

The transition of innovation policy to system innovation policy in Finland

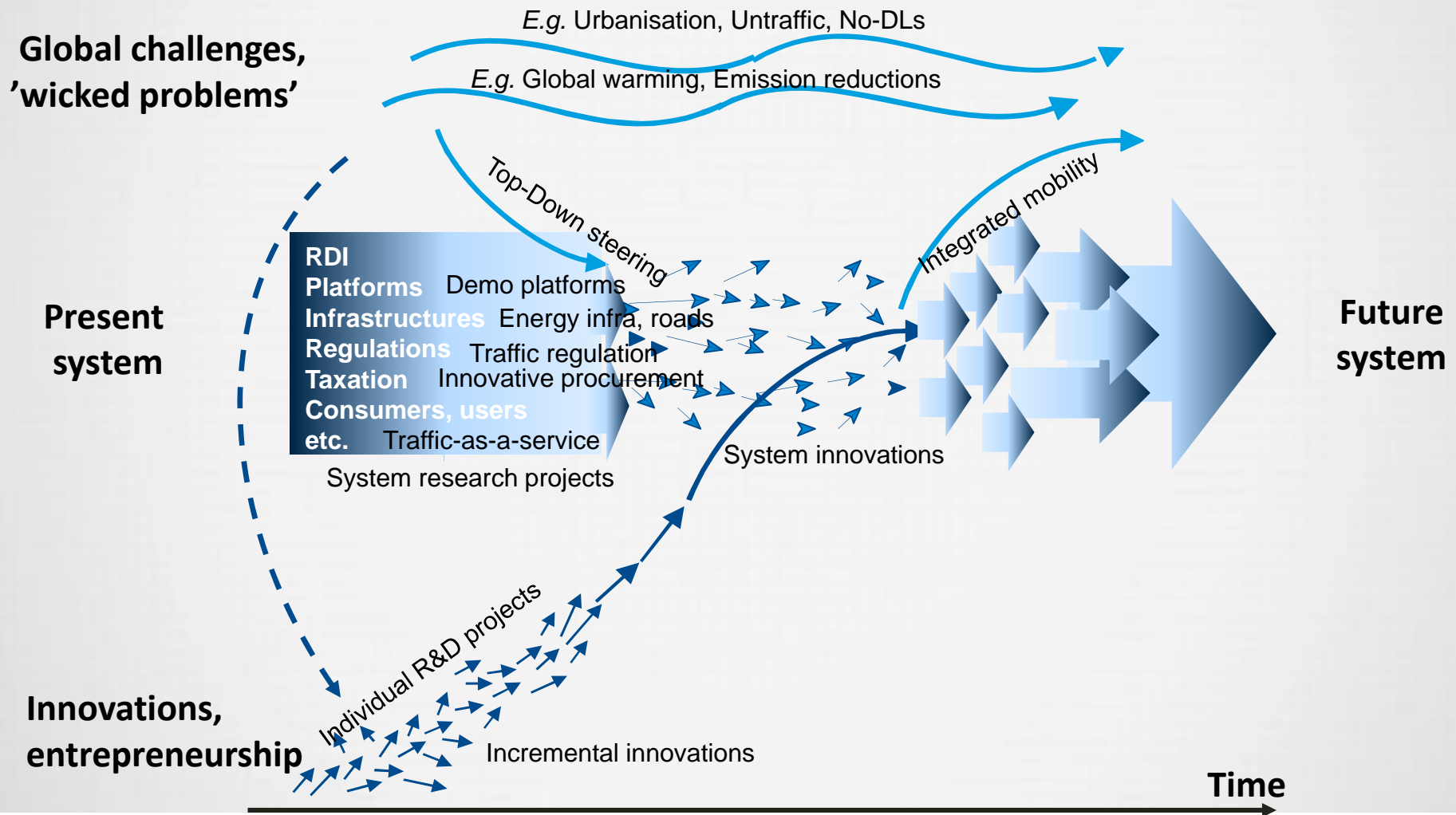
**STRATEGIC CLUSTER POLICIES FOR
NEW GROWTH**

**SHAPING STRATEGIC PARTNERSHIPS
FOR THE TRANSFORMATION OF OUR
ECONOMIES**

Monday 12 May, 13.00 to 18.00, Brussels

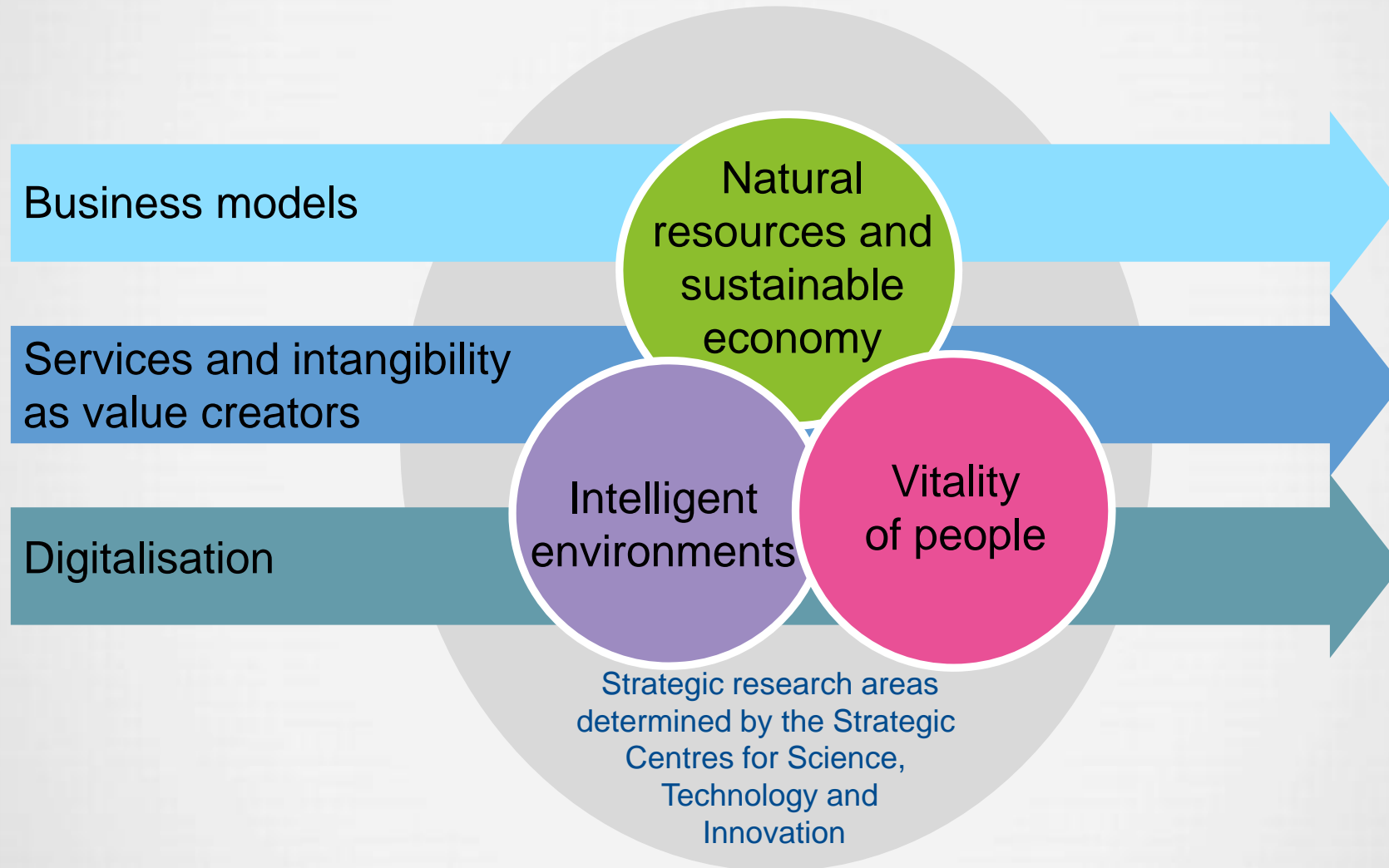
Raine Hermans, PhD, Adj. Prof.
Head of Strategic Programs
Tekes

Systemic innovation based on economic transformation



Adopted from Geels (2011)

Focus areas



Mobility-as-a-service (NMT 2.0 → GSM 2.0)

Our vision is to enable a seamless and efficient flow of information, goods and people. By this end, new integrated mobility service solutions will be launched, based on standardized open interfaces.

It is almost impossible to achieve because transport system inefficiencies are presently business for many organisations and industries, many old jobs will become unnecessary although many jobs are created, and we are acting in silos.

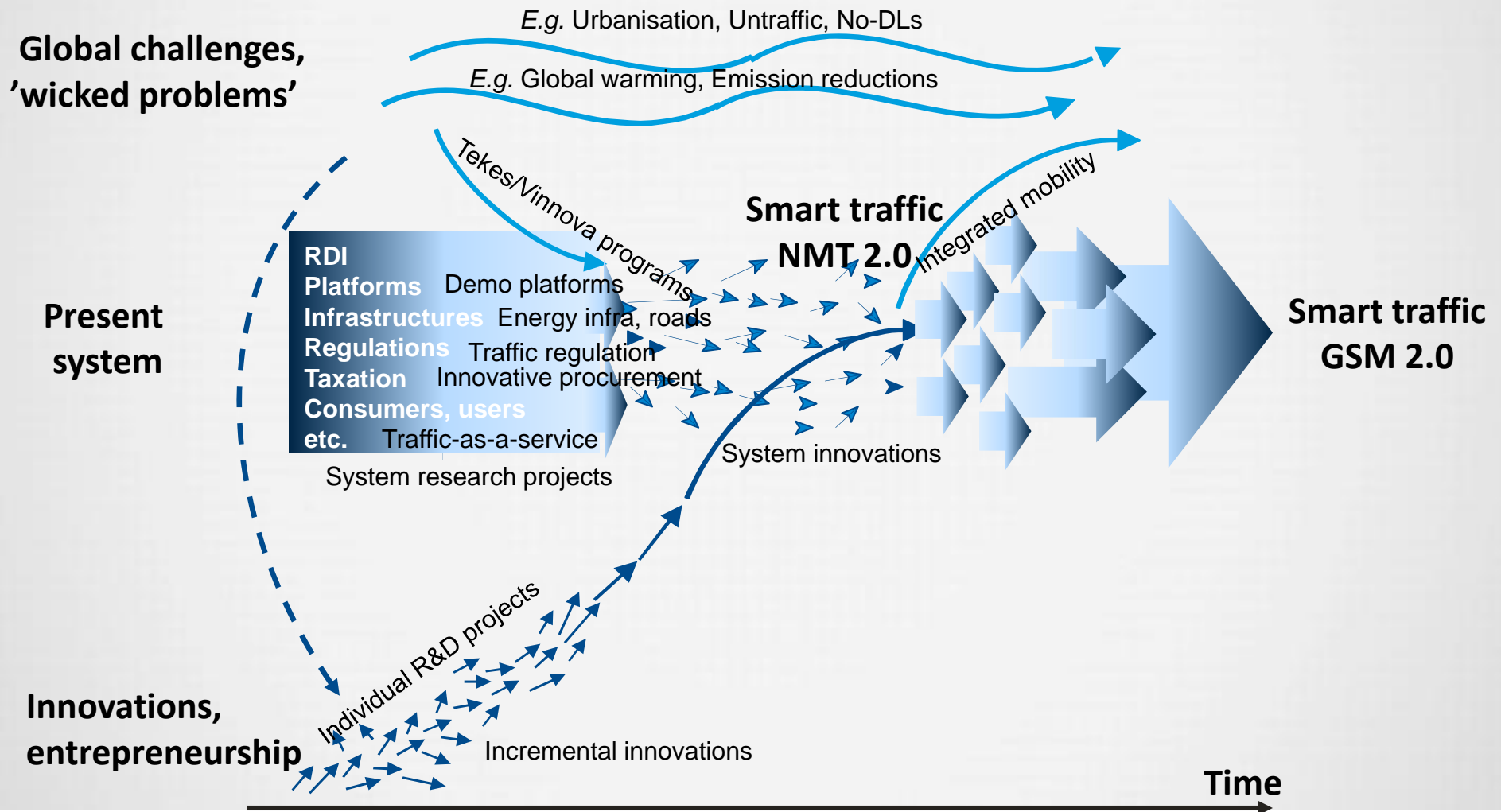
Precedents of this idea include Kutsu+, Autolib, Über, TaxMobil, Suica, Pasmo-cards, Örum.

We will make this vision real by the end of 2016, by working with the following kinds of organisations:

- Companies that are willing to operate in open ecosystems,
- Regulators that enable operations in open ecosystems,
- Payers of transport services that need to save 50% of the costs,
- Users that prefer high quality services (matching to the budget constraint),
- Research institutions that help us to see the forest out of individual trees.

The timing is right today due to technology and information potential, supportive international regulations (e.g. emission restrictions), and the economic reality that compels us towards the change.

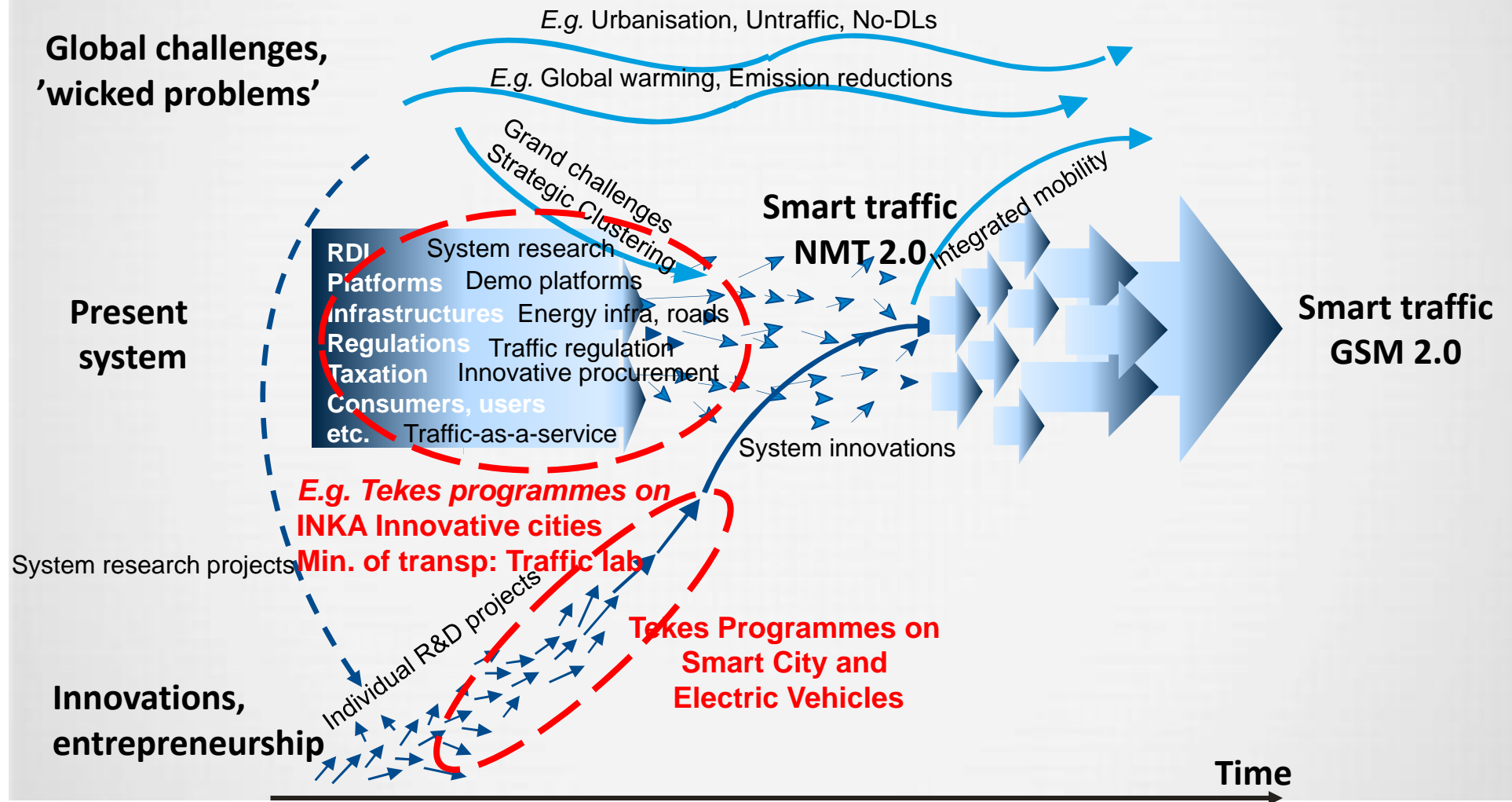
Mobility-as-a-service: from Nordic countries to global markets



Adopted from Geels (2011)

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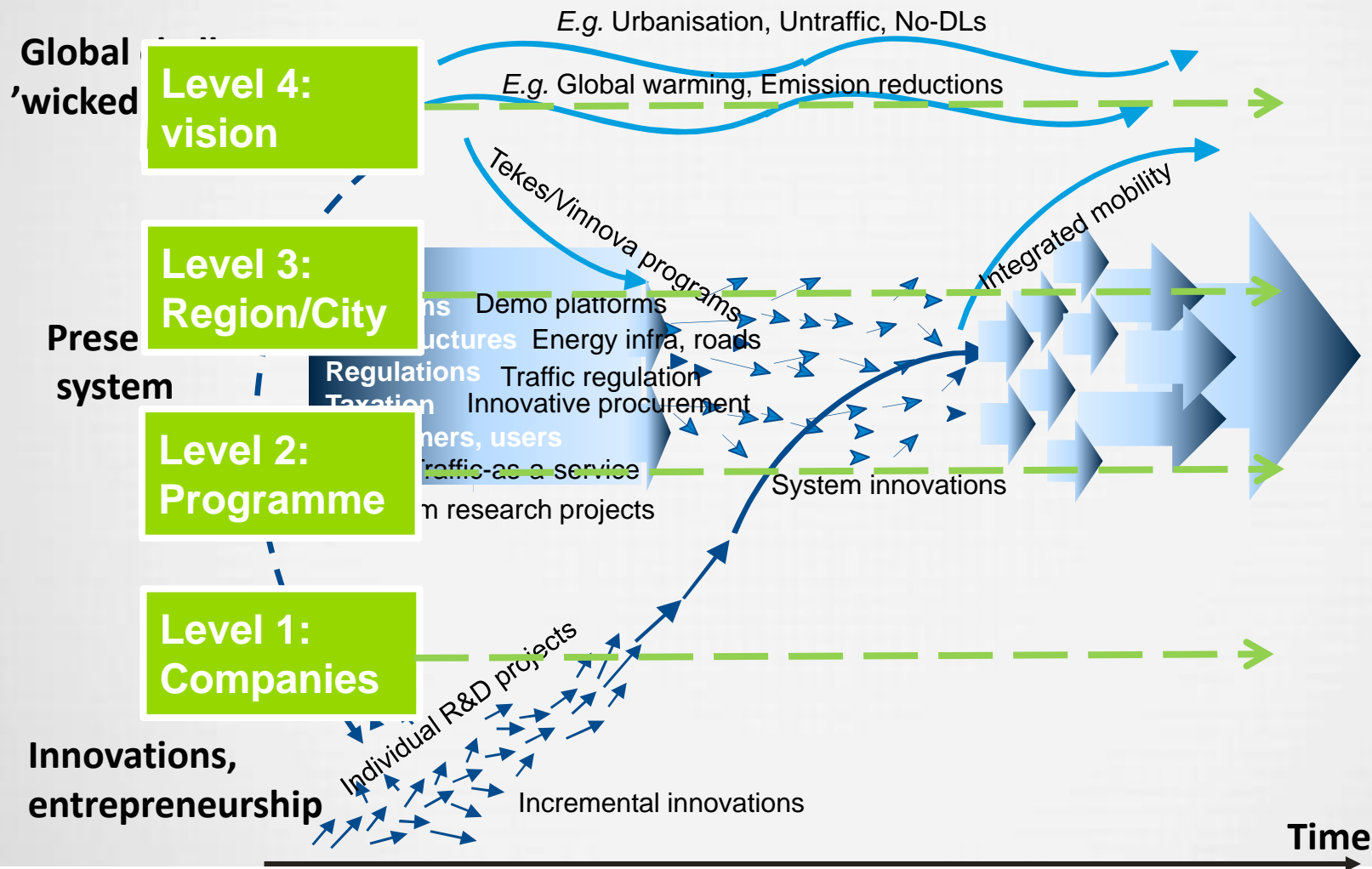
Mobility-as-a-service: from Nordic countries to global markets



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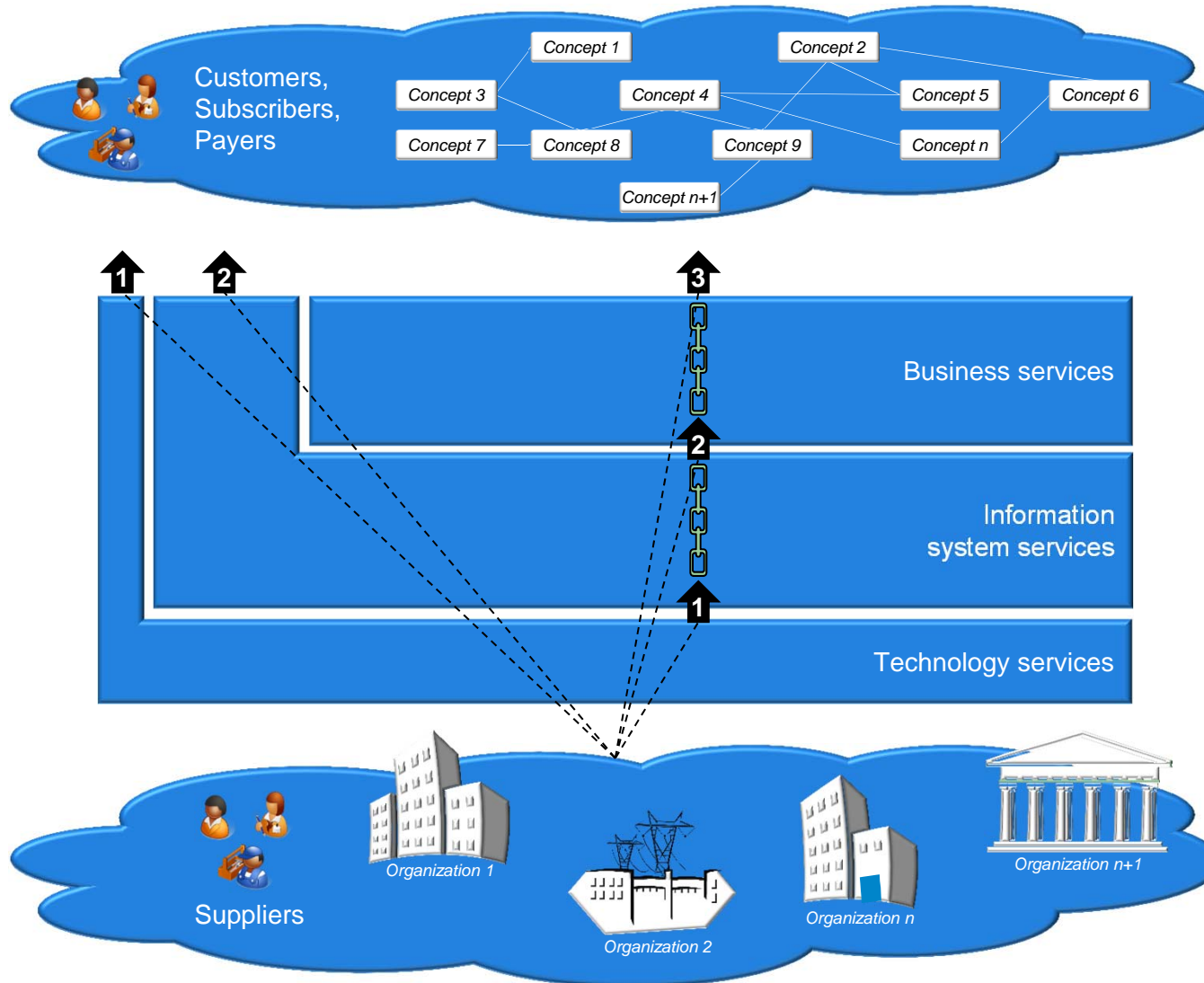
Indicators: How to predict and measure the impacts



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Illustration of Mobility as a Service Ecosystem

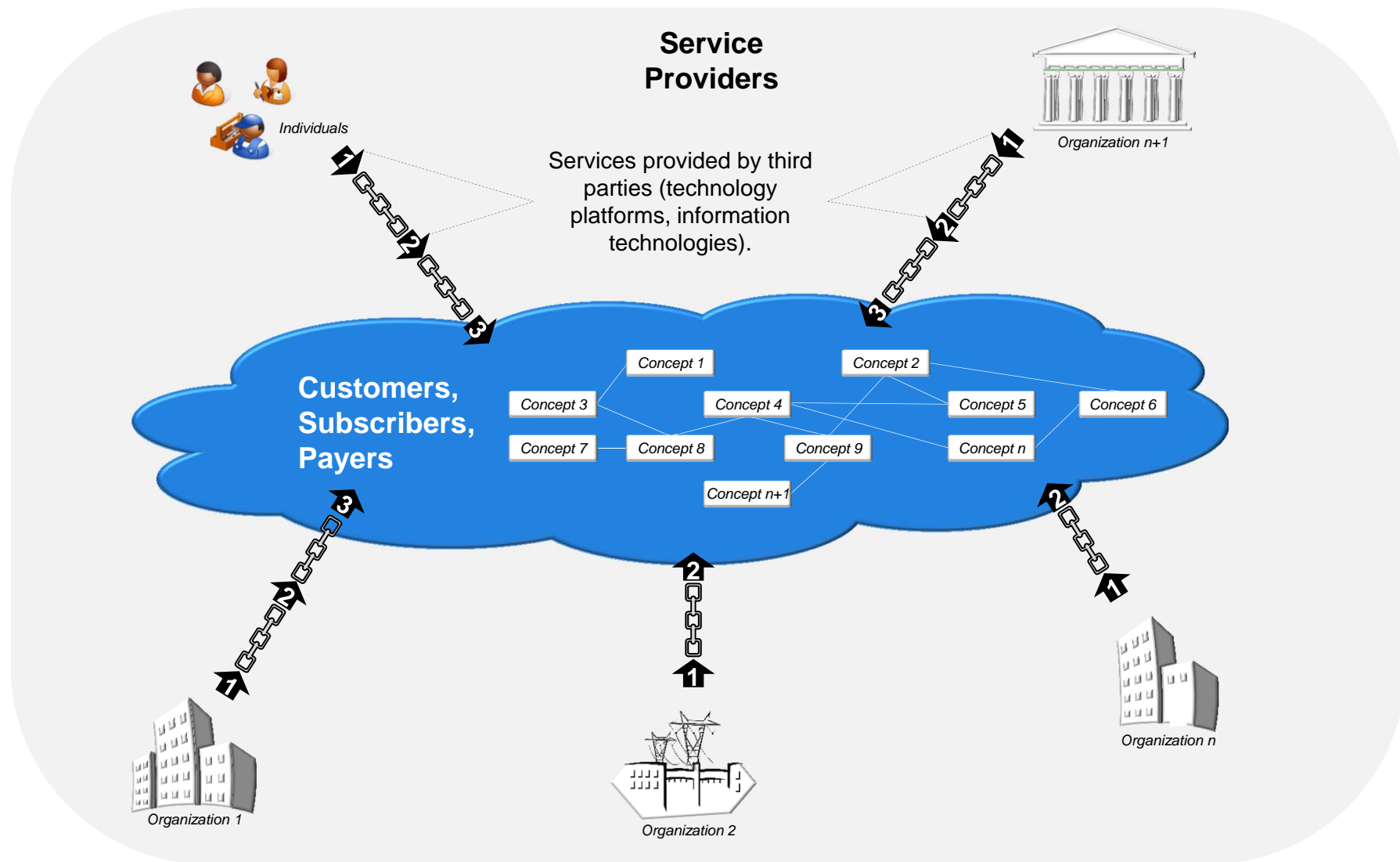


- ✓ Customers and their expectations as a starting point.
- ✓ Common understanding about values and concepts (i.e. speaking the same language)
 - Capability to handle interoperable concepts together.
 - Forms "Innovation platform" for new business models and services.

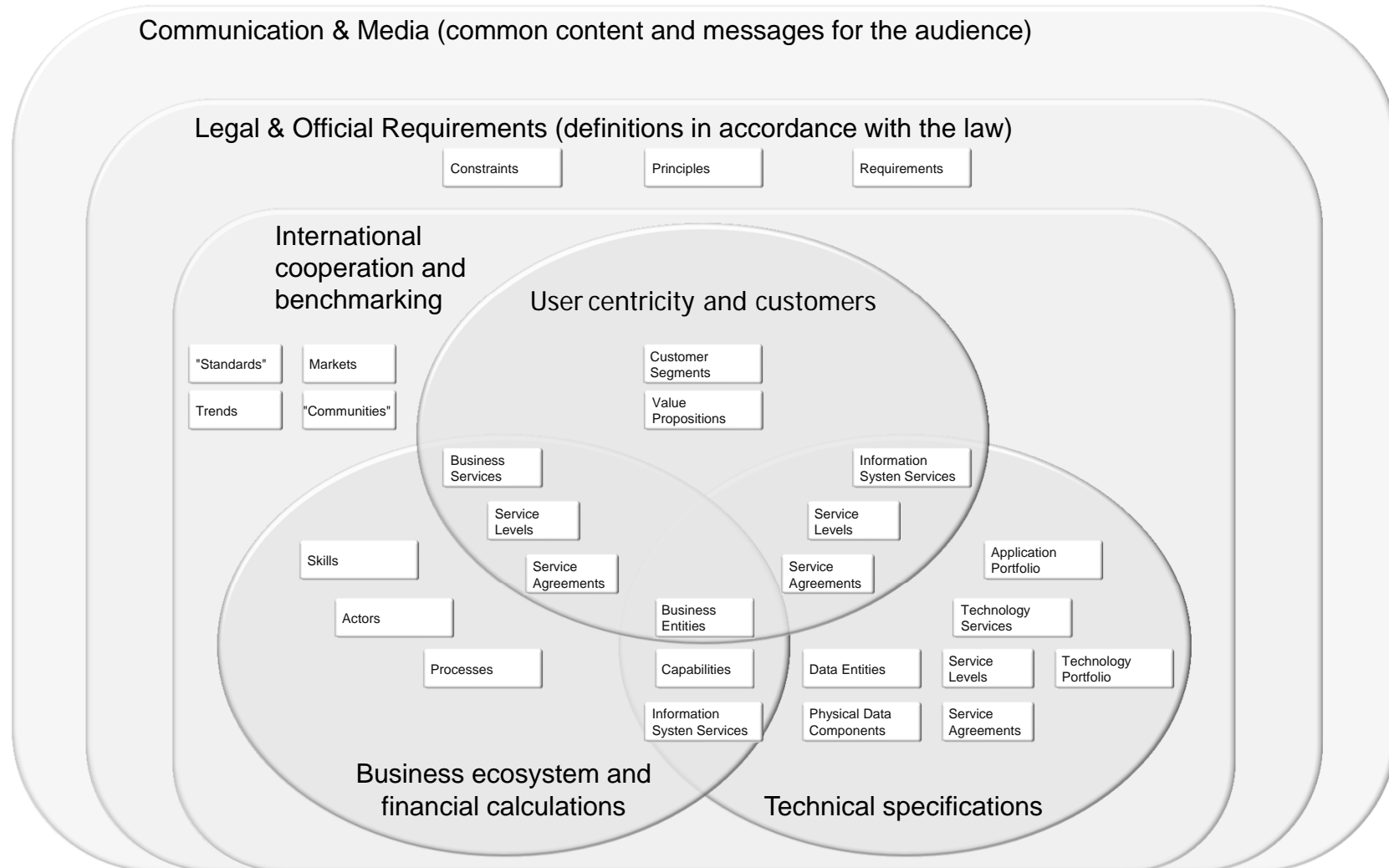
- ✓ Business model formulated by various organizations.
 - Value and service networks formulated by various organizations.
 - Value and service network related governance models.
 - Service driven leadership and management practices.

- ✓ Organization related activities (processes, development activities) and resources (personnel, information technology, other technology) behind services.

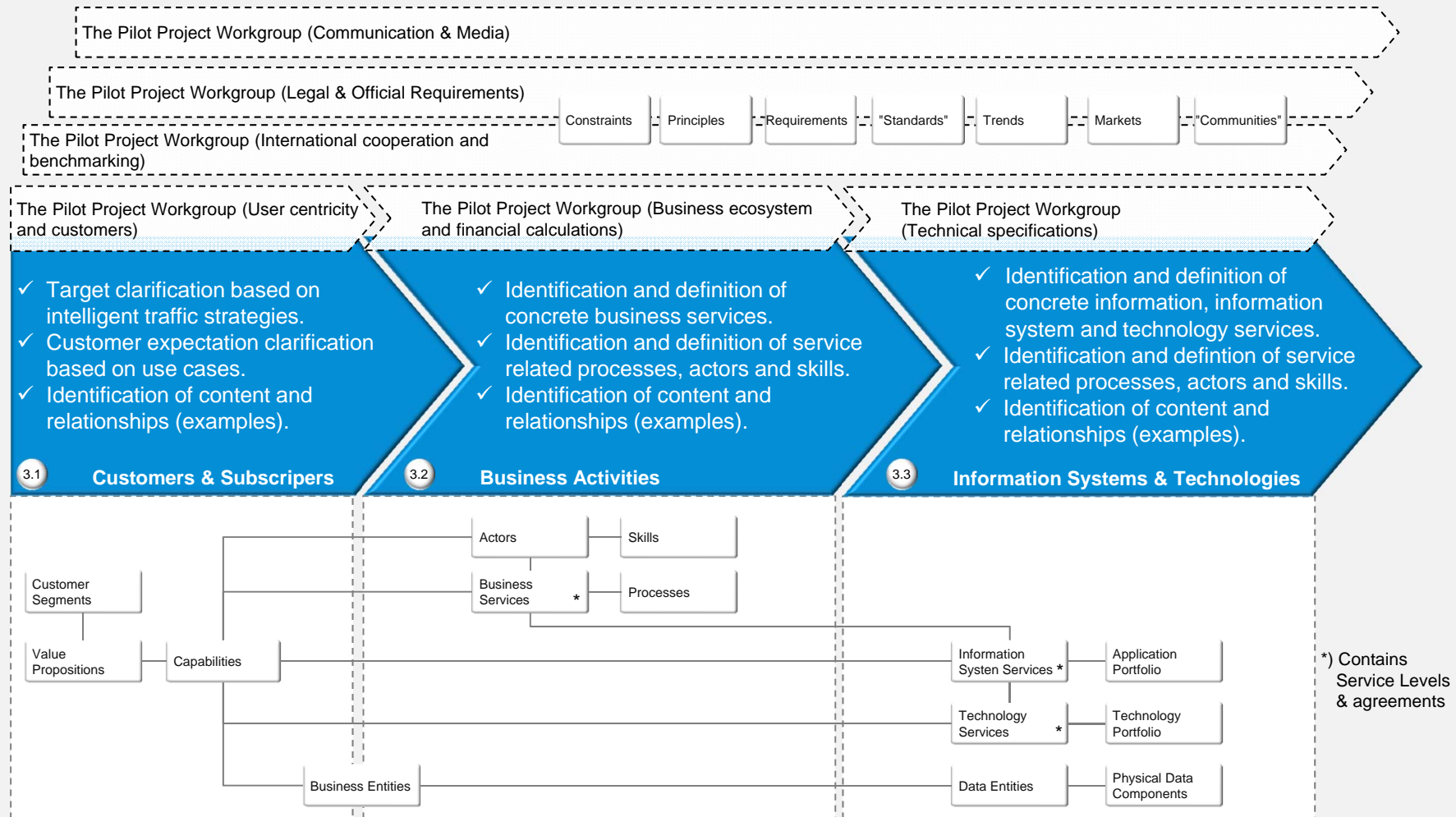
Customer Focused – Customer in the Middle



Content illustration of The Pilot Project Driven by Ministry of Transport and Communication



Approach – Definition of MaaS Ecosystem



Services and Intangible Assets Creating Value in Tekes Programs

Market trends



Need-driven and cross-cutting services tackling grand challenges



Open innovation platforms in global value networks



Local test beds and markets driving exports

Main instruments



Integration of technology areas and services



Smart standardization of cost-benefit models



Understanding needs of the future user

Business



Scaling need-driven and cross-cutting services globally

From cost-margins to need-based pricing schemes

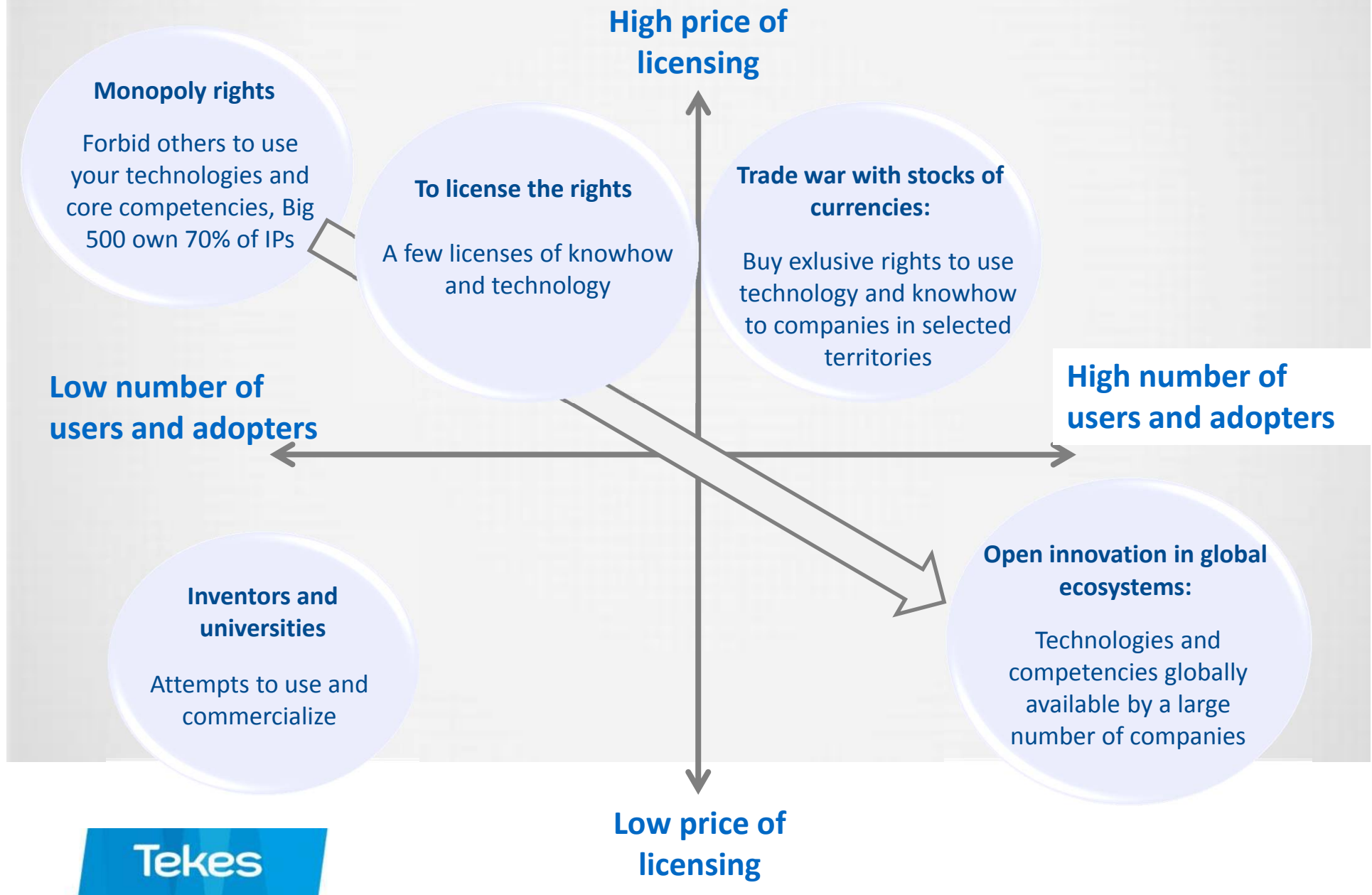
Rapid expansion from the local test bed to the world market

Change of the global value chains

Case: Tekes Technology and Ecosystem Access Program (TAP)

Raine Hermans, PhD, Adj. Prof.
Services and intangibles

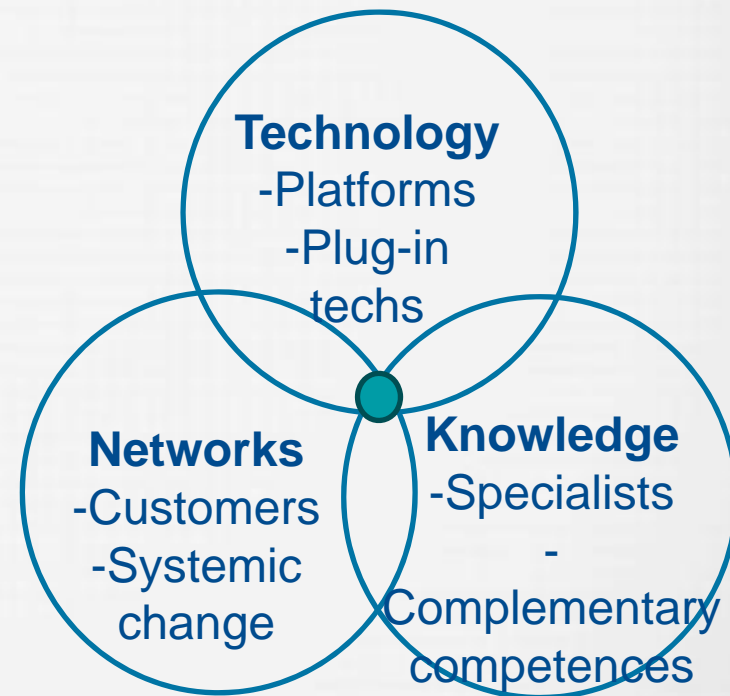
Change in intellectual property management



Technology and Ecosystem Access Program (TAP)

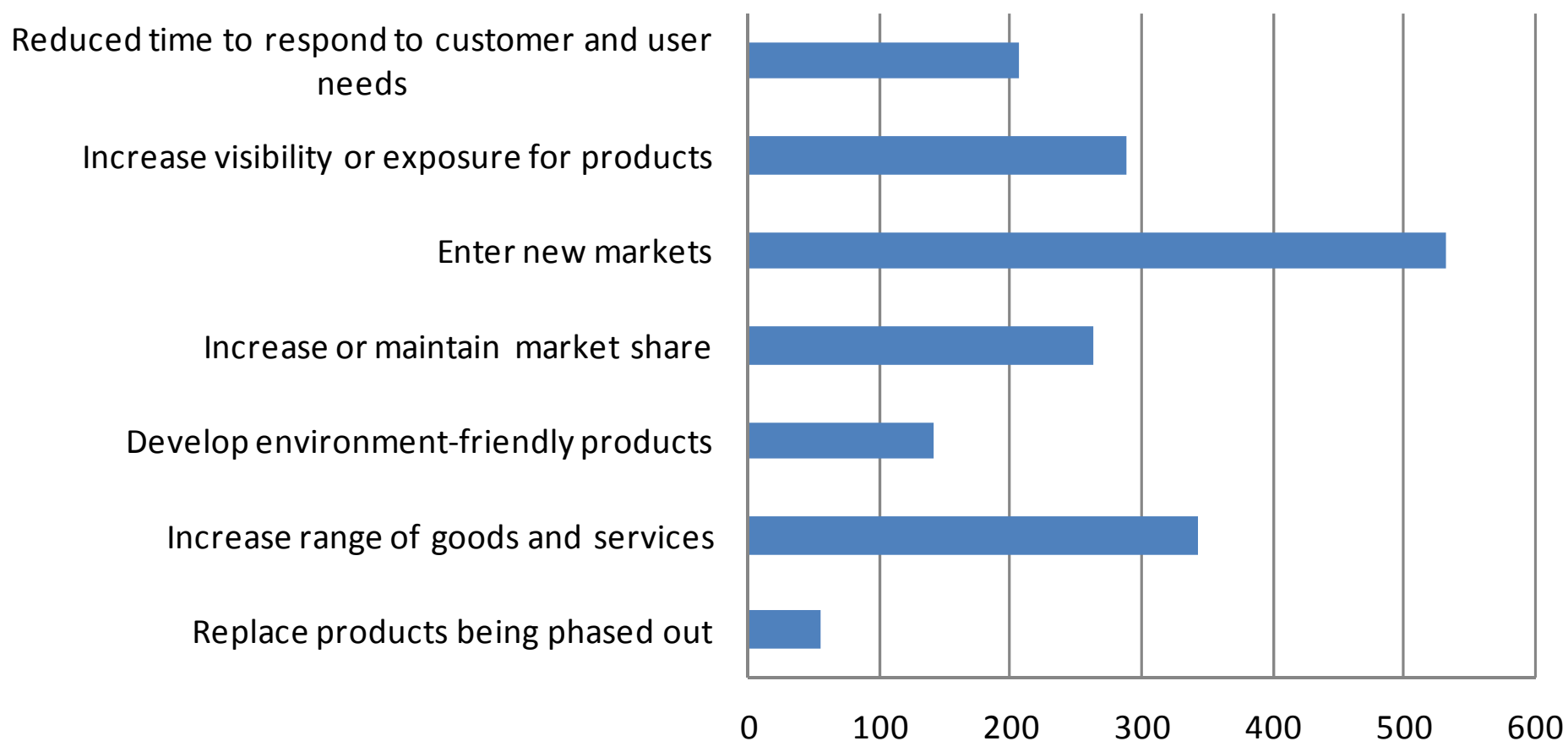
TAP – Objectives

1. Fast track R&D
2. Low-cost R&D
3. Entry to new markets



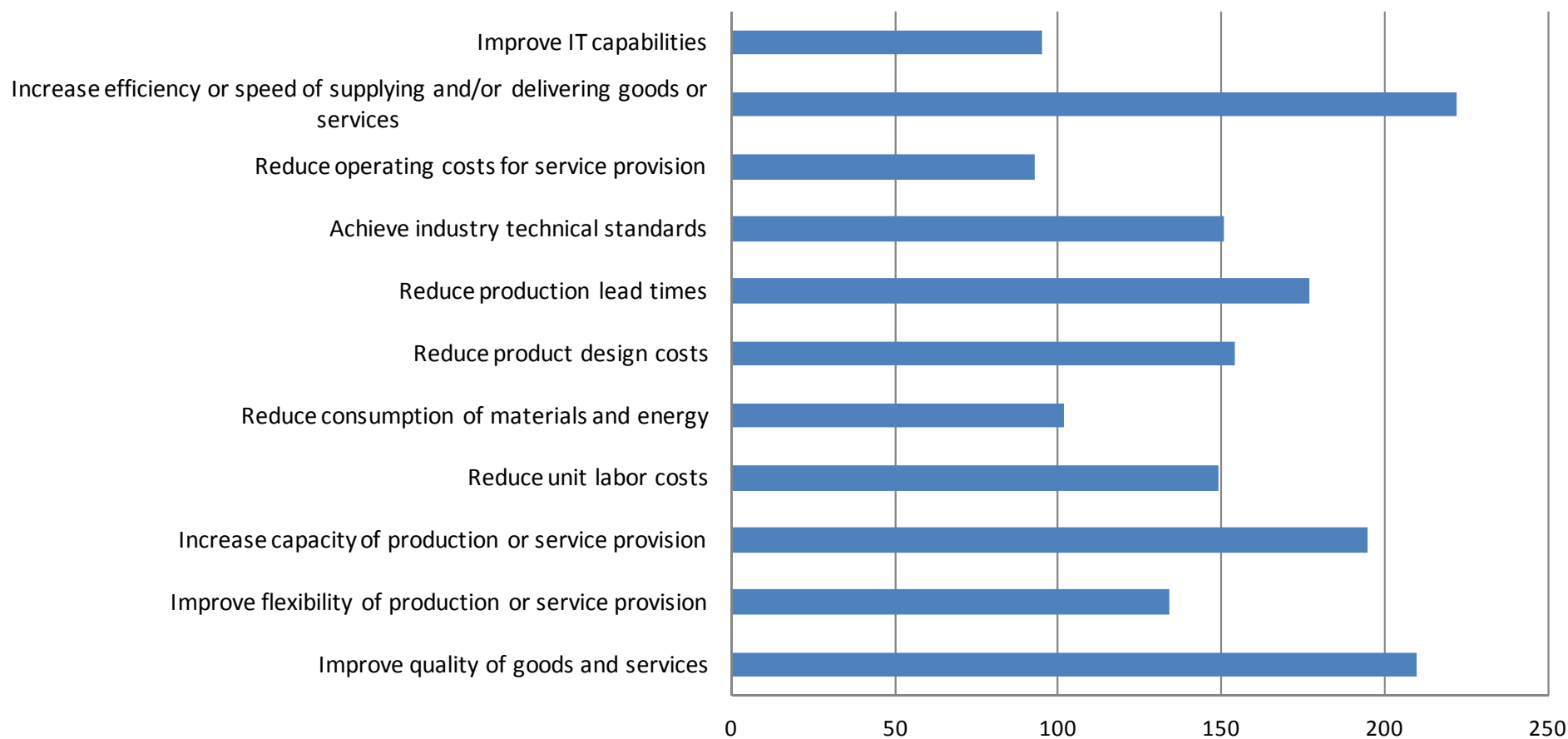
Tekes TAP Survey: The needs for technology and know-how transfer relevant, or of potential future interest to the SME

Needs for technology and know-how transfer: Competition, demand, and markets



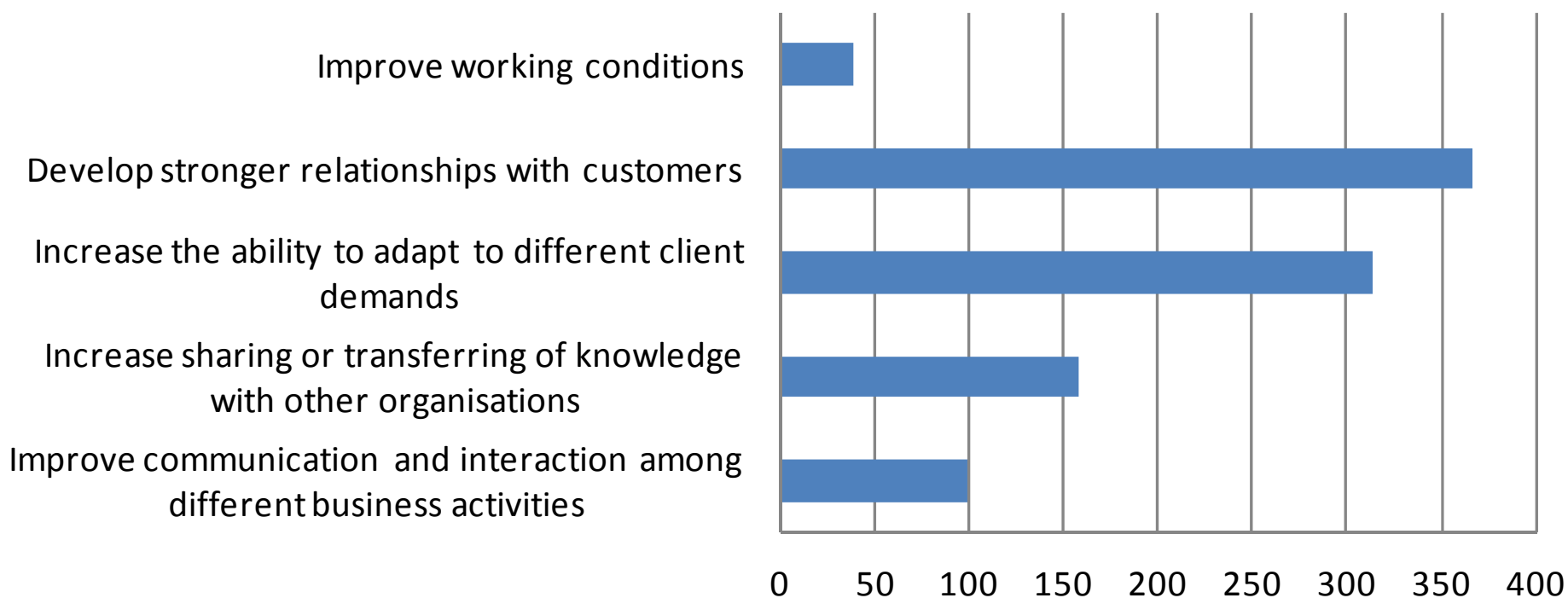
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Needs for technology and know-how transfer: Production and delivery



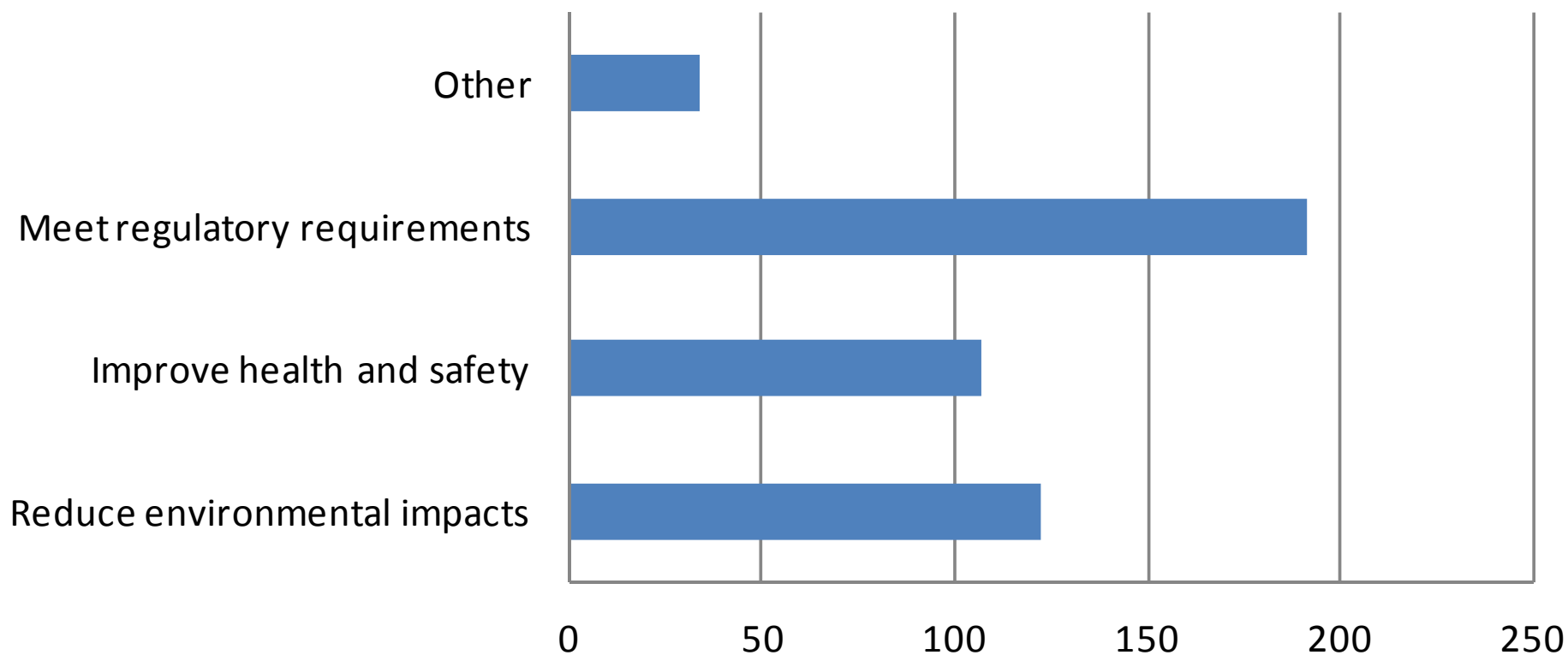
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Needs for technology and know-how transfer: Workplace organisation

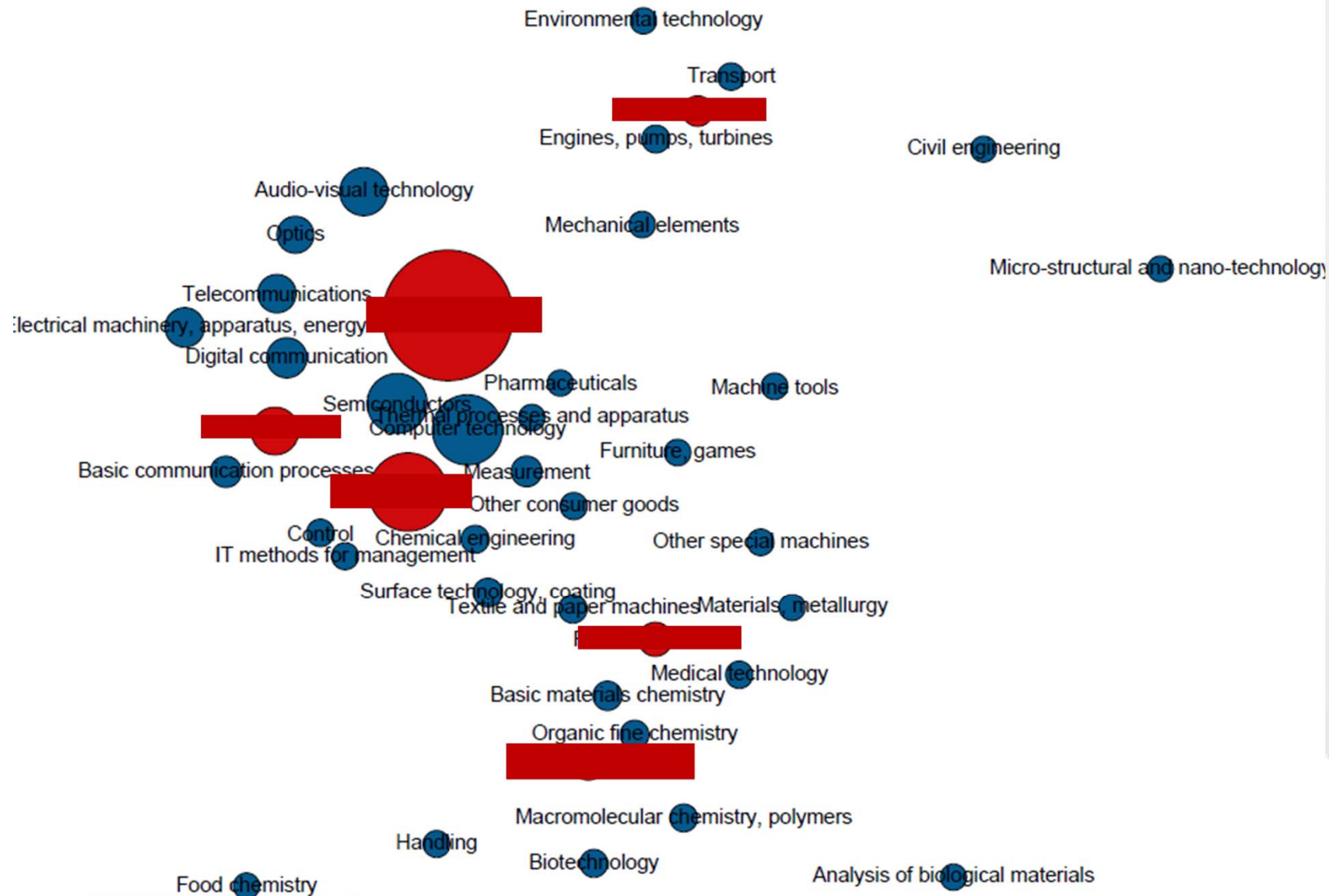


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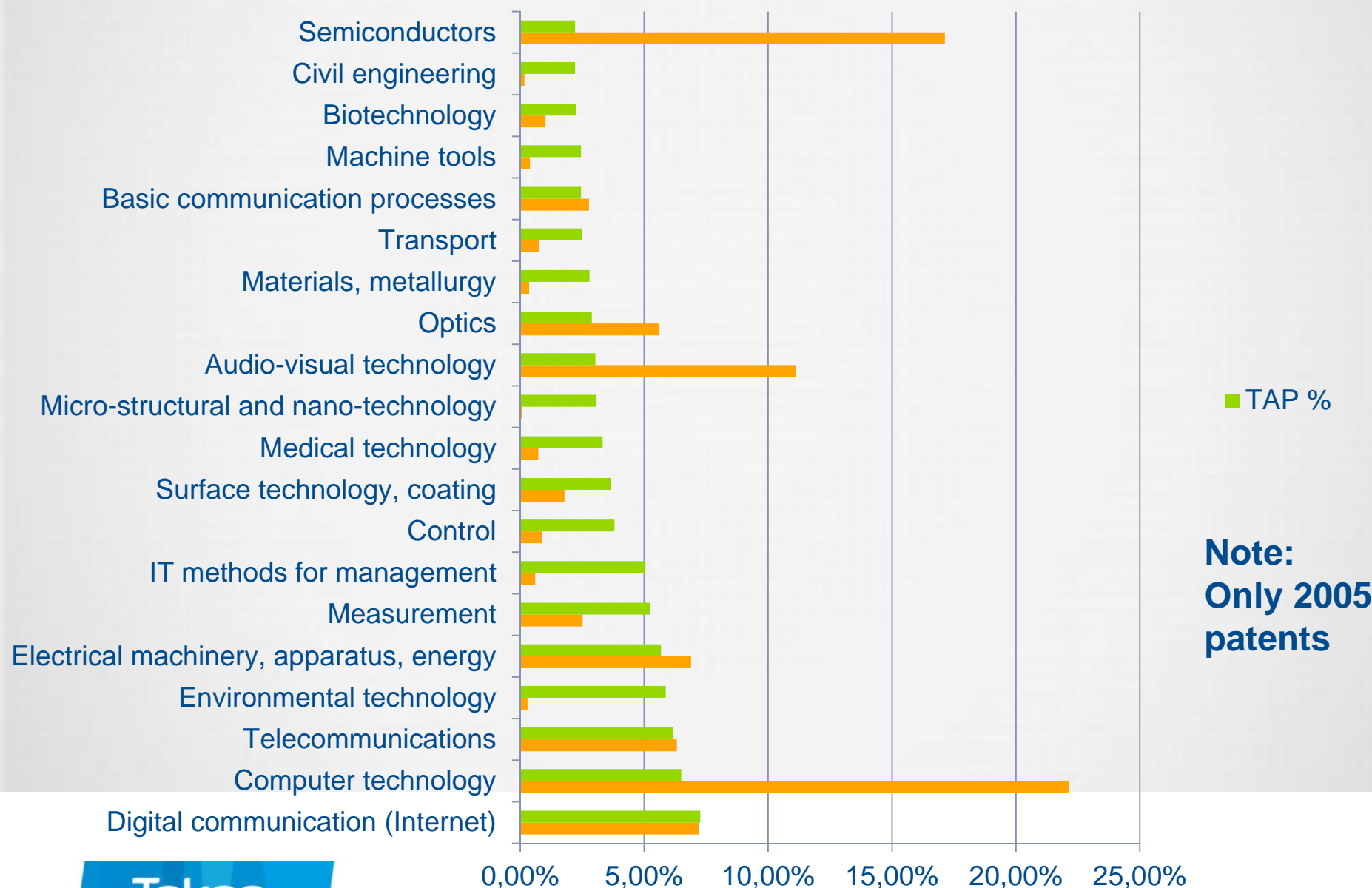
Needs for technology and know-how transfer: Other



Initiative to open innovation platform with some multinationals: year 2005 – IPC patent classes



Matching needs and technology supply: SME needs in TAP and patents in open innovation platform TOP 20



Matching needs and technology supply: SME needs in TAP and patents in open innovation platform TOP 21-35

