



GÖRAN SMITH & DAVID A. HENSHER

Towards a Framework for Mobility-as-a-Service Policies

Nanyang Executive Centre, Singapore
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THE UNIVERSITY OF
SYDNEY



VÄSTRA
GÖTALANDSREGIONEN

SMITH & HENSHER

BACKGROUND

Widespread interest in Mobility-as-a-Service, but limited results



SCOPE

Refine the understanding of Mobility-as-a-Service, and inform the public sector

1

What is Mobility-as-a-Service, and how can it be conceptualized from a transition perspective?

2

What is needed to make Mobility-as-a-Service a reality?

EMPIRICAL EXAMPLE



**Transport
for NSW**

An analysis of TfNSW's MaaS policy program based on interviews with 14 TfNSW employees, 7 (other) civil servants, 10 private sector representatives, 1 academic and 1 person working for a nonprofit organization

THEORY

Governance literature and sustainability transition studies



GOVERNANCE LITERATURE

Meta-governance can simply be understood as second- and third-order governance [1]

Collaborative innovation approaches have been recommended as a key tool for braking policy dreadlocks and organizational silos that hamper public innovation [e.g. 2]



SUSAINABILITY TRANSITION STUDIES

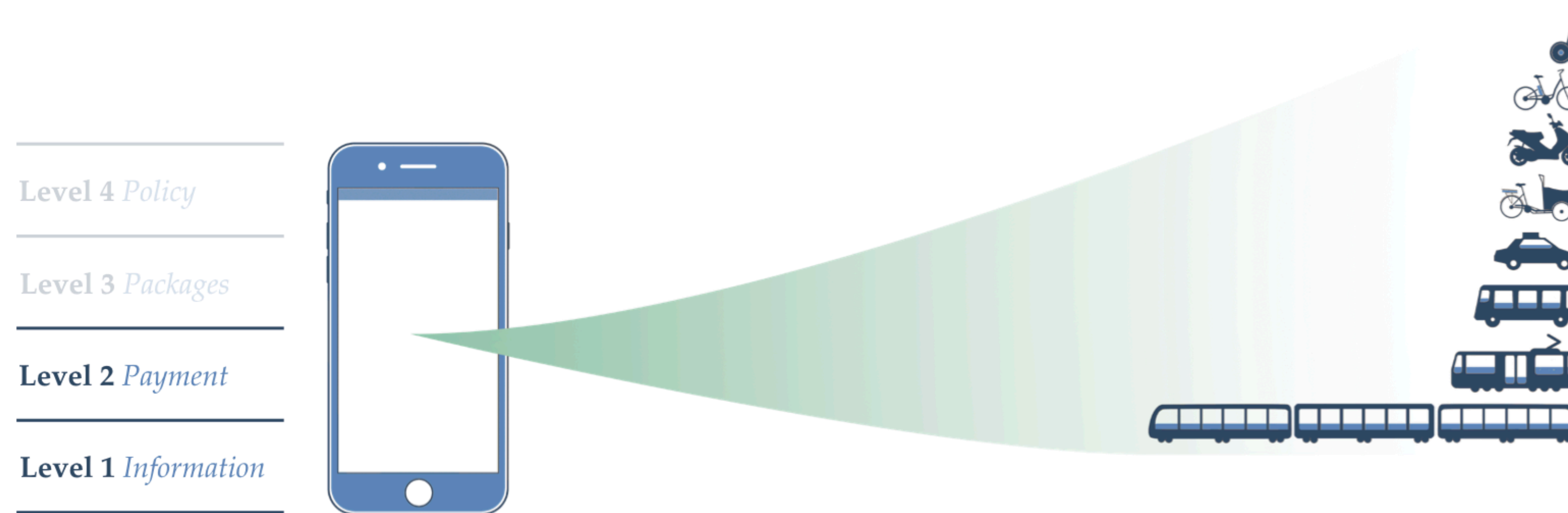
Sustainability transitions are transformations toward more sustainable modes of production and consumption [3]

Transitions can either relate to changes from one socio-technical regime to another and / or to changes in the **alignments between service regimes** within a sectorial regime [4]

S M I T H & H E N S H E R

RESULTS

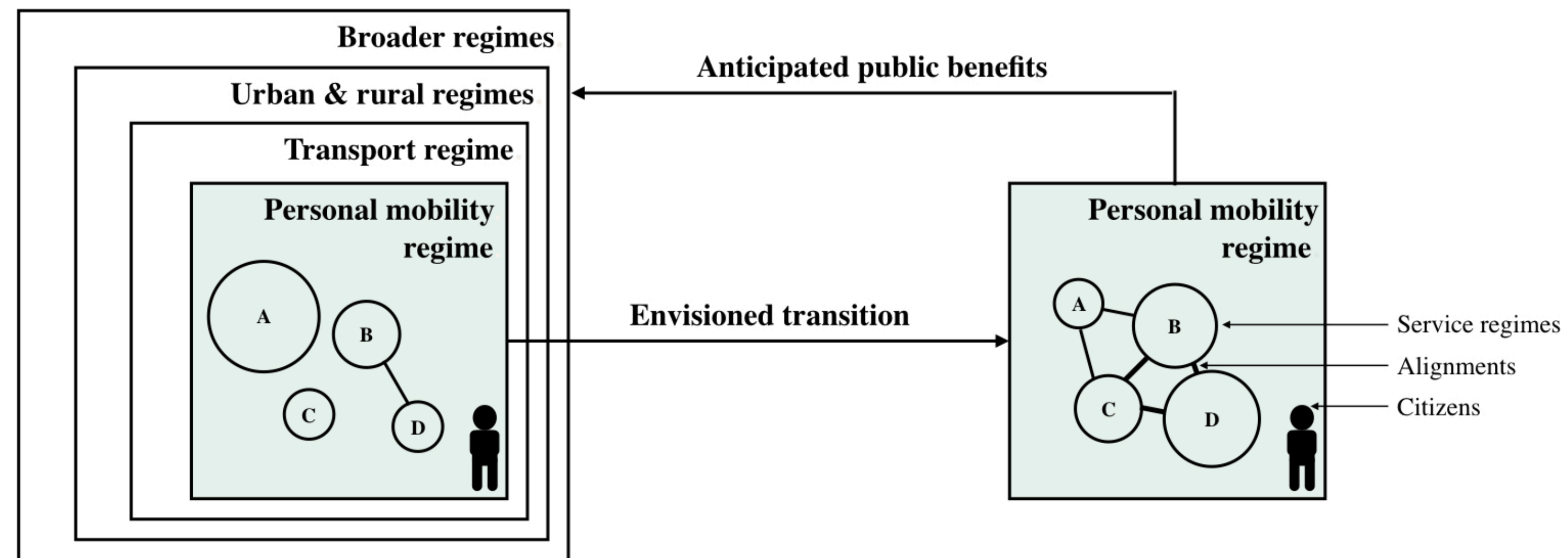
What is Mobility-as-a-Service?



A type of service that through a joint digital channel enables users to plan, book and pay for multiple types of transport services

RESULTS

How can Mobility-as-a-Service be conceptualized?



An attempt to transform the personal mobility system from (mostly) fragmented to (more) polycentric, with the intent of reaping public benefits by altering the modal split across the service regimes

RESULTS

What is needed to make Mobility-as-a-Service a reality?

1

TERMINOLOGY

Establishing a shared language on MaaS

2

OBJECTIVES

Crafting inspiring visions and goals for MaaS

3

RULES

Lowering institutional barriers and steering the trajectory towards contributing to policy objectives

4

TECHNOLOGIES

Developing front-end, back-end and support systems for MaaS

5

BUSINESS MODELS

Assisting the development of viable and sustainable business models for MaaS

6

MODES

Pushing the diffusion and availability of transport services, to include in MaaS

7

ALTERNATIVES

Supporting the relative attractiveness of MaaS, compared to alternative options

8

PARTNERSHIPS

Assisting inter-organizational collaboration, experimentation and mutual learning

9

DIFUSSION

Accelerating the adoption and use of MaaS

RESULTS

The example of Transport for New South Wales

	HANDS-OFF TOOLS	HANDS-ON TOOLS
TERMINOLOGY	Future transport 2056 strategy; Future technologies roadmap; Future mobility prospectus; Move TV series	
OBJECTIVES		
RULES	Passenger transport law reform; Flexible bus contracts; Multimodal tenders	Regulation sandbox program
TECHNOLOGIES	-	Open data portal; Opal pay framework; Contactless payments
BUSINESS MODELS	-	-
MODES	Point-to-point reform	Digitizing community transport; On-demand trials
ALTERNATIVES	-	-
PARTNERSHIPS	Collaborative strategy processes; Collaborative tender processes	MaaS innovation challenge; Digital accelerator; Research hub
DIFFUSION	-	-

CONCLUDING REMARKS

Key takeaways

NEITHER A NEW TRANSPORT MODE, NOR A NEW TRANSPORT PARADIGM

Rather, the development of MaaS is a purposive intent to incrementally transform the personal mobility system towards increased alignment between different transport services.

REQUIRES MORE THAN TECHNOLOGY

MaaS does not fit well with current institutional arrangements. Therefore, the development and diffusion of MaaS requires a lot more than mere deployment of new technologies.



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WORKSHOP 5

Group Discussions

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PURPOSE

Aims & output

AIMS

- ▶ Share knowledge and ideas
- ▶ Problematize and discuss takeaways from the presented papers
- ▶ Synthesize and conclude the workshop findings
- ▶ Develop recommendations for research, policymaking and Thredbo 17

OUTPUT

- ▶ Four posters on regulation of disruptive mobility solutions powered by technologies
- ▶ A summary of recommendations

METHOD

World café conversations

SESSION 5
Tuesday 14.30 - 15.15

20 min

ROUND 1

- ▶ Seat 3-4 people per table
- ▶ Select a table host to document the discussion
- ▶ Read through & discuss the questions for round 1

20 min

ROUND 2

- ▶ The table host shares insights from round 1
- ▶ Select a new table host
- ▶ Read through & discuss the questions for round 2

SESSION 6
Tuesday 15.45 - 16.50

30 min

ROUND 3

- ▶ The table host shares insights from round 2
- ▶ Select a new table host
- ▶ Read through & discuss questions for round 3

30 min

ROUND 4

- ▶ The table host shares insights from round 3
- ▶ Select a new table host
- ▶ Read through & discuss the questions for round 4
- ▶ Finalize the poster

Everyone but the table hosts
finds a new table

Everyone but the table hosts
finds a new table

Everyone but the table hosts
finds a new table

GROUP DISCUSSIONS

METHOD

World café conversations

SESSION 7

Wednesday 09.00 - 10.30

80 min

HARVESTING

- ▶ The final four people at each table presents the developed poster
- ▶ Recommendations for resarch, policy and Thredbo are discussed in plenum for each table/poster/technology
- ▶ Wrap-up discussion

TABLES

Four types of disruptive mobility solutions powered by technologies



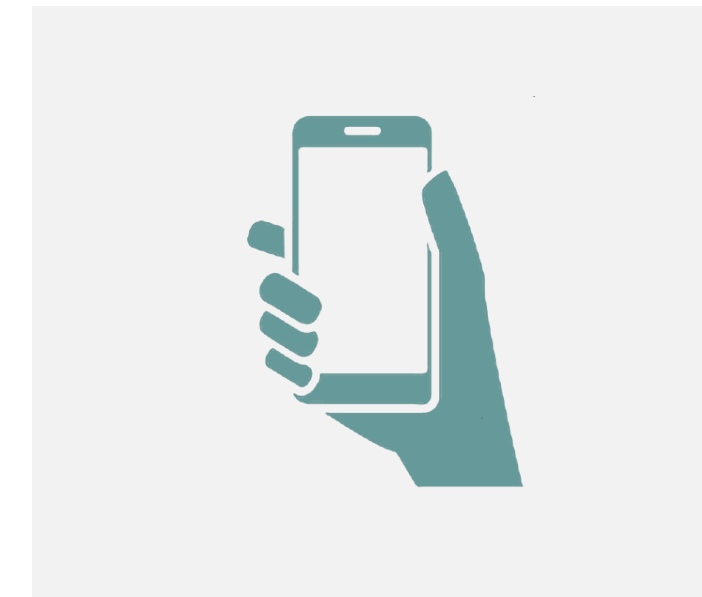
RIDESOURCING

P rearranged and on-demand transportation services for compensation in which drivers and passengers connect via digital applications [2]



AUTONOMOUS VEHICLES

Autonomous technology that has the capability to drive a vehicle without the active physical control or monitoring by a human operator [3]



MOBILITY-AS-A-SERVICE

A type of service that through a joint digital channel enables users to plan, book and pay for multiple types of transport services [4]



OTHER/GENERAL

Focus the discussion on disruptive mobility solutions in general or a specific type, such as e-scooter sharing or on-demand public transport.

QUESTIONS

Four rounds of discussions

ROUND 1: ACTORS & ACTIONS

- ▶ Who is/has been driving/involved in the development of ...?
- ▶ Which are the past, present and future milestones regarding the development of ...?
- ▶ How are incumbent reacting to the ongoing and/or anticipated changes due to ...?

ROUND 2: OBJECTIVES & EFFECTS

- ▶ What types of problems is ... intended to address?
- ▶ Are there any matches and mismatches between the stated/unstated objectives and the documented and anticipated effects of ...?
- ▶ Are there any potential trade-offs/problems/risks in terms of the effects of ...?

ROUND 3: POLICIES & REGULATIONS

- ▶ What types of governance approaches and policy instruments are/has been utilized to govern the development and use of ...?
- ▶ How are the policies and regulations for ... drafted, negotiated, ratified, implemented and analysed, and by who?
- ▶ What are the impacts of the current policys/regulations on the development of ... (short-term/long-term, intended/unintended)?

ROUND 4: RECOMMENDATIONS

- ▶ What recommendations can we offer to policy making organizations regarding ...?
- ▶ How can future research studies improve the understanding of how to best govern ...?
- ▶ What should be discussed at Thredbo 17 in relation to ...?



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