



This project has received funding from the European Union's Horizon 2020 research and Innovation programme under grant agreement N° 101016854.



SMART

SMART

RURAL

Mobility

in a

Community

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SMART RURAL MOBILITY IN A SMART RURAL COMMUNITY

Outline

- How should we perceive smart mobility for people and goods?
- Observations from a systemic & policy perspective
- Interesting AURORAL pilots

SMART MOBILITY?

*It's electric
and works in
space!*



*It's an
autonomous
car!*



*It's got a
pizza oven
inside...*



Some most common themes:

- MaaS
- Demand-responsive public transport
- Shared electric mobility
- Social services transports (elderly, schools)
- Tourism & travel services

There is no lack of trials, demos and pilots in Finland...

Innovatiiviset liikenneratkaisut -hanke (Salo) * Ruka-Kuusamo –kimppataksi * Kohti kestäviä hankintoja –hanke * Koulukuljetuksiin laatua ja joukkoliikenteeseen joustavuutta -hanke (Nokia) * Qalmari Oy (tehnyt Turulle sovelluksen koronaruoka-avun organisointiin) * Vaste-hanke (Centria) * NääsMaas (Tampere) * PPJ (urheiluseura, joka tehnyt kuljetushanketta harrastuskyytien ympärille) * CitiCap -hanke (Lahti) * PayIQ (maksuratkaisuja, myös liikennepalveluille) * MAMBA (Etelä-Pohjanmaa ja Pohjois-Karjala) * Collico Oy (verkkokauppa ja logistiikka saumattomammin yhdessä) * Soite (shl- ja vpl -kuljetusten yhdistely) * Vippari (kutsupohjainen kaupunkiliikenne jo 90-luvulta asti) * Meejo (liikkumispalvelusovellus) * Alpio (kutsuliikennettä, sote-yhdistelyä, reittioptimointia ym.) * Kaikkikyytiin.fi (MTK + yhteistyökumppaneita) * PiggyBaggy (kimppakyytisovellus) * OpenArcticMaas (Lapin matkailu ja reittiopas) * KeLiPa (edelliselle jatkoa) * FCG (oma sovellus ja palvelu kuljetusten operointiin) * Waltti * Meri-Lapin matkailun MaaS –hanke * Taksikortti Plus * Sitowisellä monenlaisia ratkaisuja * Aittakoodi (ratkaisuja mm. tarjousten pyytämisiin) * Perille.fi * Kätevä (Härjän liikenteen sovellus) * BloxCar (autojen Airbnb) * Whim * KyytiGroup * Happily-hanke * eChargie (sähköauton latauspisteiden Airbnb) * Peput penkkiin –hanke * MoveIT –hanke * MaaS Digiboksi –hanke * Jätkäsaari Smart Mobility (vaikka mitä yhteistyöviryksiä) * Harrastetaksi –kokeilu * SHOTL (Oulu) * CarDen (yhteiskäyttöautoja) * 24Rent (yhteiskäyttöautoja) * GoMore (autojen Airbnb) * MyXline (tavarakuljetuksia vertaispalveluna) * Valopilkku * Taksitiketti.fi * Taksit.fi * SnapCab (taksien valtakunnallinen virtuaalinen tolppa) * Matkaparkki.com (karavaanaripaikkojen Airbnb) * eSend

SMART MOBILITY – MOVING LESS?



- Negative externalities
 - Climate
 - Health
 - Safety
- Resource consumption
- Cost savings



- Macroeconomy
- Employment
- Positive externalities

MOVING LESS MEANS INVESTMENTS IN:

- substitutes to physical mobility
 - Digital connectivity
- service and supply chain architectures
 - Localised market structures



*“...the drive to embrace globalisation and outsourcing as a way of controlling costs, hence boosting the bottom line. **The length of supply chains has increased in the last decades.**”*

Forex

ARE WE INVESTING IN 'SMARTER'?

Results

AUS 1995-2015

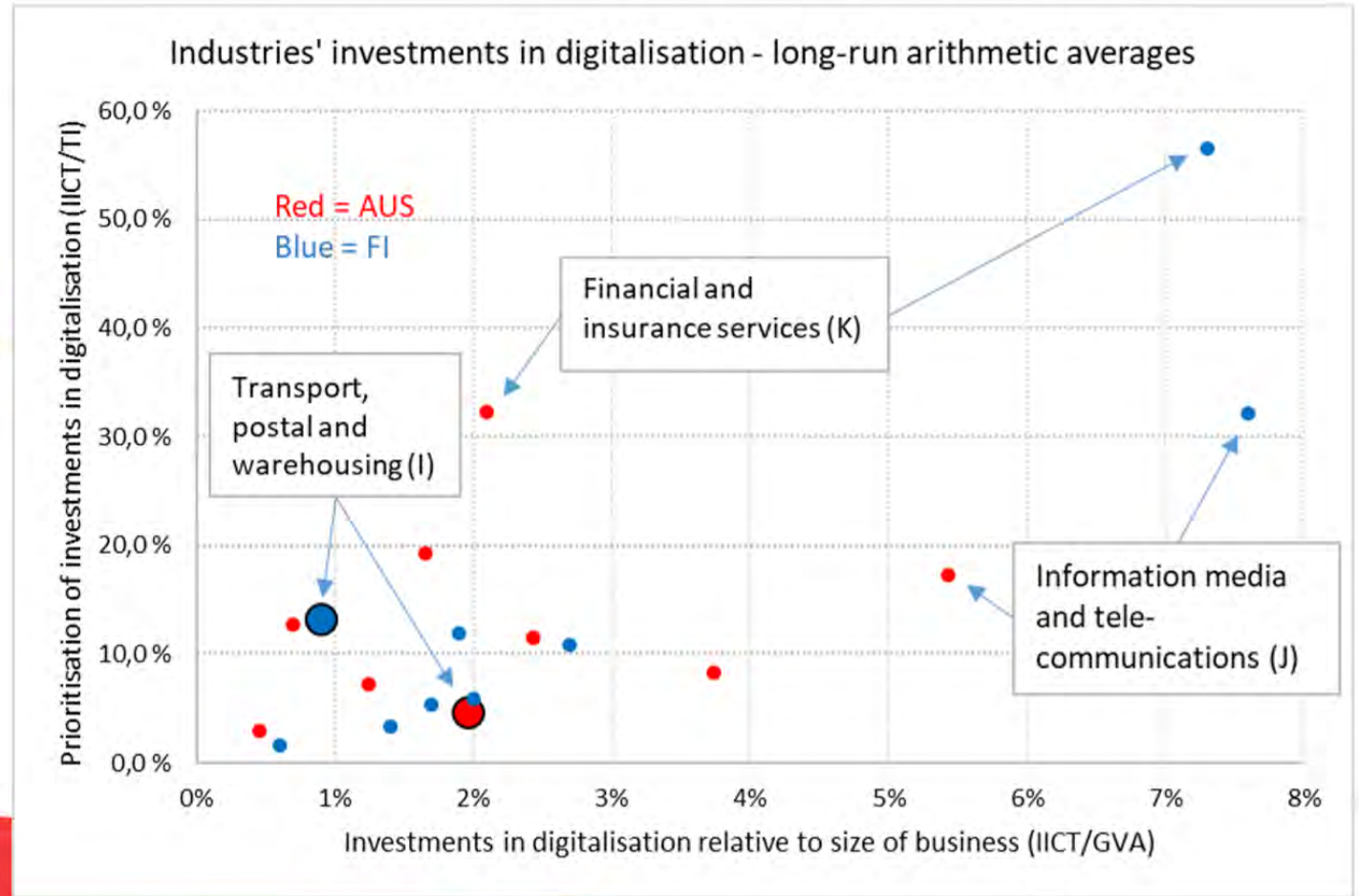
FI 1996-2017



How Intelligent, Really, Is the Transport Industry?
Analysis of Investments in Digitalisation in Finland and Australia

Pekka Leviäkangas, PhD (Tech.), PhD (Econ.)
with O.Kaupilla & Zulkarnain

VTT Technical Research Centre of Finland Ltd.



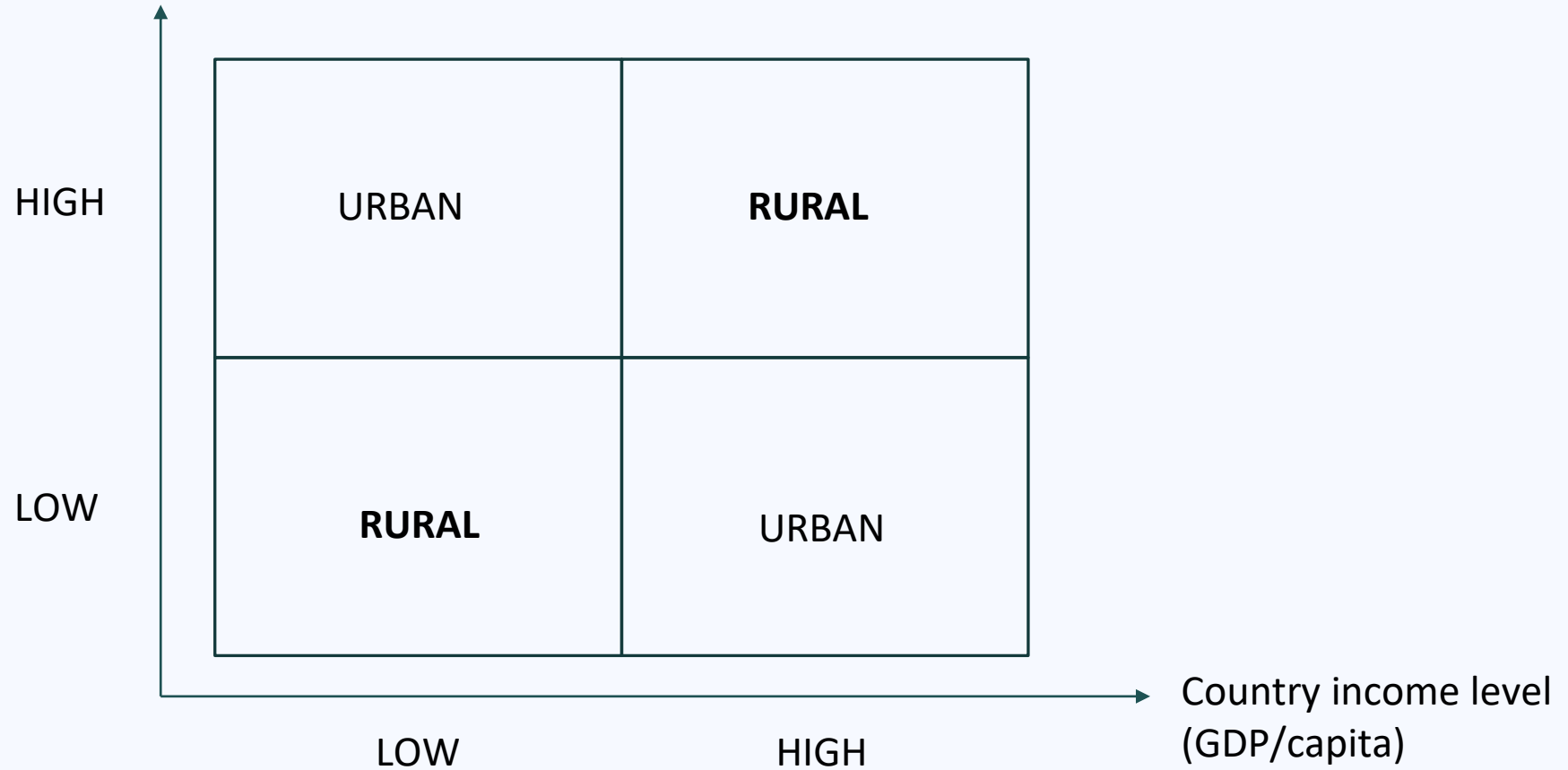
THE COMMON PROBLEMS

- sustainable business case
- interoperability of systems, e.g. payment, scheduling, person identification,...
- integrators – those who package the trips and take care of financial clearing
- governing and administration – regulations that prohibit service provision, e.g. licence to exercise transport of people
- market structures and organisation – big players vs. new entrants, who collaborates with whom

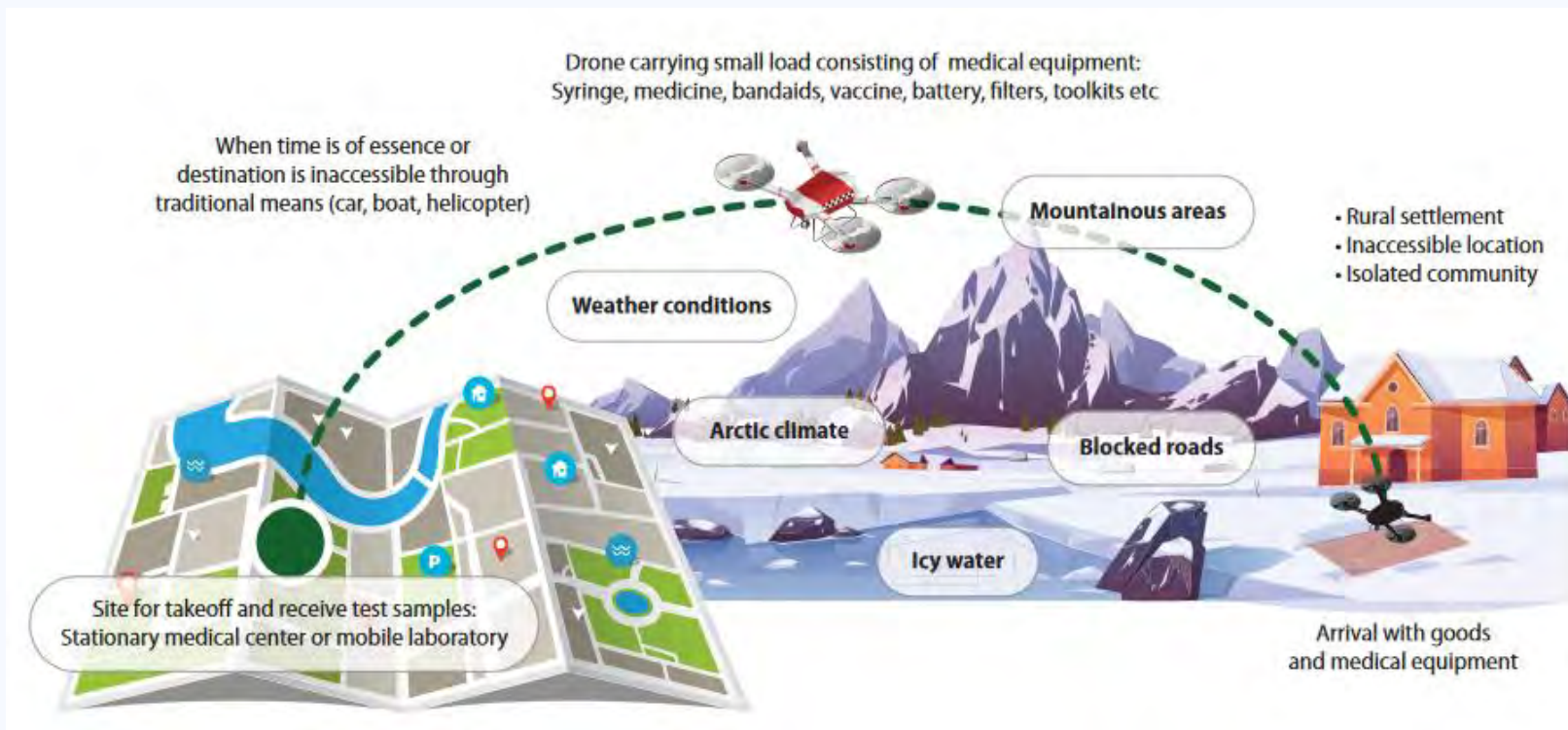
- **technology in itself is not the problem!**
- **rural and urban areas share the same problems**

IS THERE ROOM FOR A 'COMMON RURAL TRANSPORT POLICY'?

Car ownership
(registered vehicles/1000 population; relative to country average)



AURORAL DRONE PILOT – MEDICAL LOGISTICS



The smart logistics challenges:

- *Physical flow*
 - Reliability
 - Safety
 - In-time
- *Information flow*
 - Sensitive information
 - In-time
 - Authorised party identification
- *Money flow*
 - Who gets paid for what and how?
- *Regulation*
 - Operating licenses
 - Drug administration



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THANK YOU!

Science with
Arctic Attitude

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