

# science for global insight

# Luottamuksen ja epävarmuudensietokyvyn merkitys tulevaisuuden kohtaamisessa

Mikkelin Akatemia 5.1.2019

Leena Ilmola

Advanced Systems Analysis Program



## Asialistalla tänään

- 1. Miksi epävarmuudesta puhutaan juuri nyt?
- 2. Miksi epävarmuuden pitäisi kiinnostaa minua ja päätöksentekijöitä?
- 3. Miten varautua epävarmuuteen?



MEDIA 12/31/2018 04:13 am ET I Updated 3 days ago

## Washington Post Blasts 'Trump's Year Of Lies' With Blistering Fact Check



WORLD NEWS DECEMBER 14, 2018 / 4:57 PM / 20 DAYS AGO

As talli half the

fals

## EU's Juncker takes aim at Hungary's Orban over fake news

3 MIN READ





BRUSSELS (Reuters) - European Union leaders on Friday backed a plan to tackle fake news on the internet and the bloc's chief executive rounded on one of the EU chiefs, Hungarian Prime Minister Viktor Orban, as one of the main culprits in spreading disinformation.

activities. So, it w living in an as Russia are

able to spray around lies on a global scale, using the firehose power of Facebook and Twitter.

▲ Trump and Putin shake hands at the beginning of a meeting at the Presidential Palace in Helsinki, Finland earlier this year, AP Photo/Pablo Martinez Monsivais Photograph: Pablo Martinez Monsivais/AP



NSW VIC QLD WA SA TAS ACT NT AUSTRALIA GLOBAL ANTARCTICA

Bureau Home > Climate > State of the Climate 2018 > Australia's changing climate

#### State of the Climate 2018

Report at a glance Australia's Oceans Cryosphere Greenhouse gases Future climate and References changing climate further information

#### Australia's changing climate

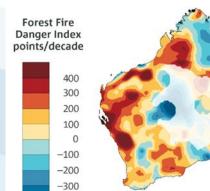
#### Temperature

Australia's weather and climate are changing in response to a warming global climate. Australia has warmed just over 1 °C since 1910, with most warming since 1950. This warming has sen an increase in the frequency of extreme heat events and increased the severity of drought conditions during periods of below-average rainfall. Eight of Australia's top ten warmest years on record have occurred since 2005.

The year-to-year changes in Australia's climate are mostly associated with natural climate variability such as El Niño and La Niña in the tropical Pacific Ocean and phases of the Indian Ocean Dipole in the Indian Ocean. This natural variability now occurs on top of the warming trend, which can modify the impact of these natural drivers on the Australian climate.

#### Key points

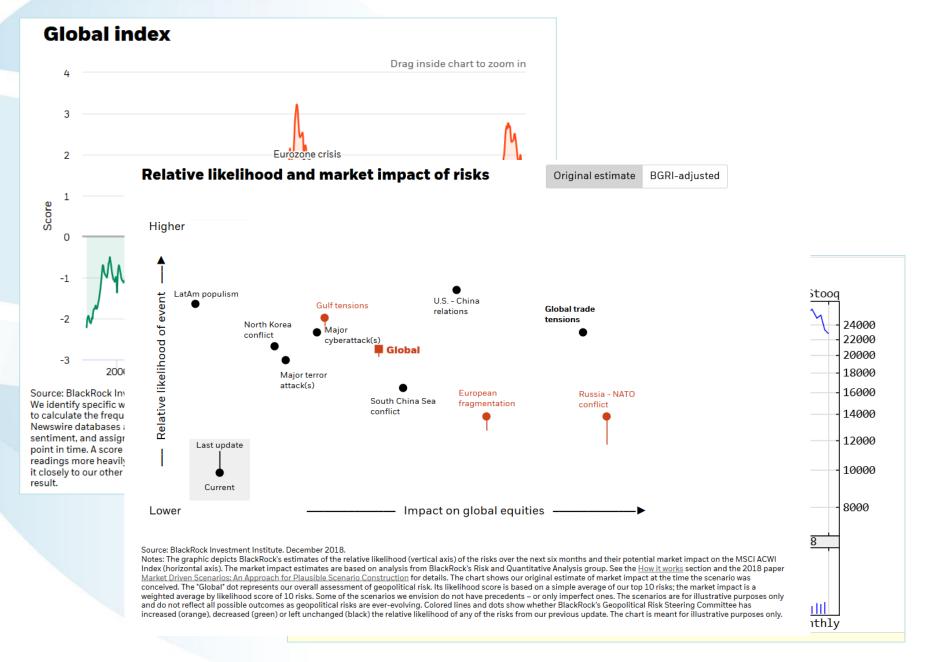
 Australia's climate has warmed by just over 1 °C since 1910, leading to an increase in the frequency of extreme heat events.



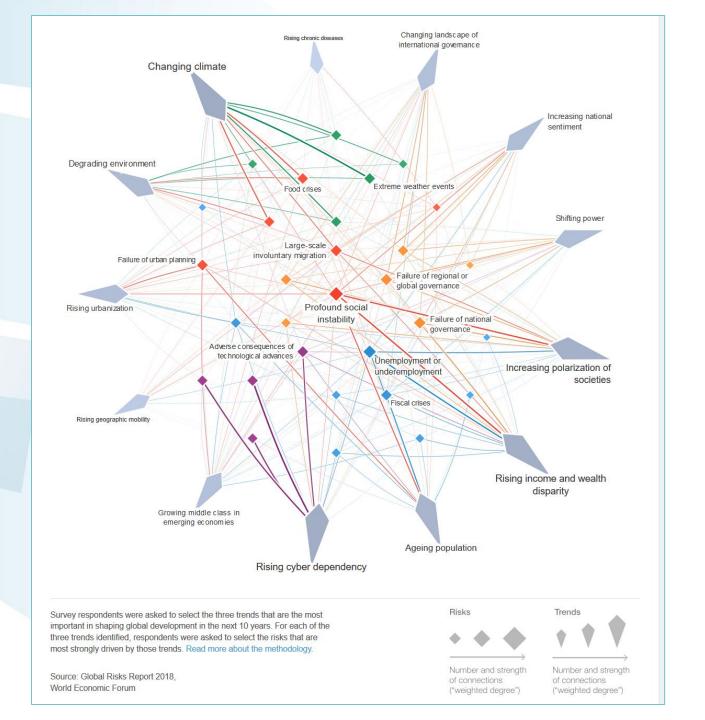
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Fire weather conditions are mostly worsening, particularly in the south and east.



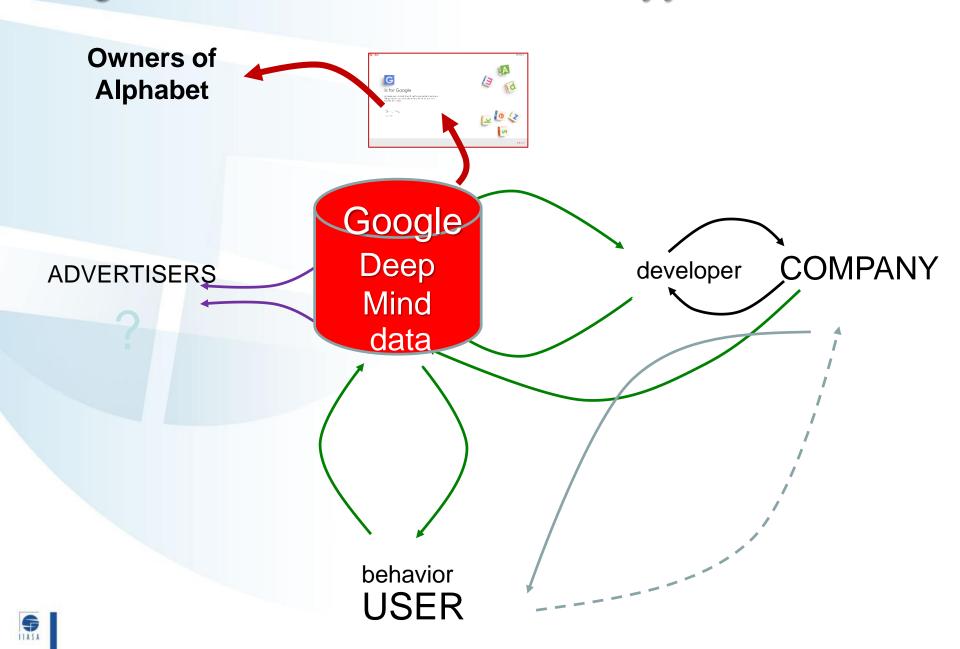




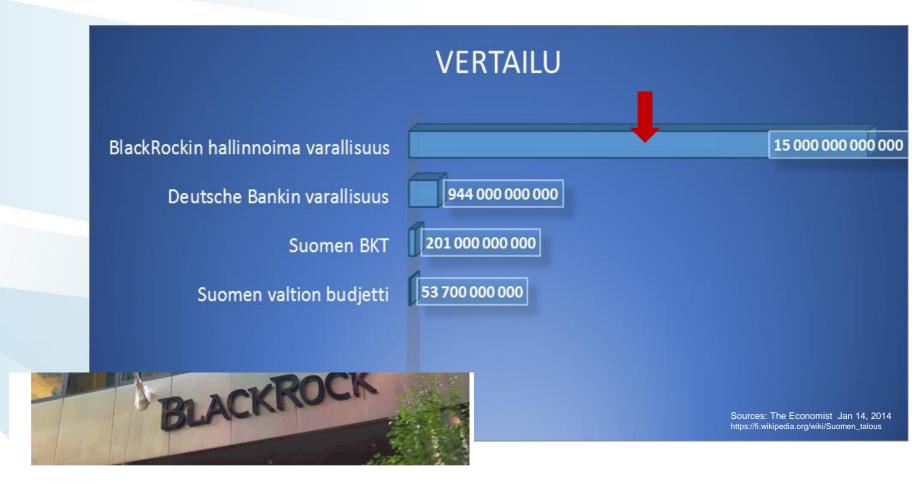




## Digitaalinen arvonluonti keskittyy



# Finanssivalta keskittyy



BY RICK BAERT · OCTOBER 16, 2018 10:20 AM · UPDATED 10:35 AM

 ${f B}^{
m lackRock~(BLK)}$  had \$6.444 trillion in assets under management as of Sept. 30, up 2.3% from the previous quarter and 7.8% higher than a year earlier, the firm said Tuesday in its earnings statement.

https://www.economist.com/business/2018/08/30/asset-managers-get-involved-in-the-companies-they-own



## Kasvava epävarmuus

- Epävarmuus
  - Tunteet dominoivat
  - Liitytään joukkoihin



Kauppalehti = uutiset pörssi yritykset johtaminen optio

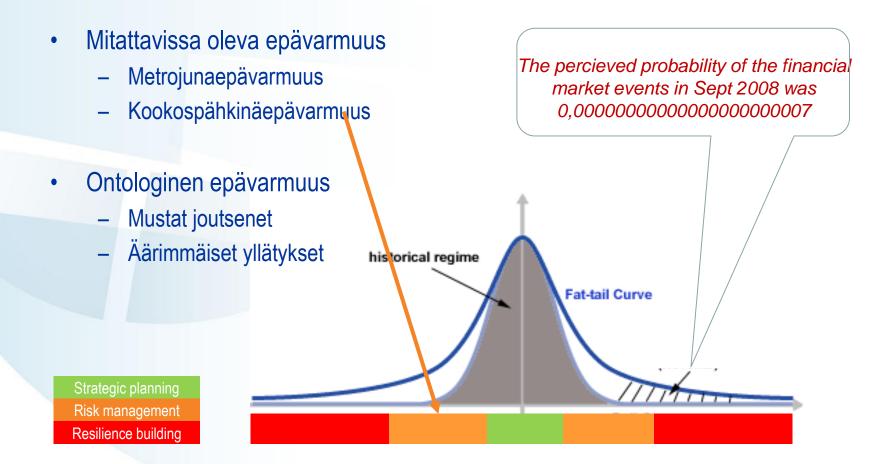
Syntyvyyden lasku voi näkyä näinkin - Yle: Isoa perheasuntoa voi olla vaikea saada myydyksi

23.12.2018 12:45 | päivitetty 23.12.2018 14:10

ASUMINEN KANSANTALOUS ASUNTOSIJOITTAMINEN ASUNTOJEN HINNAT



## Epävarmuus





## Mitä resilienssi tarkoittaa?





## Miten tavallinen ihminen voi varautua?

- Resilienssin parantaminen
  - Omat resurssit
    - Osaamisen monipuolistaminen
    - Taloudellinen hajauttaminen
    - Varautuminen
  - Sosiaalinen pääoma
  - Yleissivistys



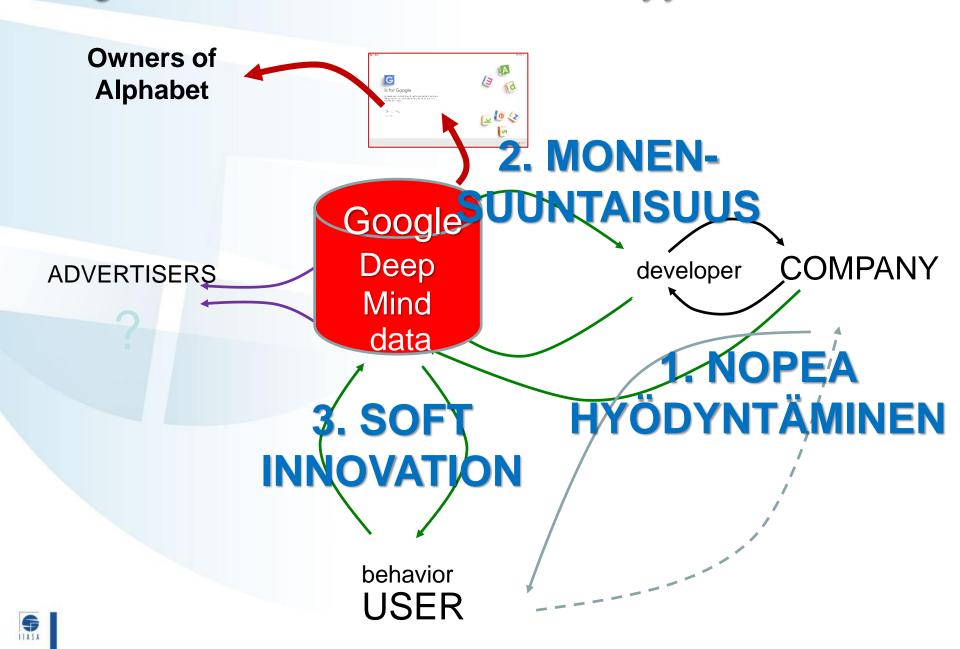
## Miten alue voi varautua?

- Talouden rakenteiden monipuolisuus
- Täytekakku-ajattelu
- Palvelujen kustannusarakenne
- Itseorganisoitumisen esteiden poistaminen





## Digitaalinen arvonluonti keskittyy



## Success in the world of uncertainty Recommendation 2009

#### CORPORATION

Portfolio of diverse
businesses
Mode defined strategies
Resource flexibility
Skills, roles Investment
intensity
Branding

Unique combinations
Portfolio of exclusive
products
Multipurpose production
Diversity of businesses

# Immediate adaptation

Structure Volume Choices

#### Growth

Speed of reaction Complexity Crash

#### PUBLIC SECTOR

National portfolio
Ecosystems
Cycle specific rules
Resource allocation
Support structure

Sensor system
High innovation pace
Regulatory environment
Platforms
Diversity of exports
Hybrid education
Basic education
Insurance



## Seeds for solutions in a nutshell 2009

#### GE scenarios:

- Multiplex world with different behaviors.
- Uncertainties are increasing, surprises

#### **GTN** simulations:

- Very different outcomes for different industries.
- Global dependencies accelerate surprising impacts or not

# Floating capabilities

Surfing capabilities

**BUT ALSO** 

WAVE GENERATOR

#### Innovation ecosystem:

- > SME ecosystems are more resilient
- LC systems are rigid, but grow fast
- Fast innovation pace generates both resilience and growth

#### Global Forest industry:

- Super scalable
- Microunits that customize their production
- Multipurpose biorefineries

## Digitalization, Life Science

- Emergence unavoidable
- Speed of change depends on traditional industries
- Several champions required



# Alternative behaviour modes for global economic system in 2030? Composed in 2009

### World of Volatility

Nations (or industries) are not able to create global rules > optimization (local fitness)

Financial system is centralized, giant banks are closely linked

IPR and patent regulation diversifies > concentration of technology development into large corporations

that are closely connected and/or emerging innovations

Knowledge structures are decentralized, but a second bubs either because of their superior

resources (Intel) or by their position

Increase of computing power in resources

markets (raw material m

Periods of Stat

Nations are forced

environment, volcan

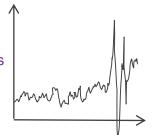
IPR regulation is supp

that are launching compe

## MAHDOTTOMIEN POHTIMINEN MAHDOLLISIKSI!

logical

rge corporations



Political and corporate power

Wealth generation is centralized, investigation and the hierarchy

Global financial system has collapsed and taken over by global gvt/blocs/groups

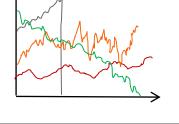
#### Multidynamics

Open source and self-organization in the virtual world and regulation in the real economy Split of industries into areas, where the regulation/ rules of the game differ — such as government owned and free industries

External constraints (such as wars, political systems, ideological blocks, diseases) are separating some geographical areas or technology fields or societies from each another.

Strong supporting structures prevent development of a domain (agriculture).

Value systems block global interaction (such as religious fundamentalism).





Ottakaa yhteyttä ilmola@iiasa.ac.at

KIITOS!

