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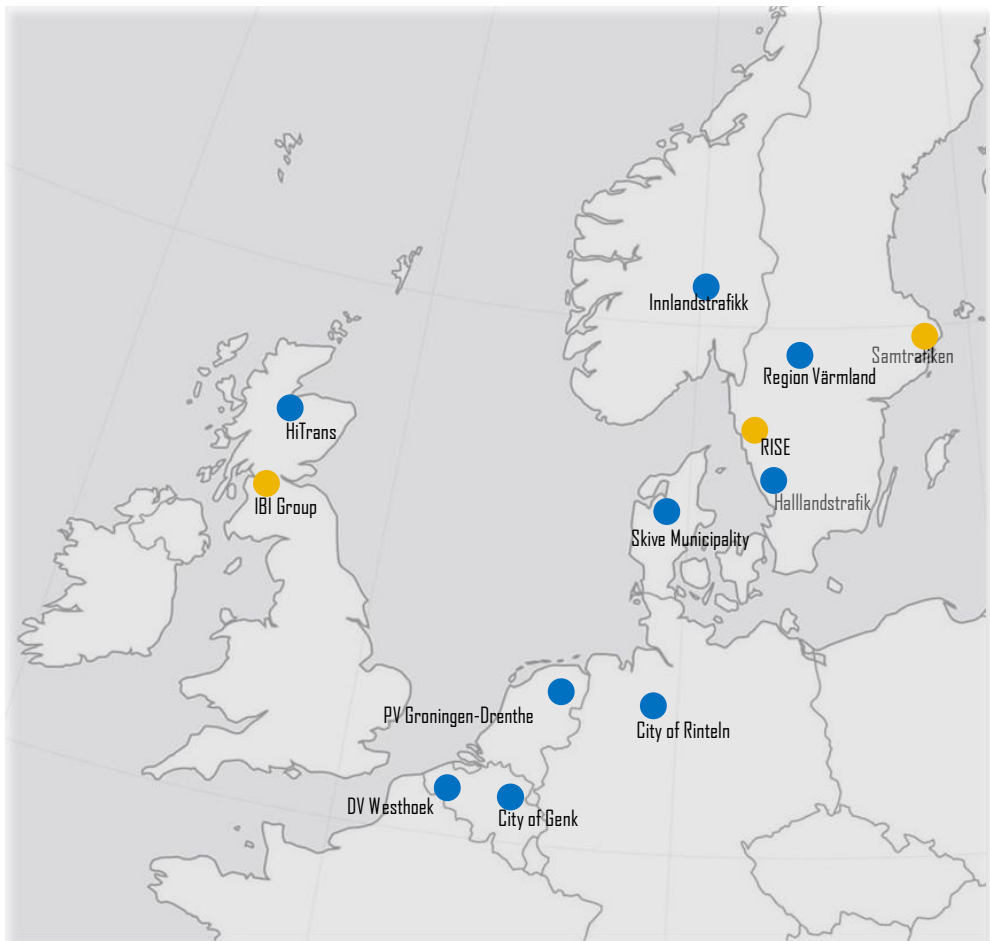
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Where is MaaS working?

The State of MaaS and MaaS Knowledge in 2022.

Overview

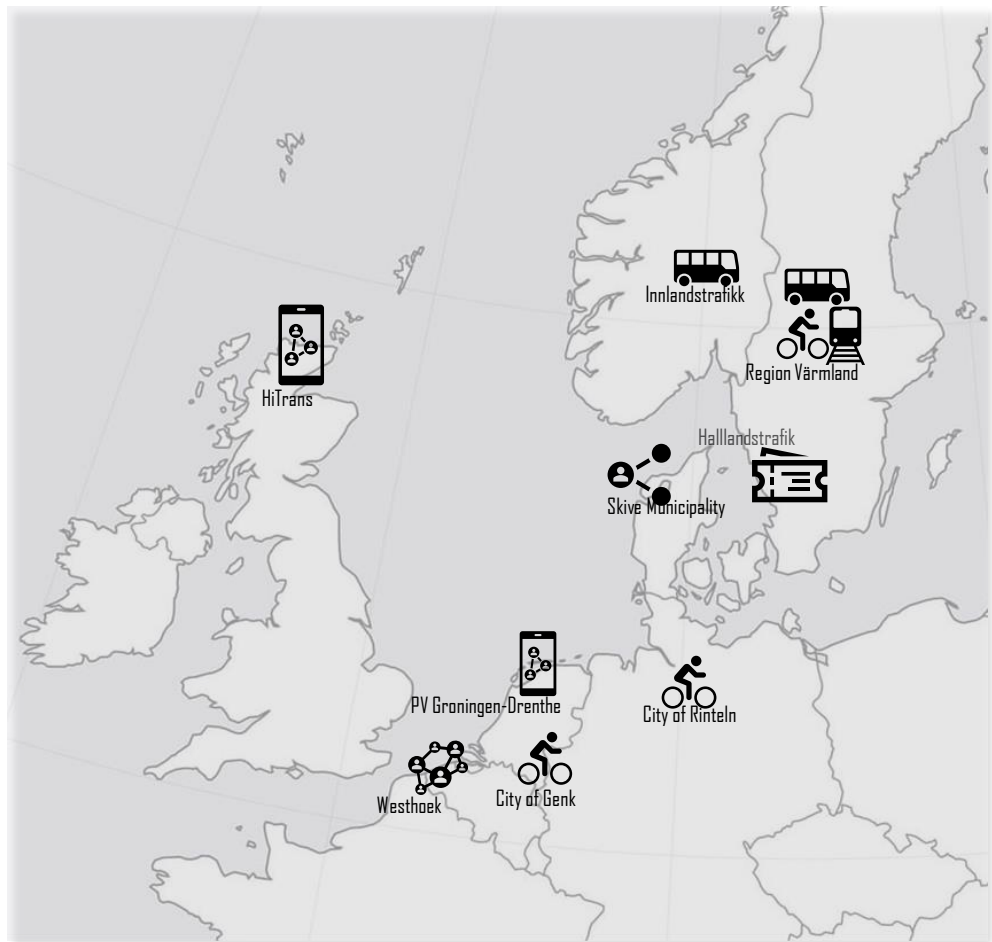
- Stronger Combined project summary
- Literature review: 119 articles
 - Methods
 - Research Scope
 - Spatial, national context
 - Definitions
 - User studies
 - MaaS and COVID



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- Living labs
- Supporting partners



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Deliverable 6.1, Stronger Combined

- A review of academic journal articles on Mobility as a Service (Maas)
- First edition published/posted to the SC website + ResearchGate
- Updated version presented today, will be submitted a journal soon!

Summary of findings:

- Huge growth in published research since 2018
- Conceptual boundaries changing in real time
- Overwhelmingly urban and northern European
- Few case studies or pilots of MaaS, many stated preference surveys
- Some consensus about individuals "interested" in MaaS
- COVID-19 interfered with research and MaaS implementation

- ✓ Searched for *MaaS* and *Mobility as a Service* in Web of Science and Scopus
- ✓ Selected only peer-reviewed articles
- ✓ MaaS as central topic
- ✓ 119 articles identified from 2015 to late 2021

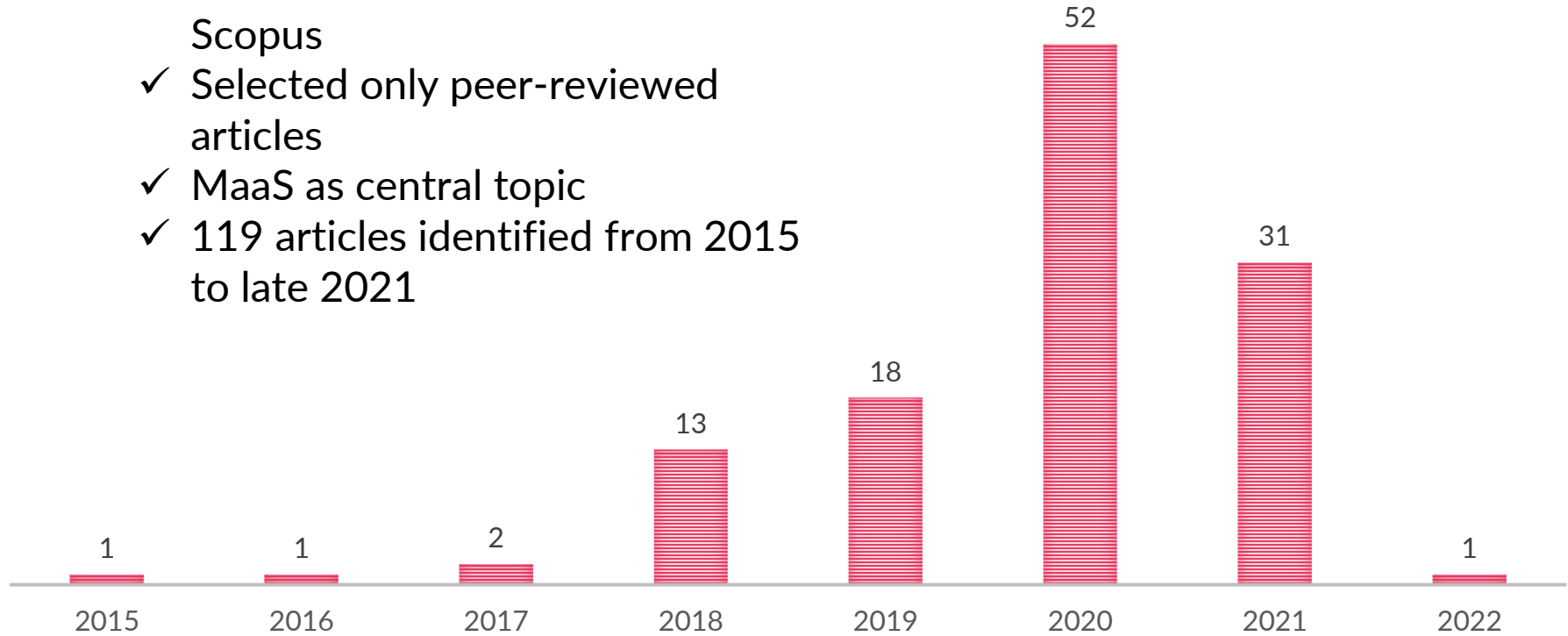
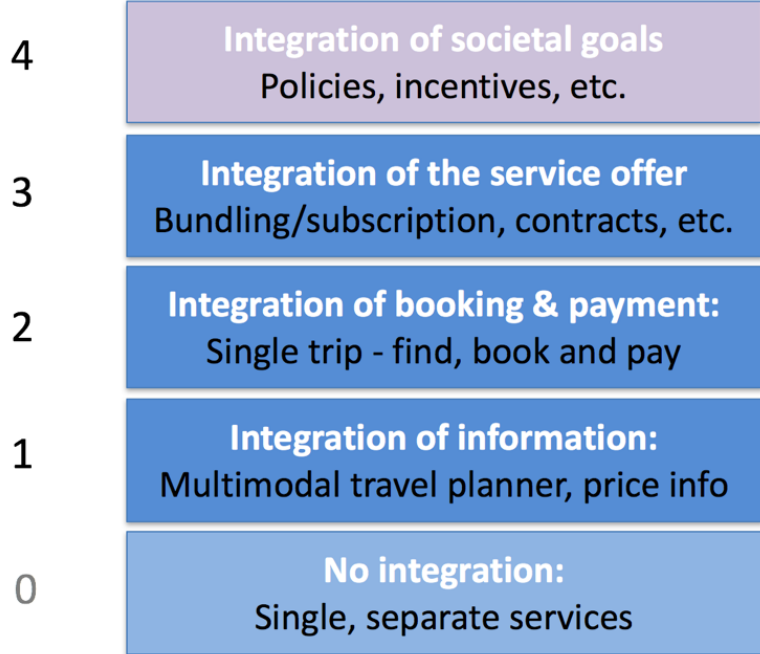


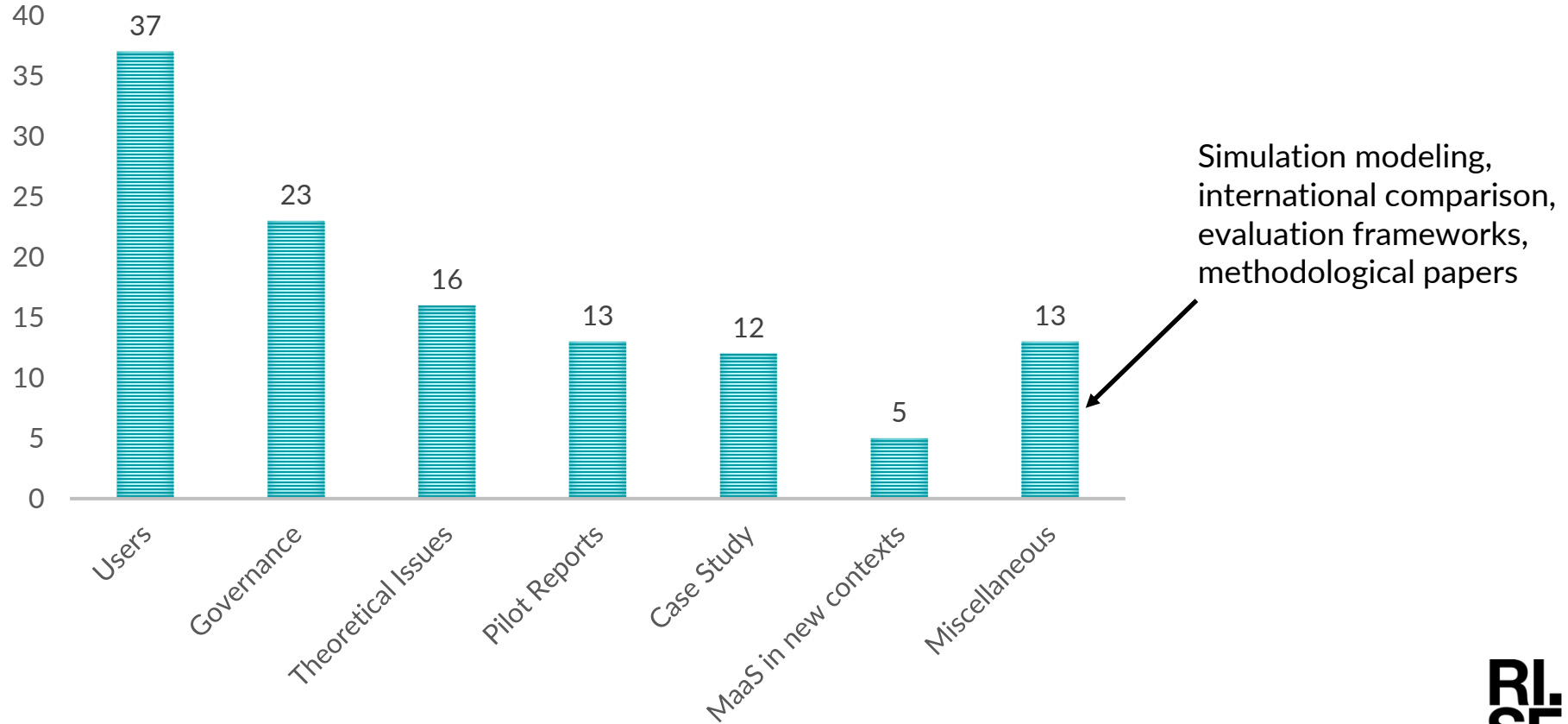
Figure 1: Number of peer reviewed MaaS papers from January 1, 2015 to September 27, 2021



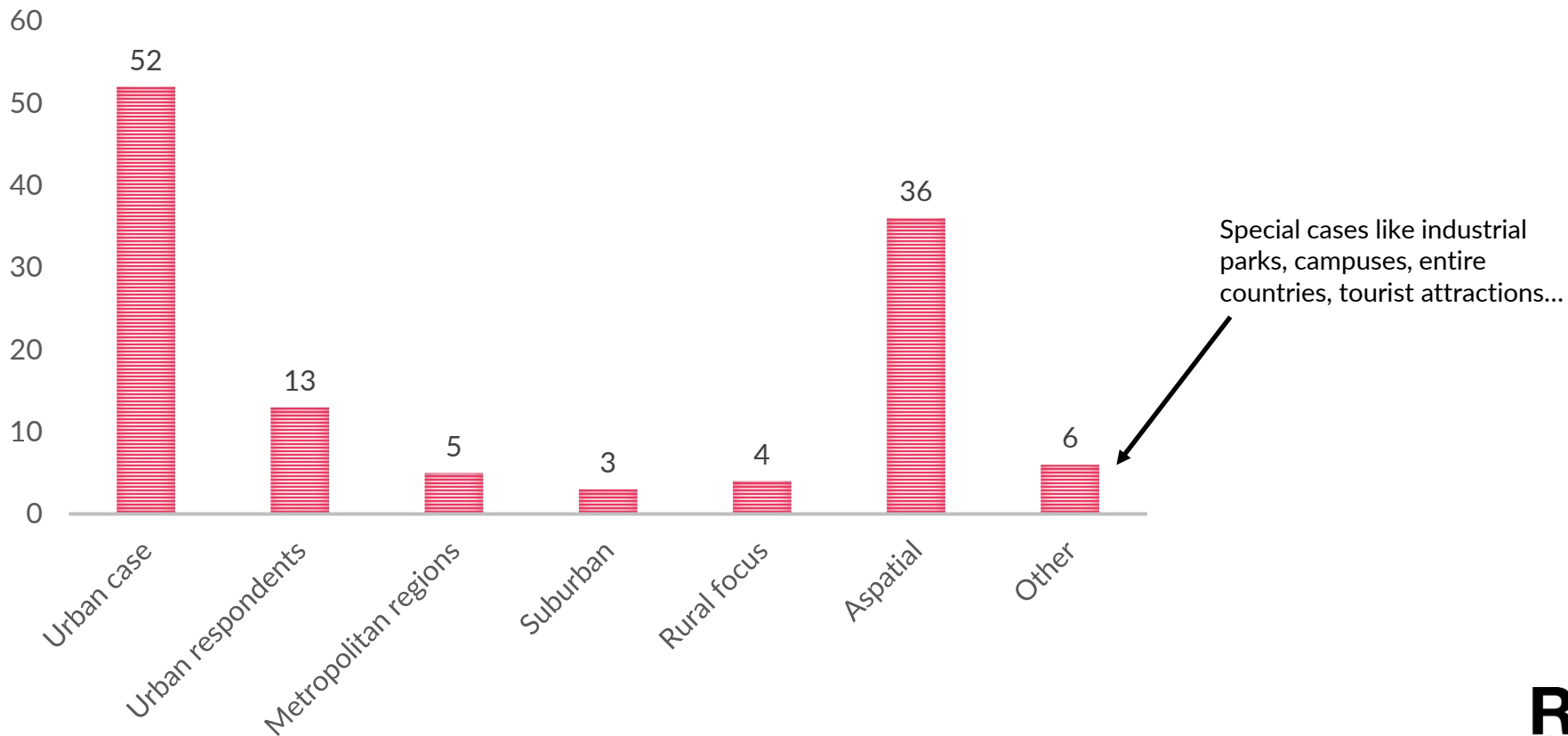
Esztergár-Kiss et al.(2020) observe that between 2010 and 2018, the number of MaaS initiatives world-wide grew steadily from 1 to 33, of which 30 could be classified as either Level 1 or Level 2 MaaS.

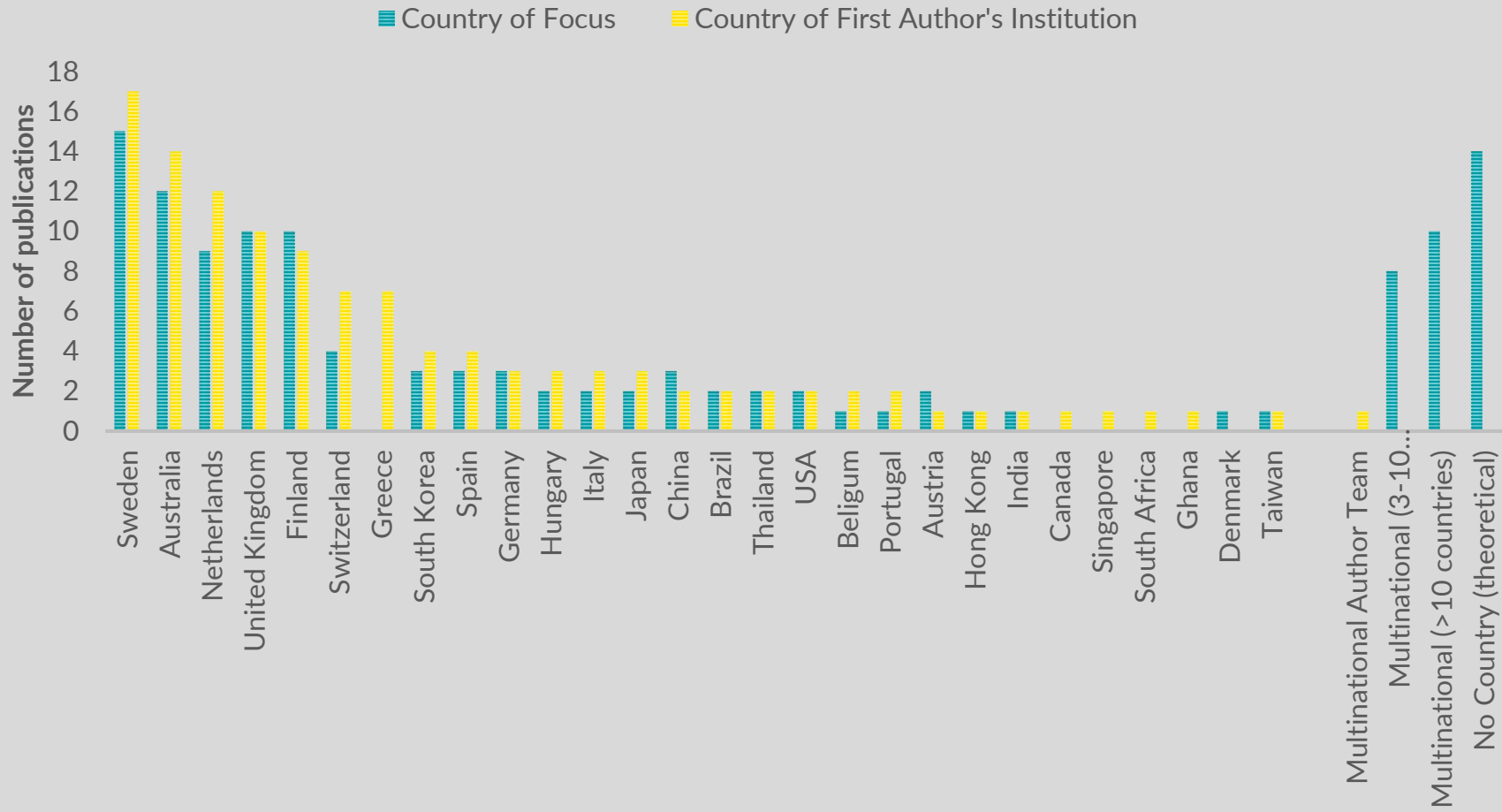
...Only three had achieved Level 3 capabilities, and only one of them—Whim—remains commercially available today.

SCOPE OF RESEARCH



SPATIAL CONTEXT







Sincere definitions...

- “bundled offerings that facilitate intermodal use of [public transportation] and other transport services (Smith et al 2018)”
- “type of service that through a joint digital channel enables users to plan, book and pay for multiple types of mobility services” (Smith and Hensher, 2020).
- “...a centralized platform that gathers all services and allows users to interact with, pay for, and choose among one or more of them” (Calderón and Miller, 2020)



Cautious definitions...

- Gaps in knowledge about MaaS' ability to deliver its envisioned societal benefits appear to have been filled – to some extent – by “speculation” informed by “strong emotional ideology” (Wong et al., 2020)
- “evolutionary” not revolutionary (Lyons et al., 2019)



Non-definitions...

- “...there are probably as many definitions of MaaS as there are pilot schemes globally.”
(Pickford and Chung, 2019)
- “...still in the phase of interpretive flexibility”
(Mladenovich and Haavisto, 2021)

User studies: Pilots

- Participant households consistently reduce personal car use, but rarely abandon vehicles completely
- If scaled up beyond a pilot study, could have an enormous impact



User studies: Stated preference surveys

- 24-45% of respondents *excited* or *open-minded* about MaaS; many that will *never* try it.
- “Flexible” or “Mode-agnostic” travelers most likely to express willingness to pay
- *Younger* more likely. All other characteristics inconclusive.





MaaS and the COVID-19 Pandemic

- A dramatic impact on transportation patterns, overall.
- Immediate decline in PT ridership worldwide, transition toward working from home

“Notably, the increase in the number of ecosystem actors, along with the arising market opportunities, surface the conflicting interests of stakeholders, thus leading to a reluctance to cooperate towards integrated (public transport and private on-demand mobility) and socially desirable solutions (Roumboutsos et al 2021, p.13).”

MaaS and the COVID-19 Pandemic

- Multiple MaaS pilot delayed or “stopped in their tracks”
- Increases in new mobility services increases complexity and competition
- Challenges the “backbone” role of PT in MaaS

What does this have to do with Stronger Combined?

- The contexts and challenges that SC represents are severely underrepresented in the MaaS literature
- Spatial mismatch between MaaS business models and societal needs
- SC pilots illustrate how smaller, less “central” communities are creating combined mobility solutions without *big bundle MaaS*



- Questions?

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