VTT

Strategic Elements for Data Sharing and interoperability

Katri Valkokari, VTT

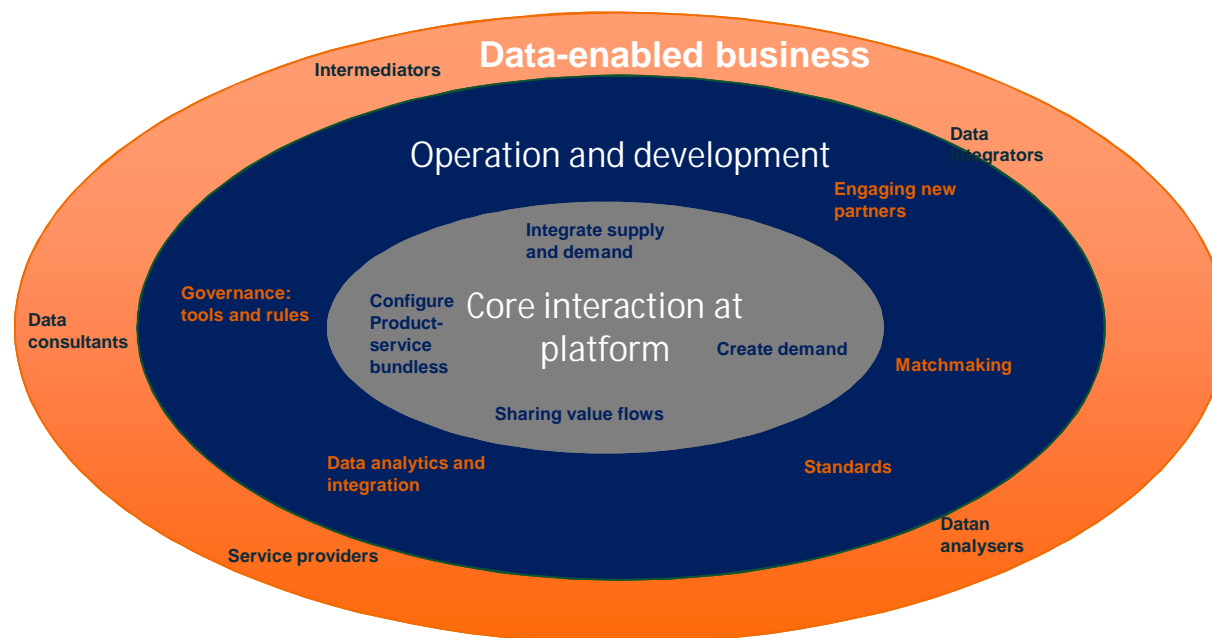**29/11/2022   VTT – beyond the obvious**

Key considerations

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1. Value of data need to be understood from the perspective of variety of actors. The business logics inside different silos (transport sectors) are different, so the data sharing and governance rules need to be different.

2. Within on sector the current value chain (logistics, mobility) are at the core (see slide 3). The roles at core value chain and data (sharing) value chain probably are different, typically actors are both users and owners of data. When aim on novel business often cross-sectoral collaboration is needed. Thus, the primary question is who makes the rules of the game.

3. There are still different conceptualisations of data space and variety (over 30) initiatives ongoing, how can an actor whos' main focus is on every day business catch these opportunities (or even follow the development).

There are several roles at the platform economy

Different benefits from data sharing

- OEMs gain more efficient transparent processes and complementary solutions through pilots
- SMEs reach new customers and collaborators, easy access to resources and novel tools

Data-enabled business

Intermediators

Data integrators

Operation and development

Engaging new partners

Integrate supply and demand

Governance: tools and rules

Data consultants

Configure Product-service bundless

Core interaction at platform

Create demand

Matchmaking

Sharing value flows

Data analytics and integration

Standards

Datan analysers

Service providers

Content

- VTT approach and purpose

- Practical example

- Data-driven business

- Way forward

Our strategy 2021–2025: The path of exponential hope

VTT

OUR PEOPLE
Top professional capable of systemic and technological breakthroughs that can bring about fundamental transformation.

The **choices** we make every day

OUR PURPOSE
We bring together people, business, science and technology, to solve the world's biggest challenges, creating sustainable growth, jobs and wellbeing.

5. Always build the world's most **meaningful** place to work

4. Always drive **sustainable** business

OUR AMBITION
We bring exponential hope to a world that needs to deal with the climate crisis, achieve resource sufficiency, drive industrial renewal, provide safety and security, and enable good life for all.

1. Always aim for **impact**

2. Always create impact together with a **customer**

3. Always lead for **excellence**

VTT – beyond the obvious

VTT

We solve global challenges

For us, *data is in the core* of these data-intensive global challenges

The challenges we focus on

Data

Systematic challenges:
Carbon neutrality, productivity leap, societal resilience

Technological challenges:
Quantum leap, super-performing materials, superior digital systems, synthetic biology

Background/motivation for the
Lyyli Living Lab

Ratikka Sepänkadun sillan ylitettyään Paasikivenkadulla
(kuva: Tampereen kaupunki ja A-Insinöörit)

- Urbanization is one of the most significant megatrends of our time. It will accumulate many challenges to cities **and arranging the people's mobility in a sustainable way is one of the largest one**.

- In people transportation, **increasing the share of public transport combined with walking and cycling is seen the most efficient way** to advance sustainable urban mobility.

- Since **data-driven digital services have become an integral part of the optimization of transport as well as customer experience**, their importance is paramount when looking for more sustainable solutions.

- The open innovation paradigm offers a viable approach for seeking novel (and better) services for public transportation.
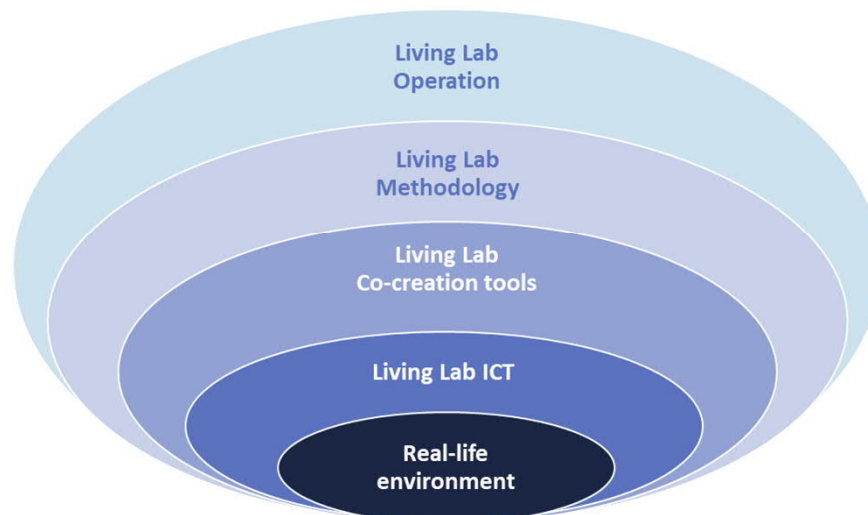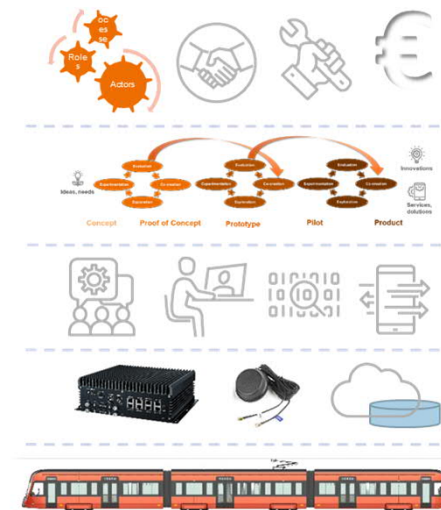
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ANATOMY OF LYYLI LIVING LAB

Lyyli Living Lab is based on physical context enriched with Living Lab ICT, co-creation tools & methodology as well as on rules, roles & processes for guiding concrete operation

Living Lab Operation

Living Lab Methodology

Living Lab Co-creation tools

Living Lab ICT

Real-life environment

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TAMPEREEN RAITIOTIE OY

Organisations need to increase data centricity

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Digitalisation is transforming products and services into connected systems

This change impacts all companies. As products and service increasingly link into connected, data-intensive systems, data increasingly creates the core of competitive advantage of companies across industries.

Extracting value from data is complex

Companies acknowledge the potential value in data. However, identifying mechanisms for value creation, implementing changes and extracting value is complex and often difficult.

Managing complexity requires multiple lenses

Our systemic approach takes a in-depth views through the lenses of technology, people, society, business. This is the key in navigating the complexity and ambiguity of internal and external operating environments.

Data-intensive environments require bringing data to the core of your strategy

Data-intensive environments are in constant change. Value creation in such environments require complementing the process and monolithic orientation with data centricity.

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PrepDSpace4Mobility – EU-DIGITAL-2021-CLOUD-AI

- Timeline: **1 Oct 2022 - 30 Sep 2023**
- Partners involved: **acatech, VTT, ERTICO, BAST, TNO, Fraunhofer, Paris Airports, iSHARE, etc.**

SCOPE:

- O1: *contribute to the further development of the common European mobility data space*
- O2: *governance mechanisms that will facilitate easy, cross-border access to key data resources*
- O3: *inventory of existing data platforms and marketplaces*
- O4: *data space reference architecture and building blocks*
- O5: *exploit, disseminate and communicate*

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