# Novel business models for digital platforms

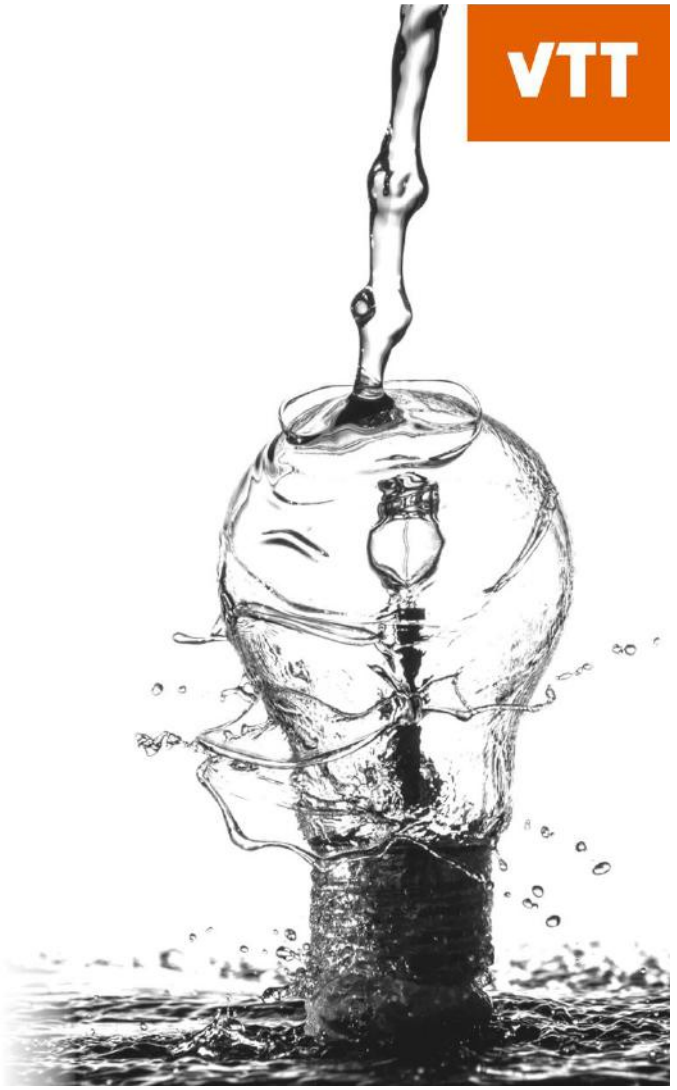
Katri Valkokari, VTT
26.2.2019

# Agenda

The core elements of digital platforms

Key platform benefits to different stakeholders

VTT’s competences on materials engineering

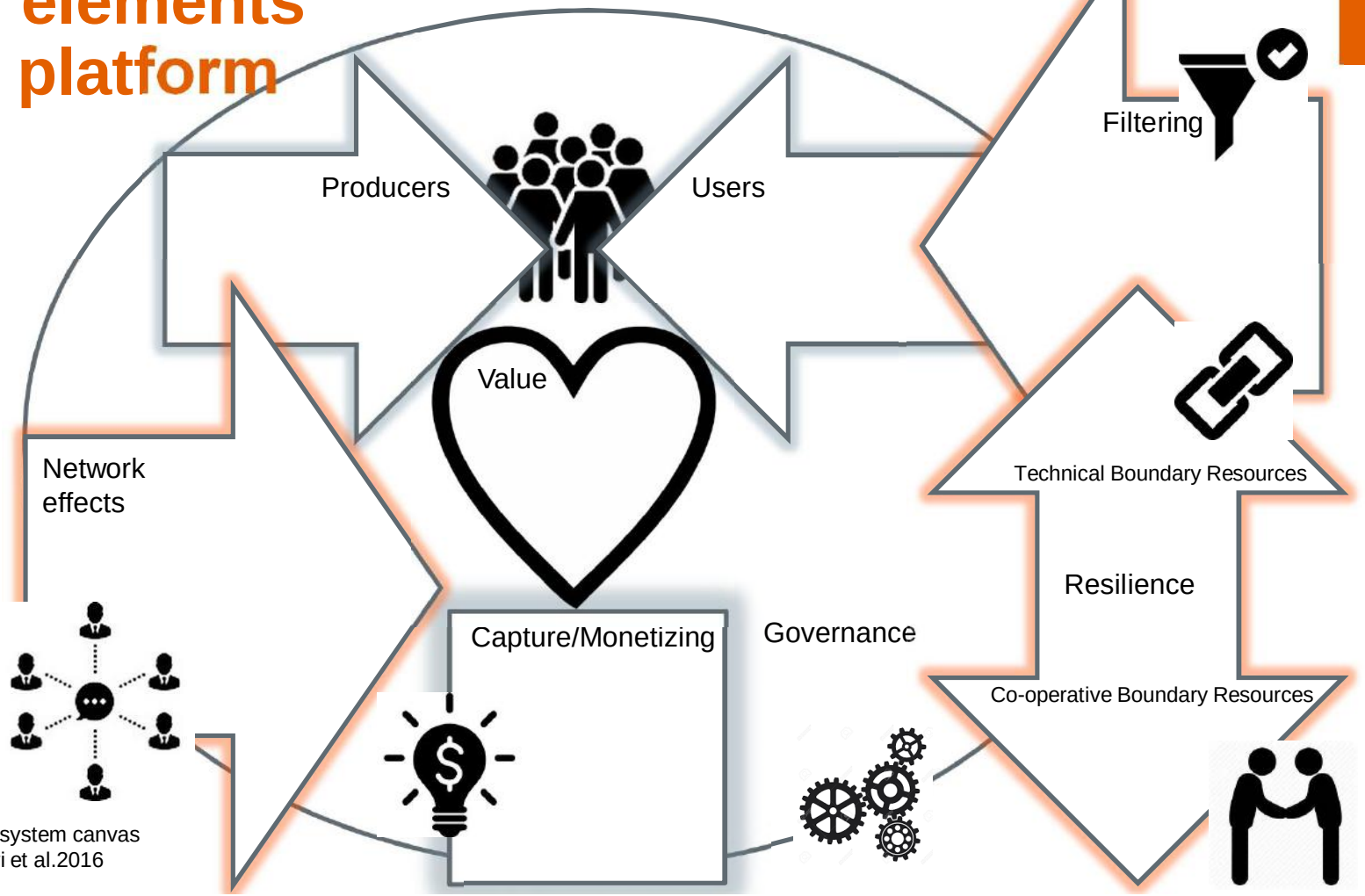


# Platform economy


Platform owner provides a platform, where different stakeholders (individuals or organizations) can offer their services, products and co-create new value

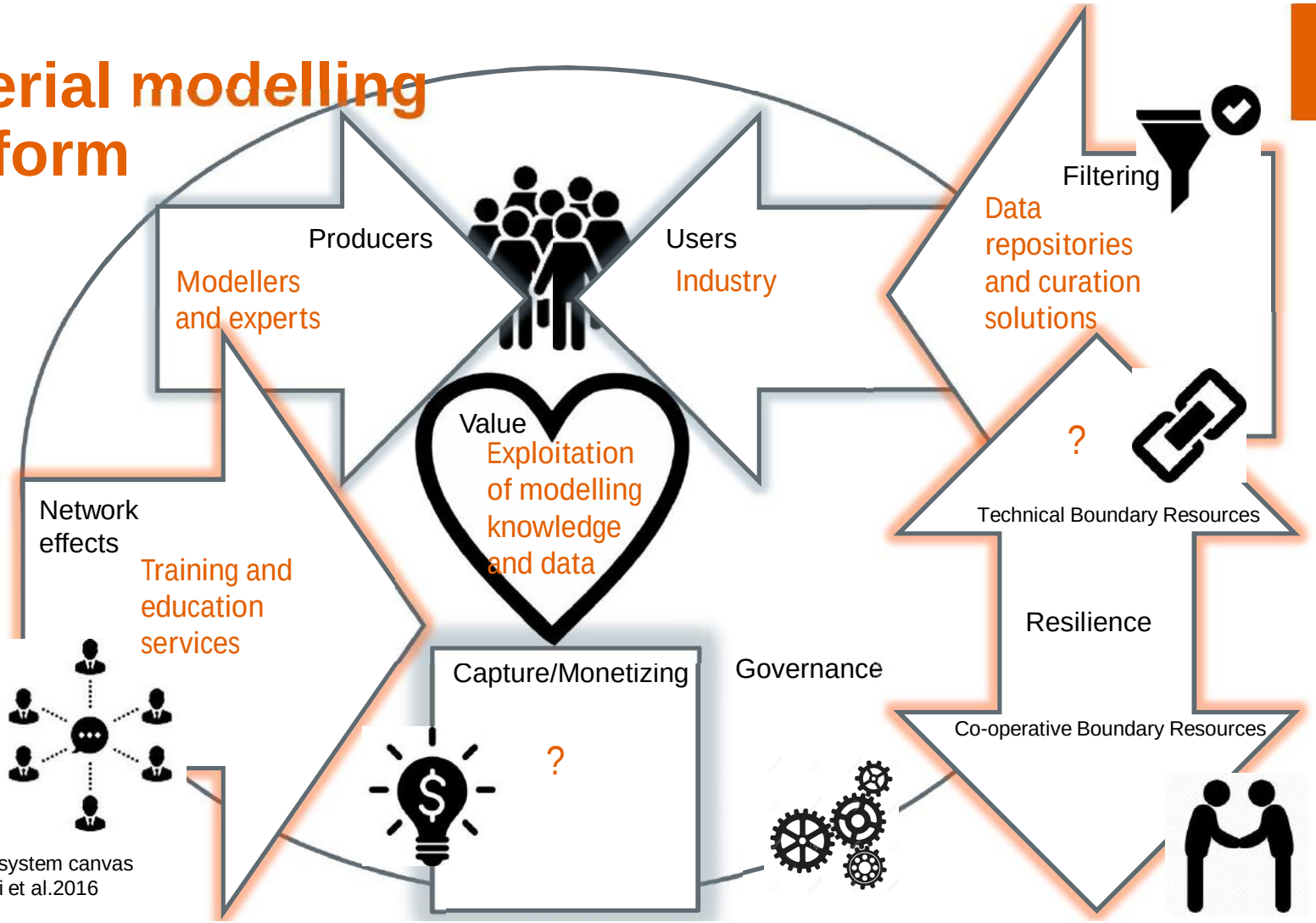
# Platform is a market place

# Key elements of a platform




Platform ecosystem canvas
Source: Sorri et al.2016

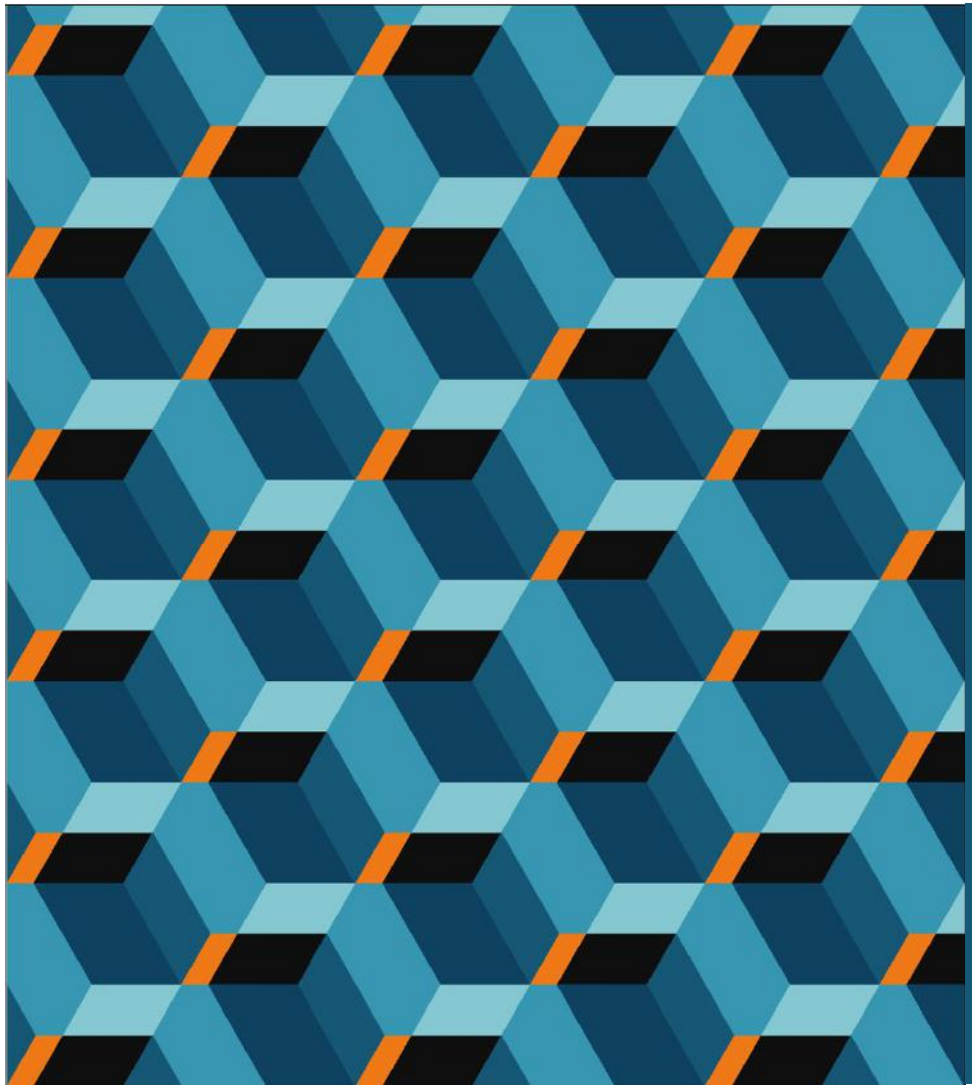
# Material modelling Platform




Platform ecosystem canvas
Source: Sorri et al.2016

# Key platform benefits to different stakeholders

| | Interest | Typical role |
|---|---|---|
| Modellers | More efficient work, complementary solutions<br>New customers and collaborators | Producer |
| SME | Knowledge, easy search of experties | User |
| Industrial R&D Lab | Additional resources, possibilities to utilise softwares and simulations | User |
| Software vendors | New customers and collaborators, product piloting | Producer |
| Translators/ consultants | New networks and customers, knowledge and access to modelling tools | Intermediator |
| Trainers and teachers | Possibilities to utilise modelling tools and test softwares | User/ producer |



# Integrated computational materials engineering

## VTT ProperTune

Example#1

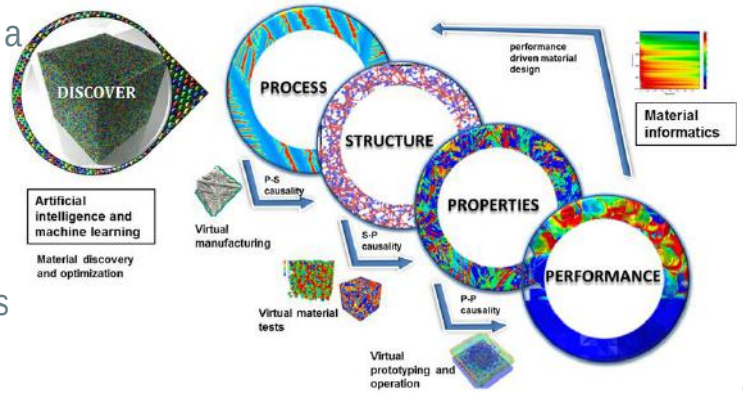
# VTT ProperTune – Integrated computational materials engineering

The core concept of VTT ProperTune, an integrated computational materials engineering (ICME) solution, is to **provide a systematic requirement-based design approach and provide a digital framework for material discovery, design and optimisation exploiting AI/ML technologies.**

- time-to-market of new material solutions is more than 2 times faster than traditional trial-and-error
- Decrease the time required for component deployment by a factor of 2–3
- Return of investment by a factor of 3–9 across industry sectors
- Decreases in component costs due to the improved design process
- Enables improved and disruptive discovery of novel designs and material solutions, leading to improved products

*"VTT ProperTune optimises material design by replacing expensive and time consuming testing, and shortening time-to-market for new products by an average of 50%."*

Anssi Laukkanen
Principal Scientist
VTT



# Concluding remarks

## What would be the most important elements?

- Networking within the community of material modelling
- Broad view on current knowledge and on-going discussion
- Easy access to software and modelling methods/tools

# Thank you!

**Katri Valkokari**
**katri.valkokari@vtt.fi**

**vttresearch.com**
**#vttpeople / @VTTFinland**