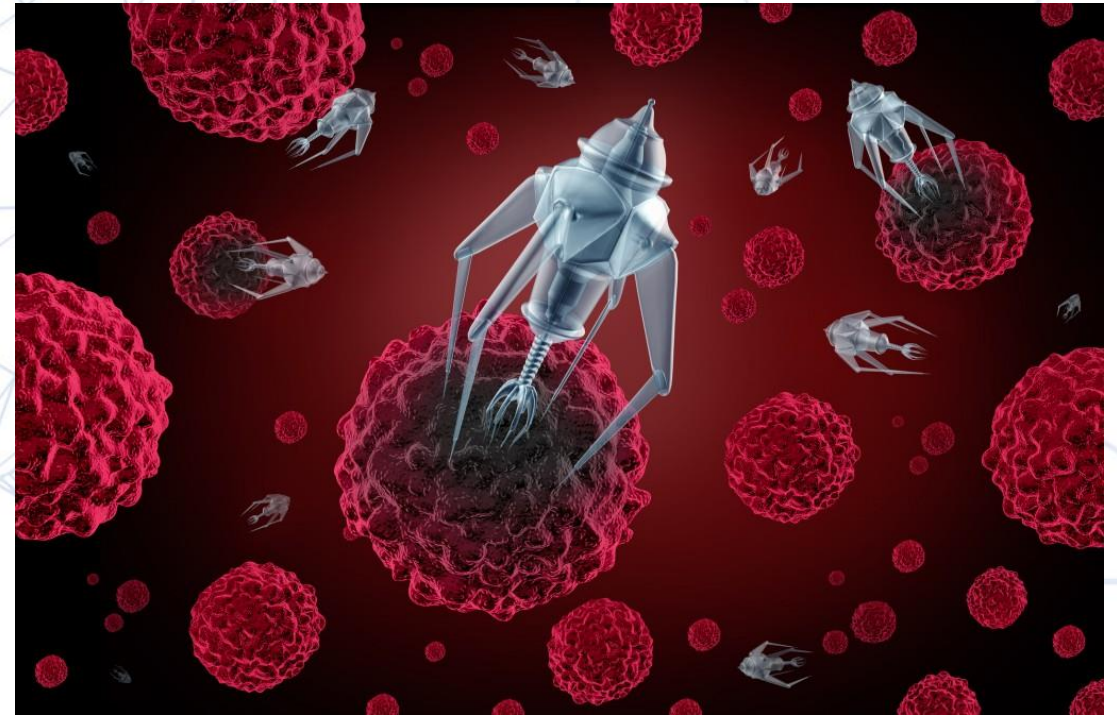
- Innovation of products, also technological
- Trend to more healthy: nutrition as preventive medicine
- Sustainable and lower foodprint
- Supply chain approach
  - Effective
  - Partnerships
  - Safe
  - High value and profits





# Transition 2: Health Care and Technology

- NANO Technology for better and effective treatment.
- DNA for prevention.
- 57% increase of chronic diseases in next five years: research and business models!
- Global pandemics (speed of infections): business models and complexity theory.
- Many entries of new companies and new solutions.



# Transition 3: Energy

- Increase of renewables
- Energy grids and how to optimize need, capacity and delivery (grids and complexity)
- Impact on global power of countries and companies
- Trends in consumer behavior: Horizon 2020 projects about sustainability
- Power of communities



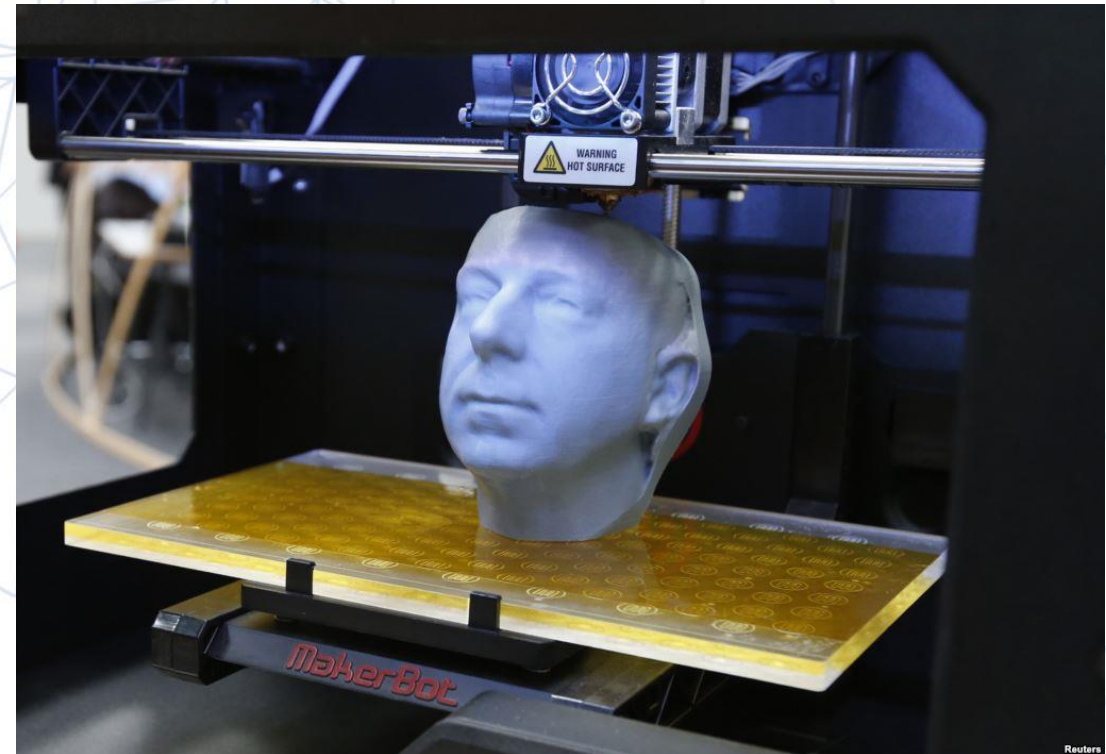
# Transition 4: Smart Cities

- **Smart Living**
  - Lower footprint (materials, biomimicry)
- **Smart Mobility**
  - The productivity of a city
- **Smart Energy**
  - Flexibility in technology and optimizing need, capacity and delivery
- **Smart Economy**



# Transition 5: Manufacturing

- High tech materials and systems
- 3D printing in infancy stage
- Data driven factories
- Internet of things
- Robotics (China from 75,000 – 150,000 in 2015-2018)
- Augmented Reality



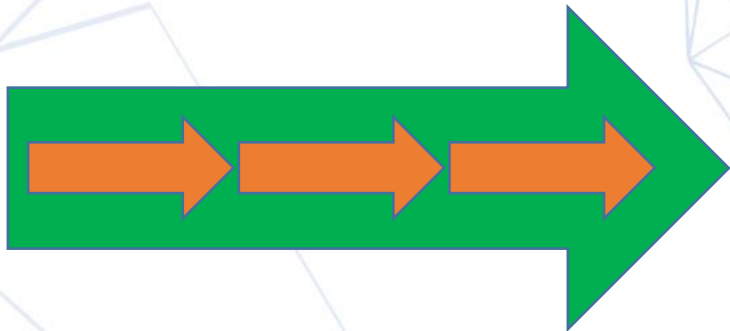
# Value Creation and Value Systems

- **Company related innovation**



- **Value chain related innovation: Value driven and reducing costs**

- Sharing
- Trust



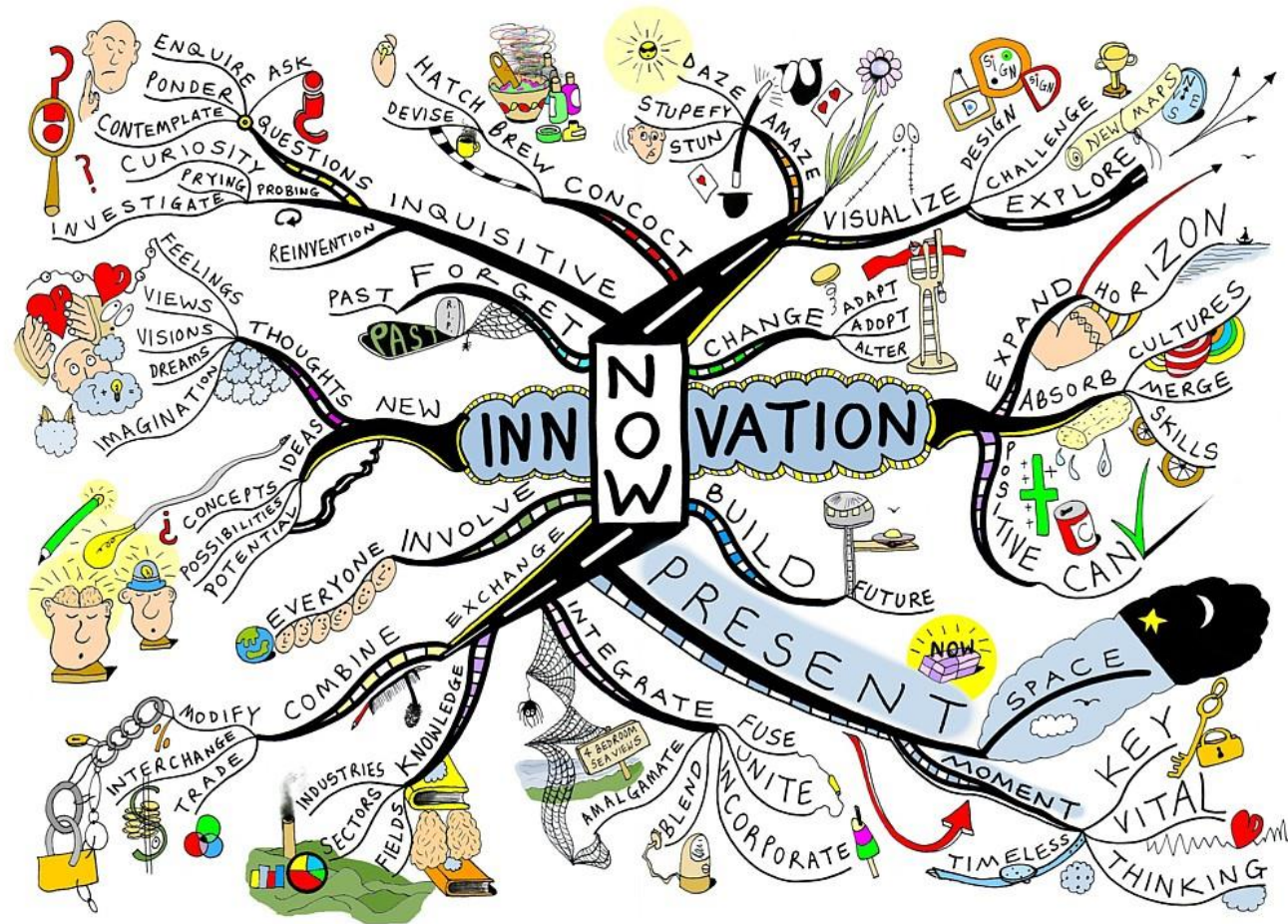
# Leadership = Change

- **Traditional Leadership**
  - Change is temporarily
  - Looking for stability in „no change“
  - Change feels unsafe
  -
- **Leadership in Transitions**
  - Change is business as usual
  - No top-down leadership anymore
  - Leaders create conditions
  - Higher level of Self Organized

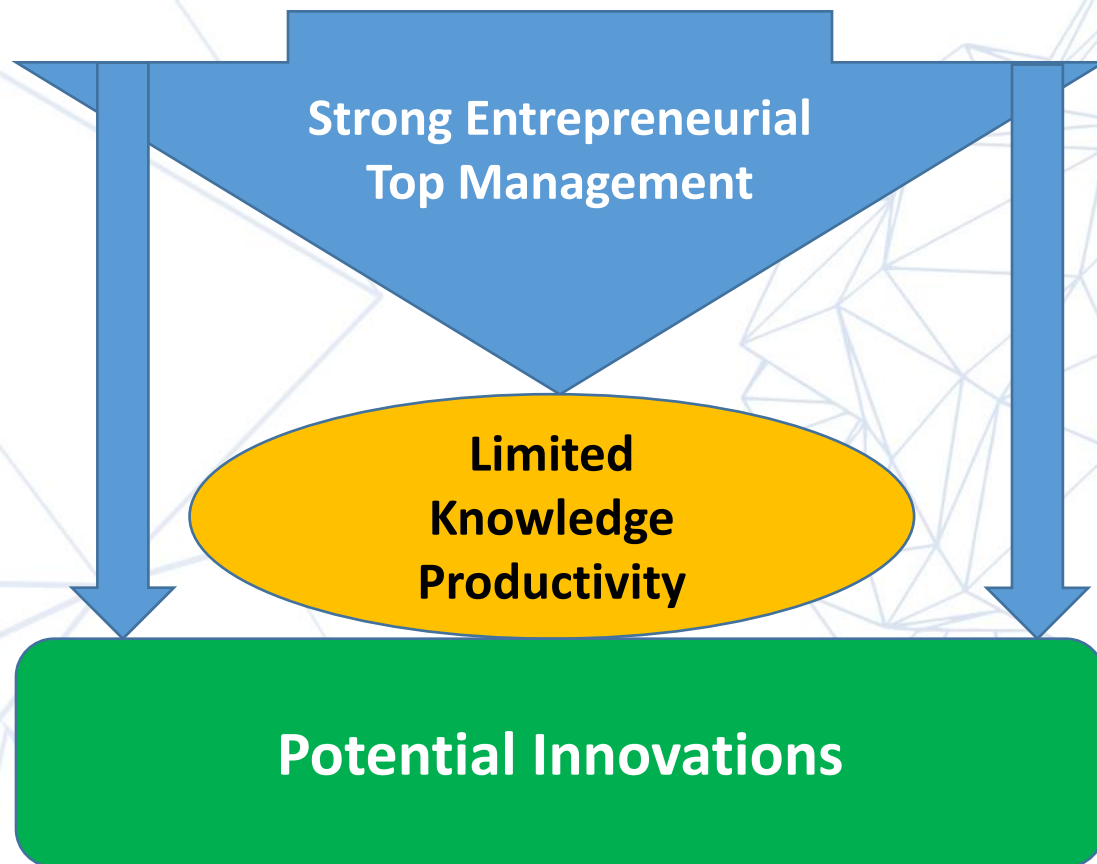


# Knowledge productivity

- Intellectual assets
- Knowledge management
- Knowledge productivity
- Conditions to support knowledge productivity



# Leadership and innovation, The Growing Start-UP



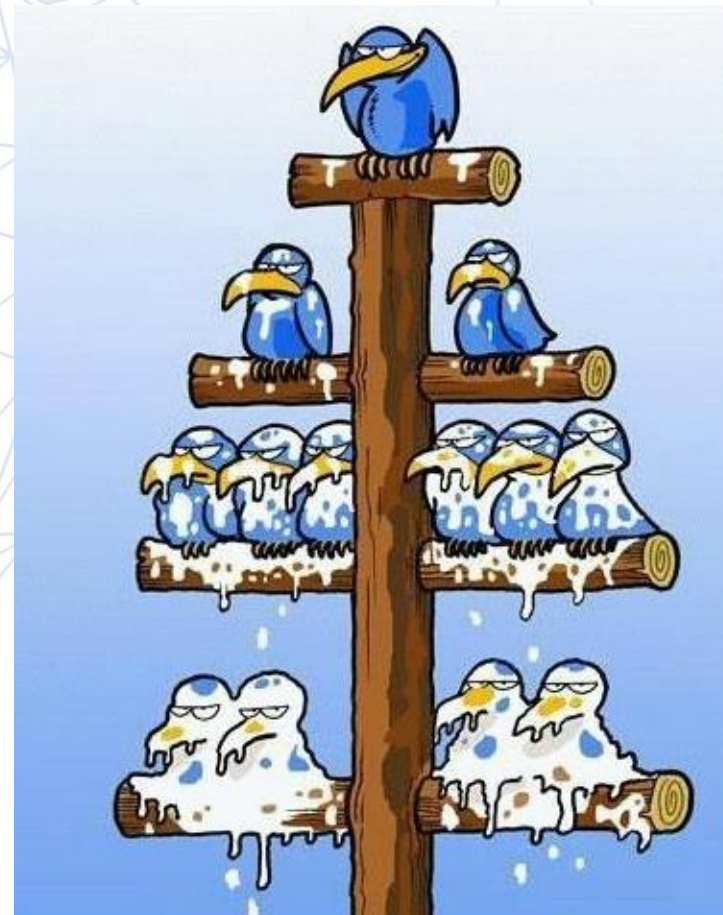


# Leadership and innovation, The Traditional Firm

Vertical leadership;  
top down  
Management

Very Little  
Knowledge  
Productivity

Potential Innovations



# Leadership and innovation, The Innovative Enterprise

Top Management  
Creates Conditions

High Level  
Of Knowledge  
Productivity

Potential Innovations



# Conclusion: Many opportunities for European Countries

## Relevant innovations:

- Related to general trends in technology and society
- Related to sector or industry specific trends (influenced by the general trends)
- Products, Services, Systems and Business Models

## Make innovations work:

- How do you lead your company?
- What's your future business model?
- What does knowledge productivity for you?
- Find the unknown