



2014-2020 Operational  
Programme for the  
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Investments in Lithuania

7<sup>th</sup> biannual international evaluation conference

## EVALUATION OF INNOVATIONS AND INNOVATIONS IN EVALUATION



MINISTRY  
OF FINANCE



18-19<sup>th</sup> of May 2017

Sapiegos Vilnius Tech Park | Antakalnio str. 17 | Vilnius, Lithuania

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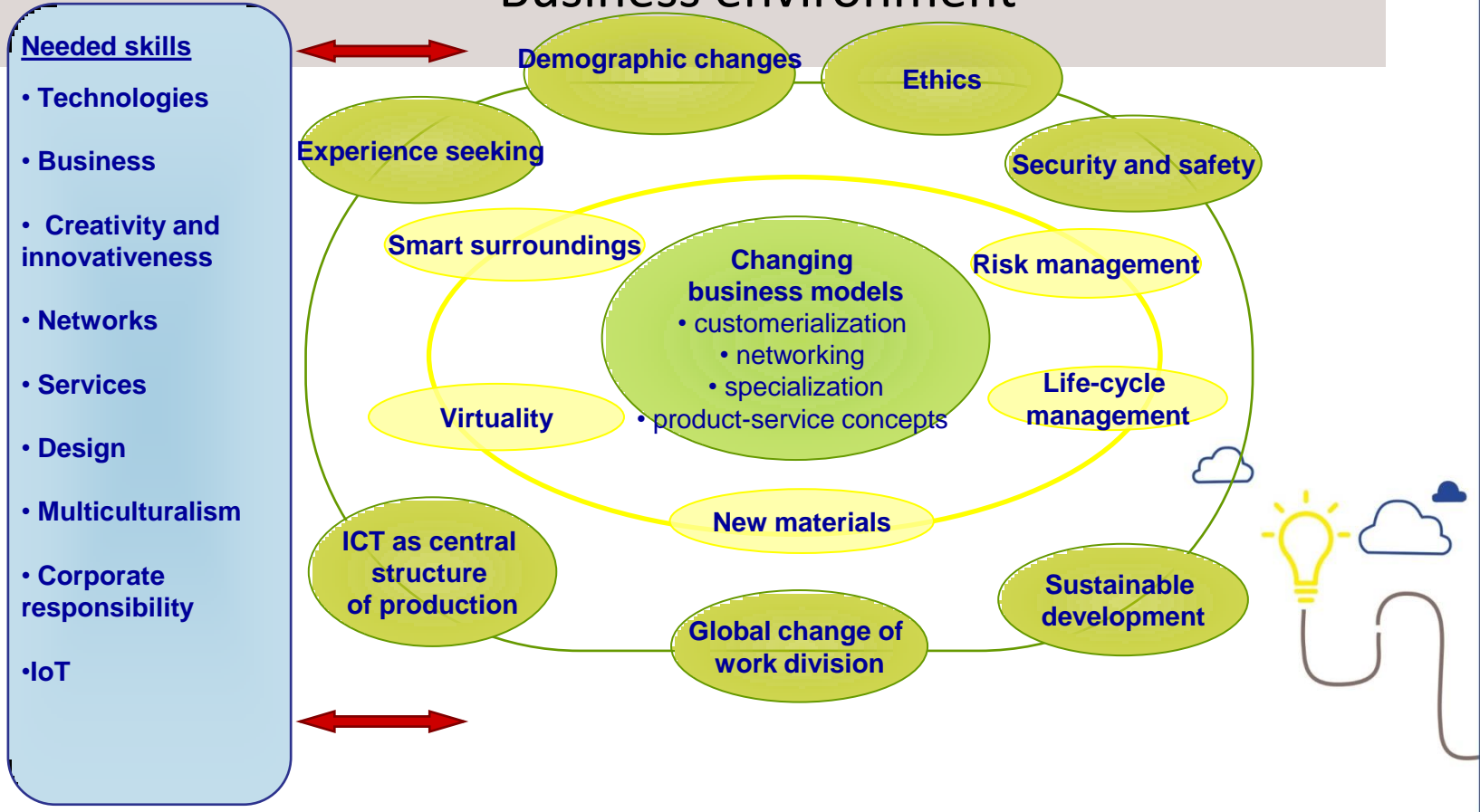
**Complex future challenges as  
possibility and threat of societies**

# Our environment

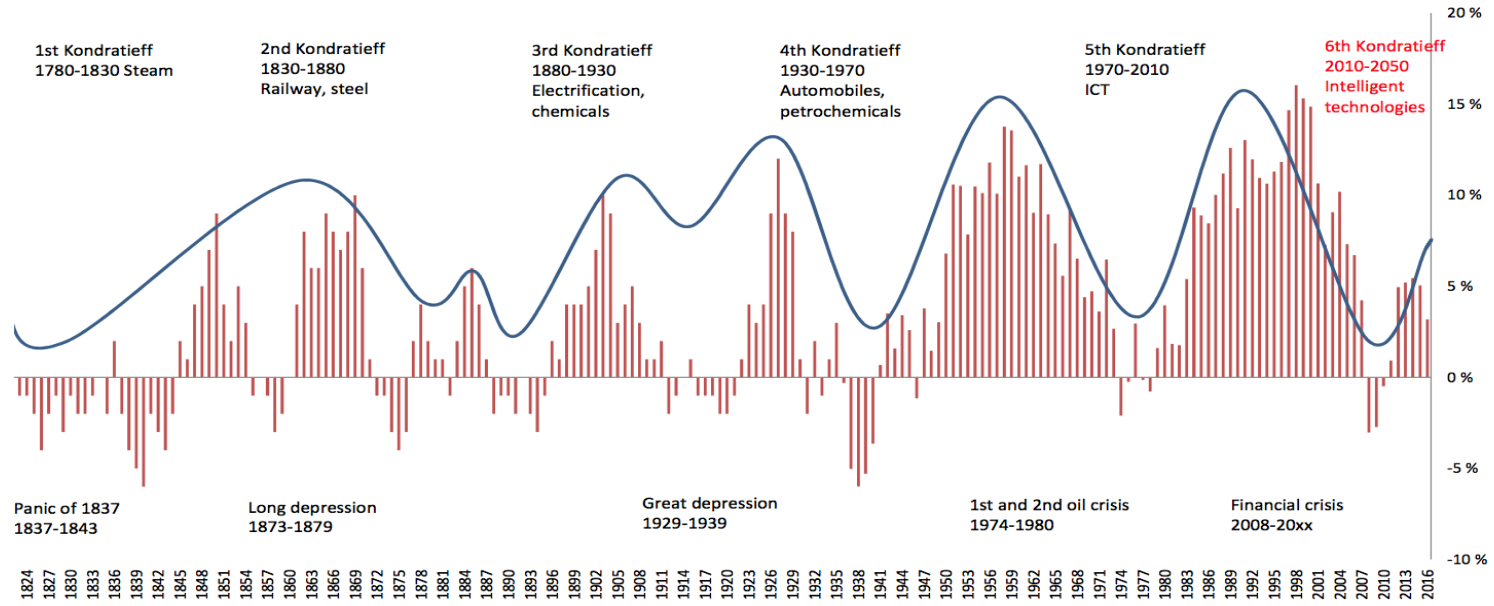
- Complexity
- Connectivity
- Globalisation
- Rapid change
  - E.g. in technology
  - Different speed of change (e.g. technology versus human behavioral patterns)



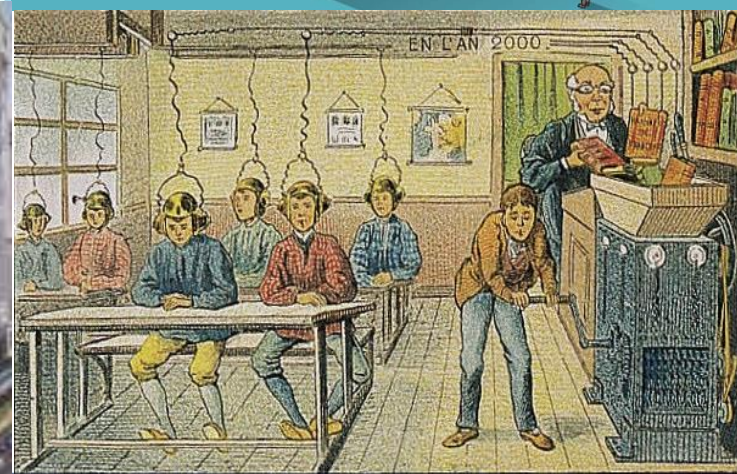
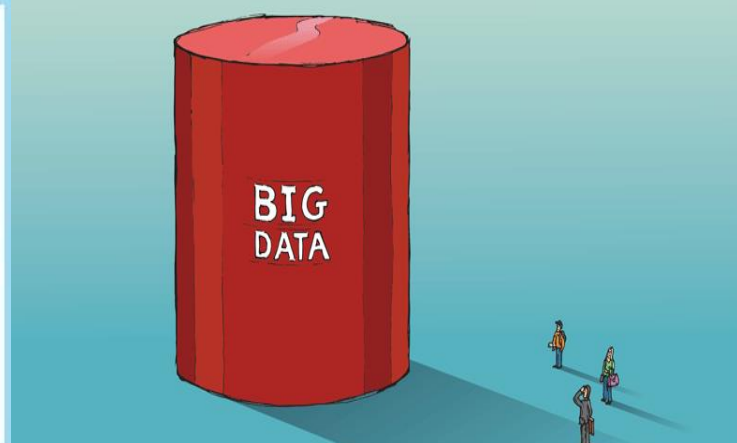
# Business environment



## PATTERN OF SOCIETAL WAVES OF ADVANCEMENT SINCE THE BIRTH OF INDUSTRIALIZATION



Rolling 10-year return on the S&P 500 since 1814 till January 2016 (in %, p. a.). Source: Datastream, Bloomberg.  
Illustration: Helsinki Capital Partners.



# Megatrends 1

- Globalisation
- Environmental problems, climate change
- Scarcity of resources, e.g. water
- Biofuture: energy, mass, fiber, materials, food
- Urbanization
- Demographic changes
- ICT, IoT, Big Data, digitalization, automatisisation and robotisation
- Life science, improvement of health care



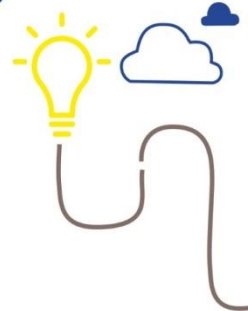
# Megatrends 2

- Changes of global power structure in economy and politics
- Nationalism, protectionism, populism
- Sustainable development, responsibility, rise of environmental values
- New protein sources
- Climate change adaptation and mitigation
- Virtual and augmented reality (VR, AR)
- Gamification
- Synthetic biology etc.






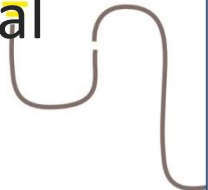
# Implications of megatrends and trends

- In future we will have more people, they live longer than before, they are more educated, more aware of global world and they mainly live in cities.
- Emphasis of the world economy is shifting to China, India, other Asian countries
- Paradox: Scarcity of resources but more and more goods at the same time.
- Big data, digitalization, knowledge management challenges.





# Implications of megatrends and trends

- Changes of work and income distribution and their effects on well being and societies
- Sources of materials and energy are under development, production processes become more biotechnical but we are still dependent on fossil systems and structures for a long time (decades) and this slows the development of bio-economies. 
- Technologies are creating more possibilities and the time frame from scientific discovery to technological application shortens.   

# Future of work

- Polarization of work markets and jobs (2020's)
- Knowledge intensiveness increases
- Automatization and use of robots
- Mixing of work and leisure time
- New jobs of bioeconomy, circular economy and sharing economy
- Career shifts become more common, life long learning



# Future of Education

- Education and research is not dependent on a particular place.
- Online and virtual education and research platforms, digitalization
- Multidisciplinary research and training
- New novel combinations of disciplines
- International research groups and training programs
- Unlimited growth of data and knowledge



# Future of Education

- We have to educate people for professions and jobs that do not exist yet.
- We should concentrate more on skills and competencies than facts and data.
- We should have skills to understand, adapt and even manage the change.
- Imagination, dreaming, innovation, social and cultural skills, openness, creating new combinations...



# Urbanization

- Megacities (10 million inhabitants), fast growing cities of 1-5 million inhabitants
- Global trend
- Production and manufacturing takes place in or near cities
- Rural areas become places of material resources
- Cities increase their resource efficiency and in them energy, food, biomass and pure water for inhabitants is produced



# Meaning of key trends for organizations

Trends and changes rising from environment



Persons

New skills and competencies



Organizations

New ways of action and performance



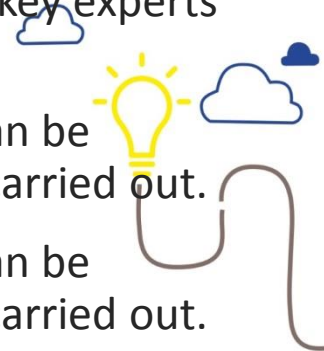
Results of activities

New products and services



# Foresight and evaluation

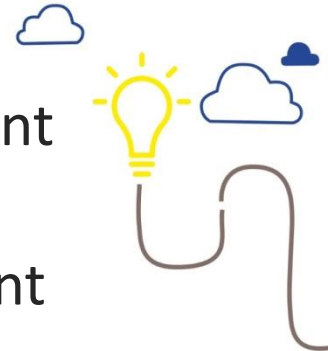
- Foresight methods are also useful as assessment methods.
- With foresight, we can especially improve the effectiveness of constructive assessment. Constructive assessment includes e.g. participation and dialogue between different parties. Along with assessment results, constructive assessment also emphasises the process itself and the learning that comes with it.
- Foresight also places special emphasis on participatory processes and methods that aim to promote the know-how, synergy and networking of those key experts who are central to change. (Hietanen & Kaivo-oja 2005)
- Assessing futures approach of and organization e.g. how well vision can be achieved by mission and development plan, how horizon scanning is carried out.
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# Foresight and evaluation

Visionary Assessment (Hietanen & Kaivo.oja 2005)

1. Create a vision of the best possible future with services/products, customers, actors/partners together with your internal and external stakeholders (for example organize futures workshop and use scenario methodologies like futures wheel and/or futures table)
2. Assess the gap and differences between the current vision and the new one
3. Define next steps: how can we improve our present mission, vision, strategy and procedures





# Many thanks for your attention!



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