What to consider when protecting and utilizing AI

10.9.2019   Marketing Day

Akseli von Koch

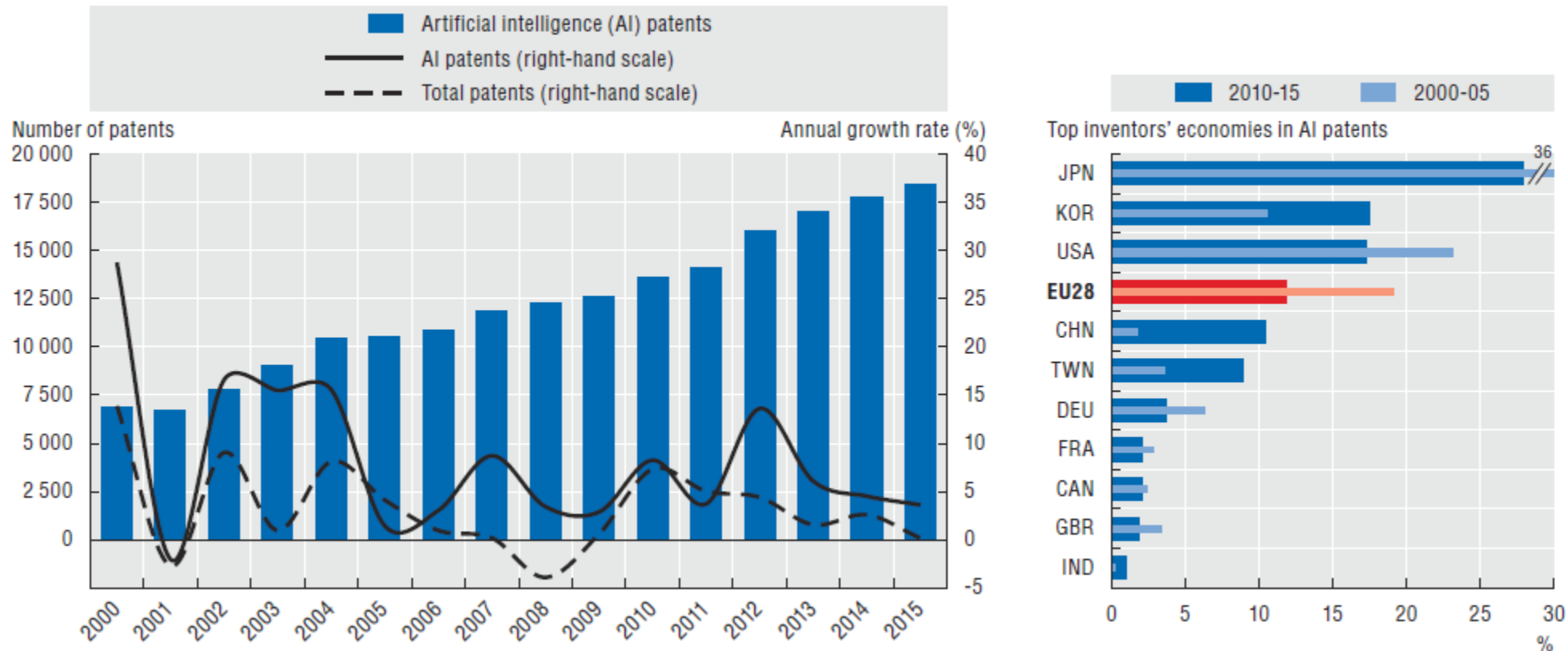*Patent Attorney*
EU Trademark and Design Attorney

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AI patenting is on the rise

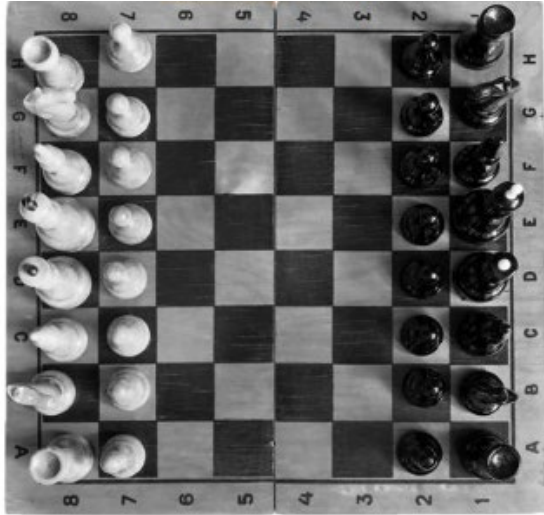7. Patents in artificial intelligence technologies, 2000-15

Number of IP5 patent families, annual growth rates and top inventors' economies

Source: OECD, STI Micro-data Lab: Intellectual Property Database, http://oe.cd/ipstats June 2017. StatLink contains more data. See chapter notes.

StatLink http://dx.doi.org/10.1787/888933616978
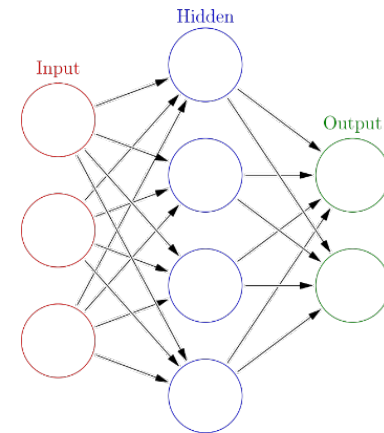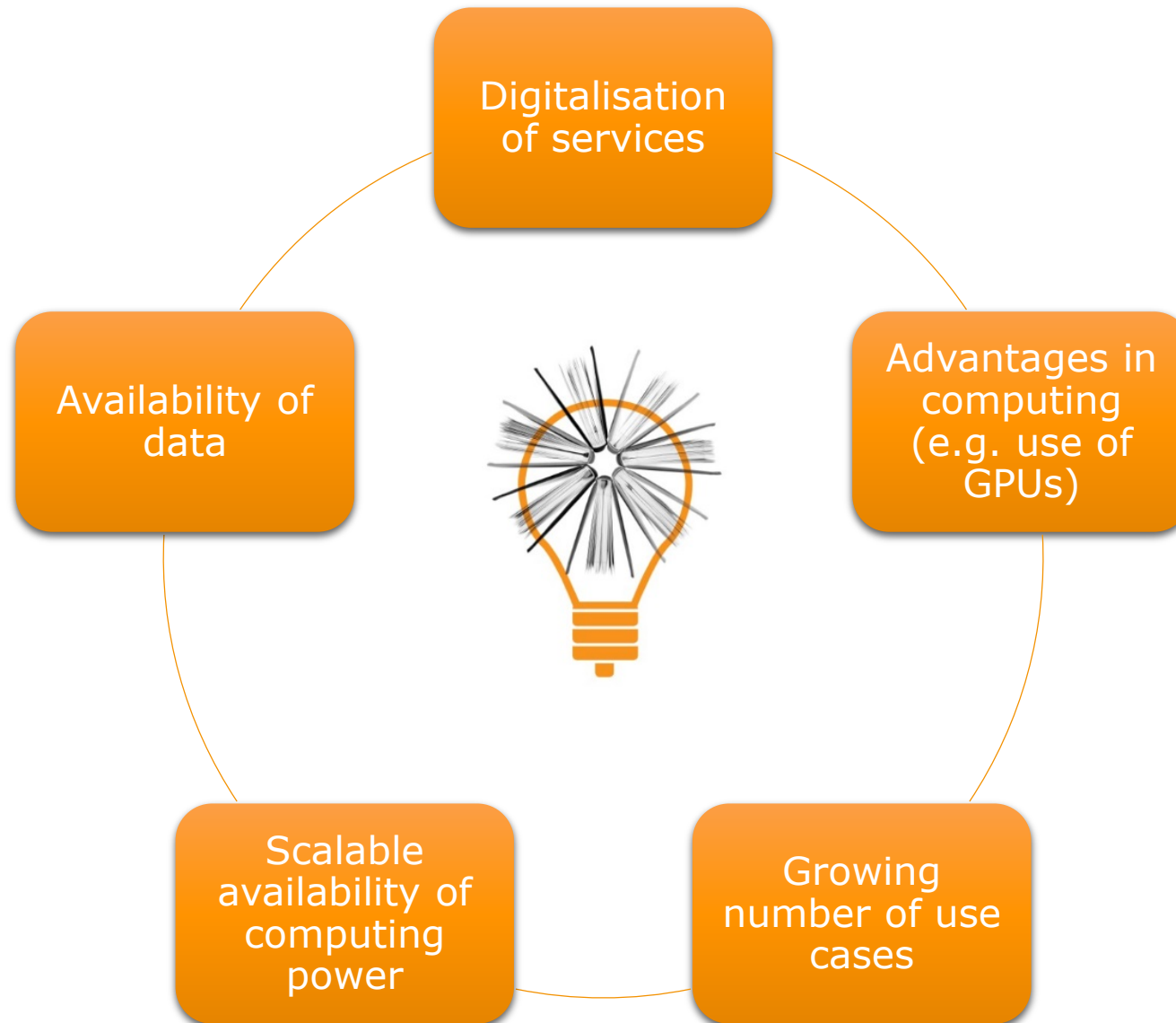
AI

ML

DL

1950   1980   2010

Artifial intelligence = computer mimicking human actions

**Machine learning = computer improves its capability to solve problems
by learning from experience (data)**

Reasons for the new AI boom

Digitalisation of services

Advantages in computing (e.g. use of GPUs)

Availability of data

Growing number of use cases

Scalable availability of computing power

Applications

- Siri, Alexa

- Medicine

- Language translation and document managment

- Autonomous vehicles

- Logistics

- Marketing

- Trading

- Legal tech

Data

Input

Hidden
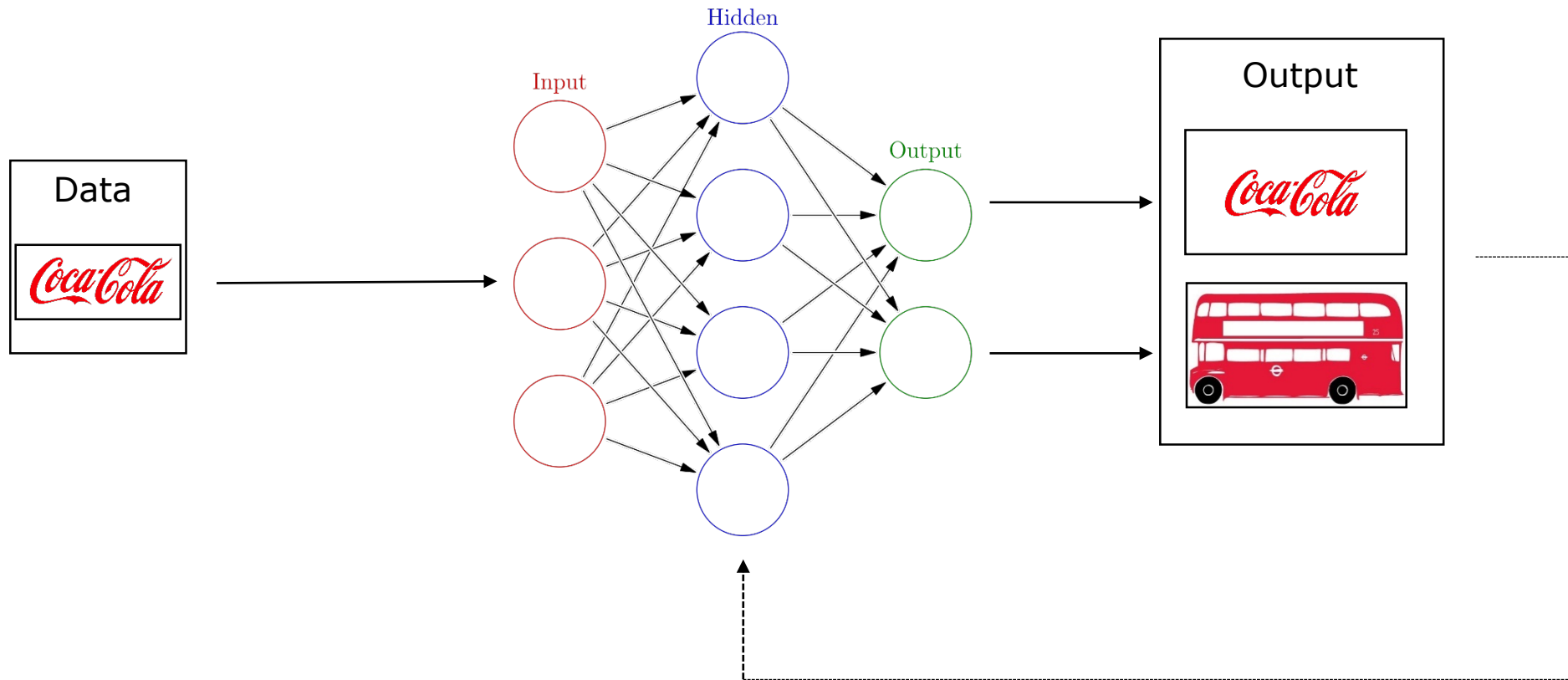
It's all about the data

*"An AI is only as good as the data used to create it"*

– The value of good, proprietary data increases

– The value of proprietary AI taught with proprietary data increases

CASE: automous vehicles

– A race to collect good data and create the best algorithms
  • Additional features are offered at a discount or even free to enable data collection
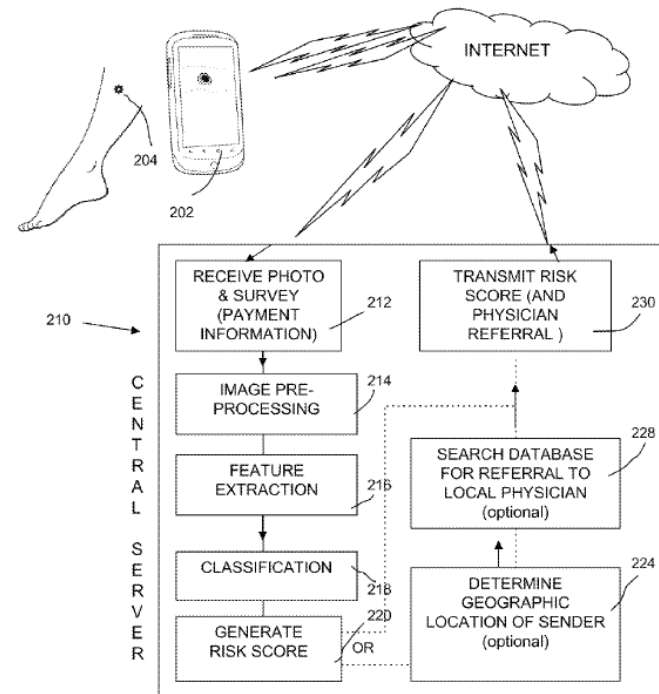
– Better data -> better algorithms -> less accidents

Patent applications at the EPO in SDV technologies and their sectors 2008-2017

Legend: Total SDV, Automated vehicle platform, Smart environment
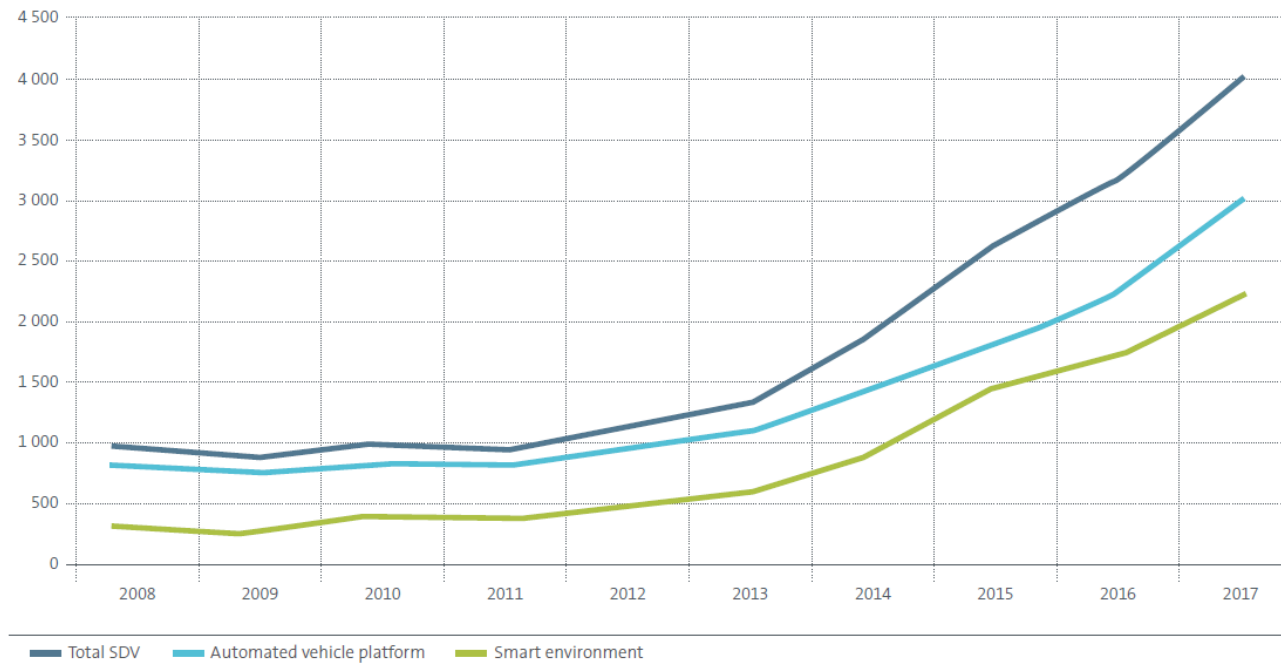
Source: EPO

CASE: life sciences

– Better data -> better algorithms -> more human lives saved

– Do some tasks become "AI-obligatory"?

System and method for remote melanoma screening (US Pat. no. 8543519)

Legal tools for protection

–**Patents**

–**Trade secrets**

–**Copyright**

–**Sui Generis Database right**

–**Contracts**

Patenting AI = a feasible approach?

- Not for
  - Data
  - A mathematical or statistical model in itself

- For
  - Technical application (system or method) of ML

- Examples of AI patents
  - Core solutions for AI techniques, e.g. improvements in neural networks and deep learning
  - Functional applications of AI technologies, .e.g OCR and machine vision
  - Application-specific solutions, e.g. medical, telecommunications and vehicle applications

"Patent protection of algorithms and software is narrow and easy to design around"

*- In general, a false statement that is only true to poorly and unilaterally designed protection*

Growing activity = increase in disputes?

- Whether you patent or not – others will

- Increase in investments = increase in enforcement of rights

- Not knowing doesn't save you from infringement

- Build your freedom to operate into your solution

In a nutshell

– Activity in the field is increasing tremendously

– Legal protection must be assessed from a number of perspectives

– Understand the actual solution behind the hype

– Monitor competitor's IPRs when implementing your AI solutions
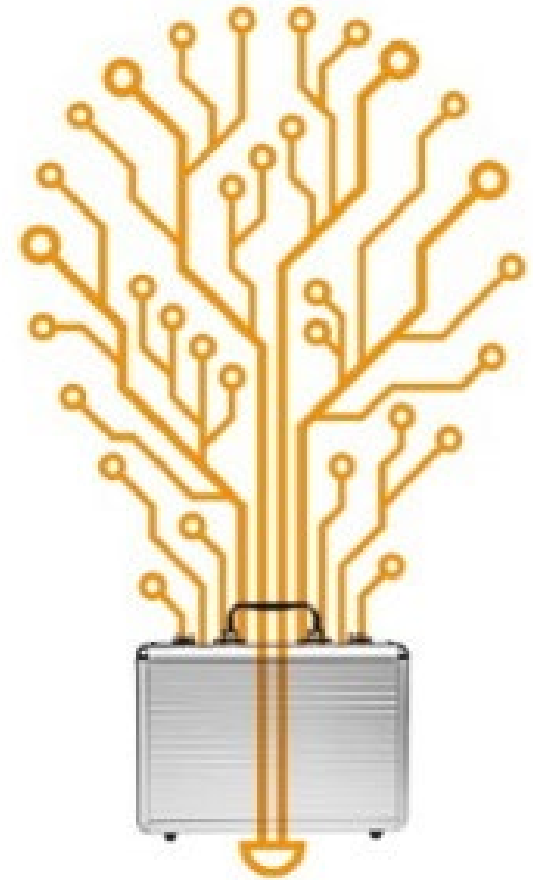
Akseli von Koch

Patent Attorney
EU Trademark and Design Attorney

050 325 5191
akseli.vonkoch@heinonen.com

https://www.evershared.fi/elamme-
tekoalyn-kaupallisen-hyodyntamisen-ja-
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