

# European regional mobility ecosystems towards sustainable MaaS

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# Baseline Assessment Report

Executive Summary

PriMaaS Regions Characterization

Context

Population

Density

Gross Domestic Product

Climate Change and Energy Vulnerability

Transport Externalities

Congestion

Air Pollution

Noise Pollution

Climate Change

Digital Agenda Scoreboard

Summary of Current Baseline Situation of PriMaaS Areas

Integration of transport modes and pricing options

What is MaaS?

MaaS Initiatives

Current Integration of transport modes and pricing options in the PriMaaS regions

MaaS Levels differentiation

Relevant factors behind a MaaS scheme under the PriMaaS Partnership

PriMaaS Multidimensional Indicator concept

Comparing New MaaS Multidimensional Indicator with Sochor et al. levels

Good Practices related to COVID-19 and Public Transportation

Public Transport and mobility Trends in the post-pandemic era

Stakeholder View on MaaS

MaaS main topics or long-term impacts

National vision and legislation framework

Business Uncertainty

MaaS Design and Sustainability

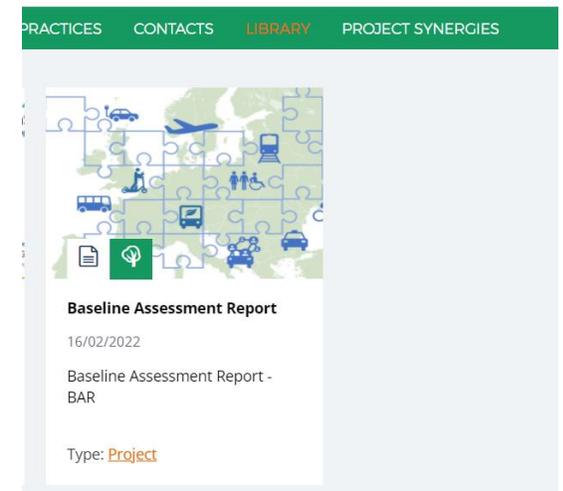
Who Should lead MaaS structures?

Stakeholders' perspectives, open-ended questions

Key messages from stakeholders' auscultation

MaaS Readiness Indicator

Overall conclusions and lessons learned



# Transport Costs and COVID 19 impact on PT

# Transport external costs

Table 4 Total external costs in the PriMaaS countries.

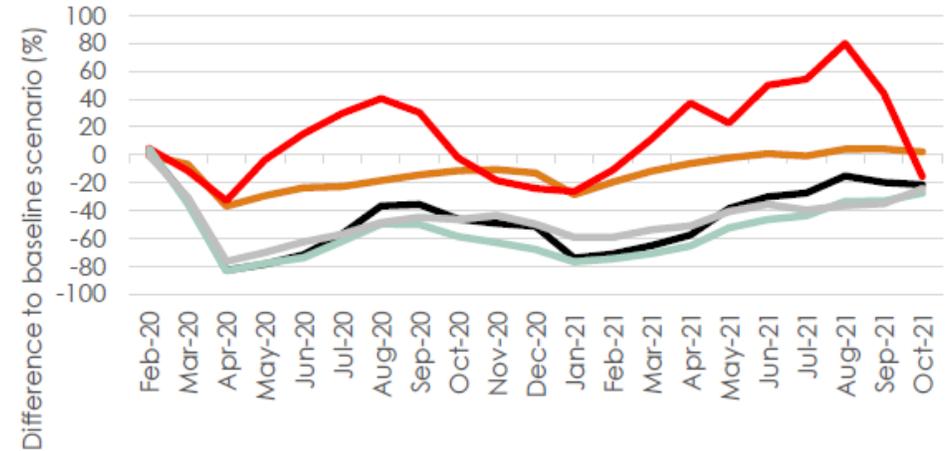
Country	Total external costs				% of GDP
	Road bn €	Rail bn €	IWT bn €	Total bn €	
EU 28	820,4	17,87	2,90	841,1	5,7%
Finland	7,4	0,23	0,073	7,7	4,4%
Germany	165,7	5,37	1,228	172,3	5,8%
Italy	115,0	2,20	0,009	117,2	6,8%
Portugal	16,8	0,18	-	16,9	7,2%
Romania	21,2	0,46	0,171	21,8	6,5%
Sweden	15,3	0,46	-	15,8	4,5%
United Kingdom	99,4	1,42	0,009	100,8	4,9%



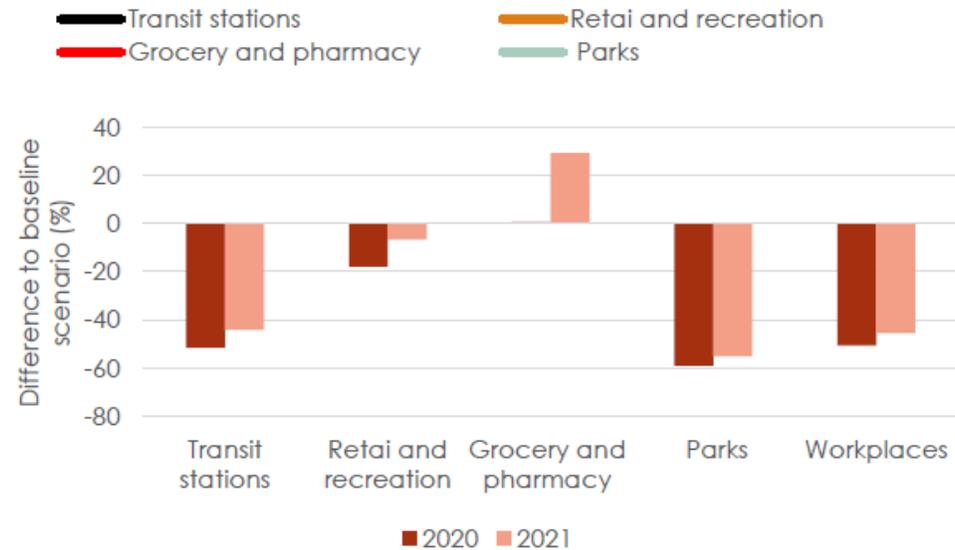
Source: Handbook on the external costs of transport, January 2019.

# Google mobility Reports

- Transit stations affected in all PriMaaS regions
- Slower recovery of PT compared to other sectors
- Significant differences among PriMaaS regions



A)

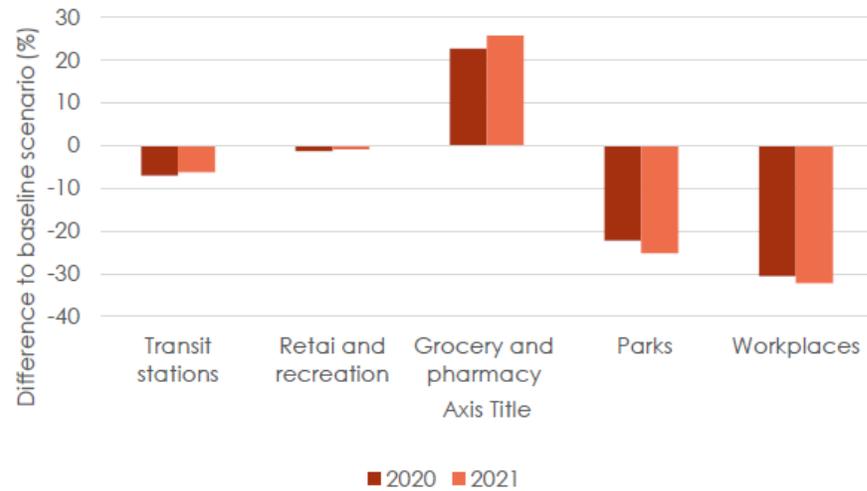


B)

Figure 24 a) Average monthly change in people mobility trends between February 2020 and October 2021 for various categories in South East Scotland; b) Average annual change in people mobility trends between 2020 and 2021 in South East Scotland

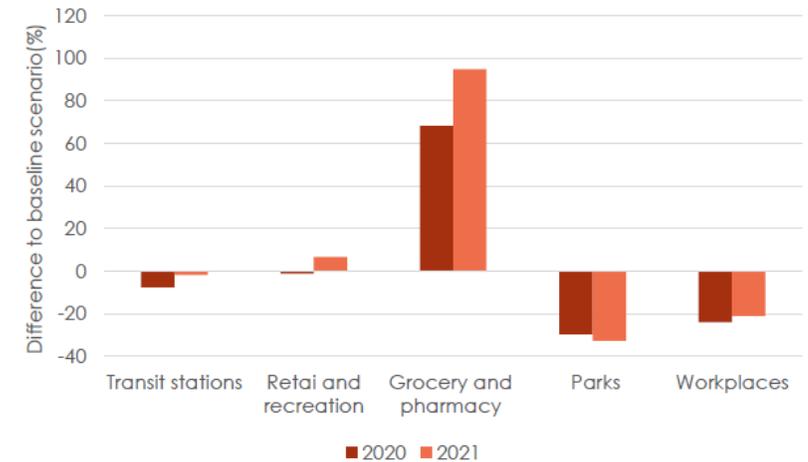
# Google mobility Reports

## Tempera and Stockholm - High PT resilience



B)

Figure 28 a) Average monthly change in human mobility trends between February 2020 and October 2021 for various categories in Stockholm; b) Average annual change in human mobility trends between 2020 and 2021 in Stockholm

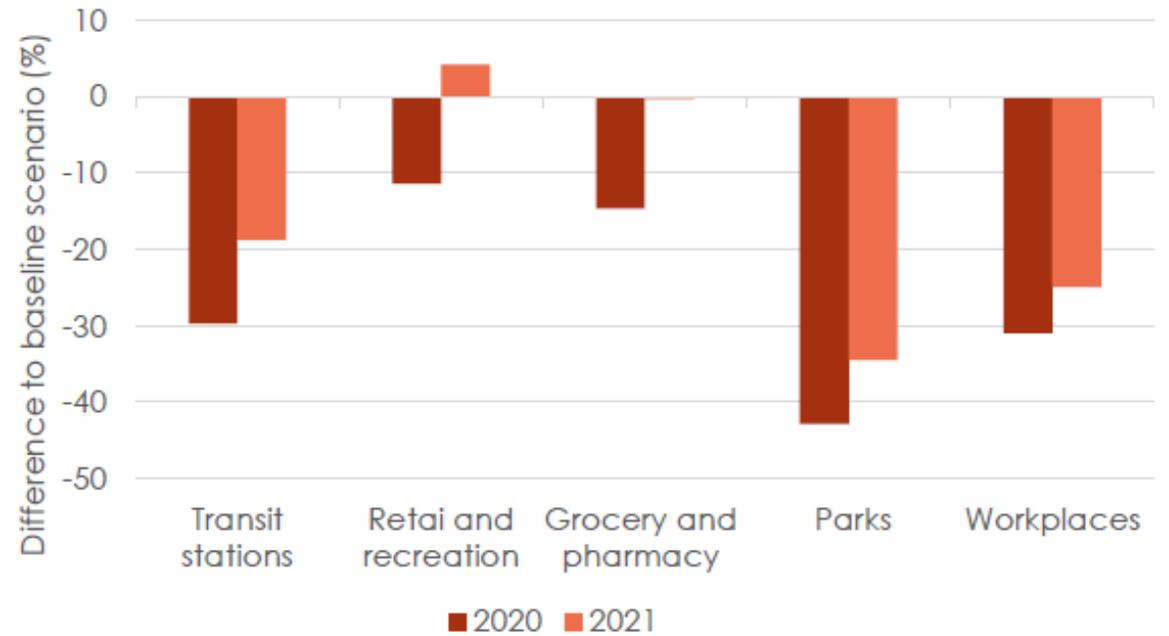
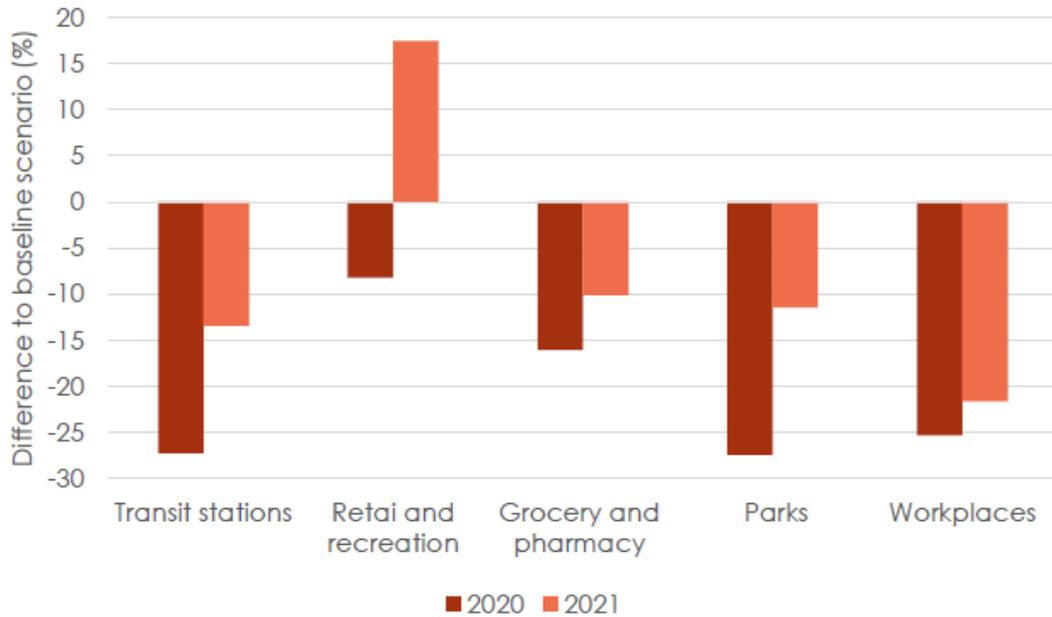


B)

Figure 32 a) Average monthly change in human mobility trends between February 2020 and October 2021 for various categories in Tampere; b) Average annual change in human mobility trends between 2020 and 2021 in Tampere

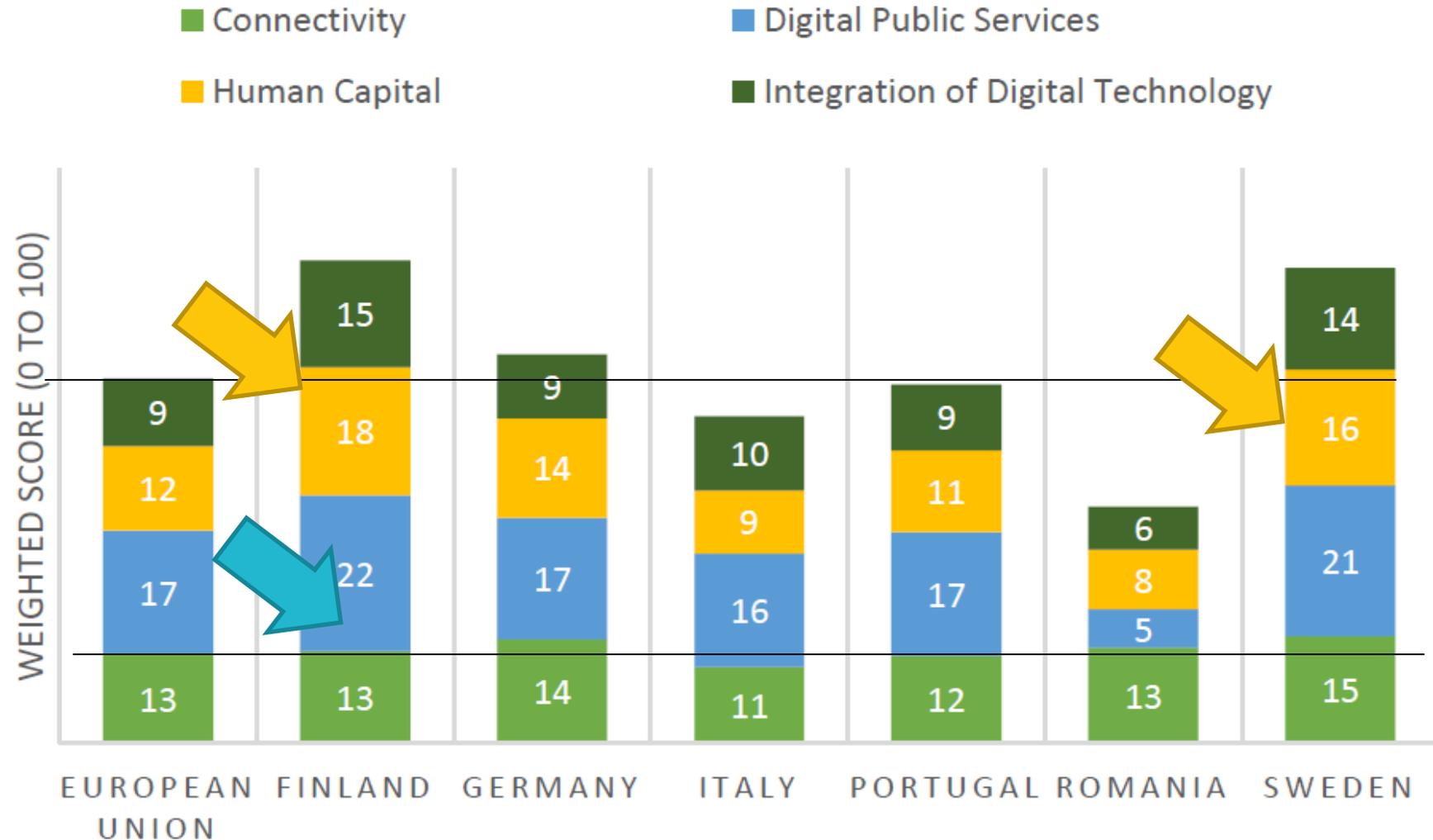
# Google mobility Reports

## Coimbra and Timisoara (lower PT resilience)



# Digitalization

# Digital Agenda Score Board



# Internet users

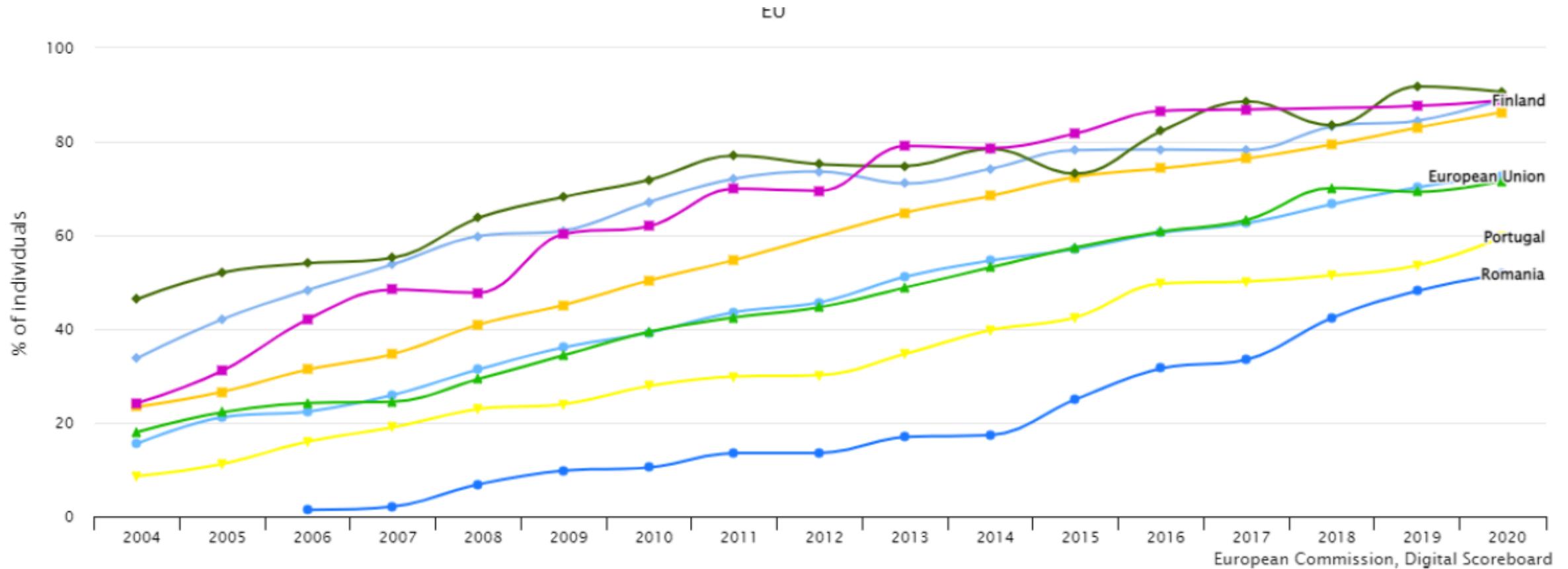
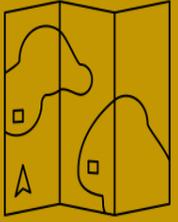
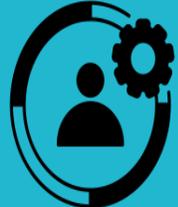


Figure 18 Evolution of internet users per country

# MaaS Characterization

Coverage		Functionality		Sustainability	
					
<b>Geographic area</b>	<b>Multi modality</b>	<b>Integration of services</b>	<b>IT personalization</b>	<b>Environmental policy</b>	<b>Social cohesion policy</b>
5	4	2	1	2	3
4		1		2	
$(5+4+2+1+2+3)/30 = 0,5$					

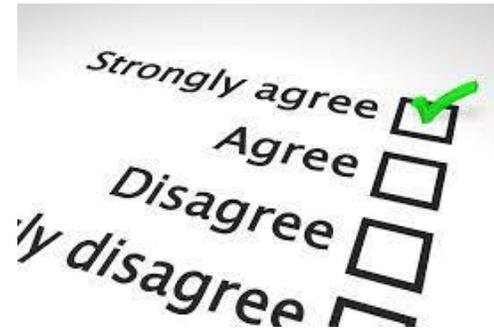
# Results - Application

Interreg Europe

	Coverage		Functionality		Sustainability		Overall	Sochor et al., 2018	Transport Tech., 2018	Lyon et al., 2019
	Geo	Modes	Integration	Person	Environ	Social				
Whim (Helsinki, FI)	2	4	5	2	1	1	0,5	3	4	4
SWA Mobil (Augsburg, DE)	2	4	3	3	0	0	0,4	3	4	4
VMT App (Erfurt, DE)	2	3	3	3	0	0	0,37	2	4	4
DB Navigator (DE)	3	2	3	3	0	0	0,37	2	4	
Google Maps (Erfurt, DE)	5	3	2	4	0	1	0,5	1	0	1
Moovit (Coimbra, PT)	4	1	2	2	1	0	0,3	1	0	1
AMT (Genoa, IT)	2	4	3	3	1	3	0,6	3	3	4
Uber (Stockholm, SW)	4	1	3	3	2	1	0,4	1	NA	2
Ubigo (Stockholm, SW)	2	4	5	2	1	1	0,5	3	4	4
Resplus (Swdeen)	3	4	5	1	1	1	0,5	3	2	3
FreeNow (Timisoara, RO)	4	1	3	3	0	0	0,3	1	NA	2
Flixbus (International)	5	1	3	1	0	0	0,33	1	NA	2

# Stakeholder perspectives

# Stakeholder survey



Country	Participants [#]	Participants [%]	Requests	Private Sector Participants [%]
Finland (Tampere)	17	8%	100	65%
Germany (Thuringia)	30	14%	47	63%
Italy (Rome, Liguria)	40	19%	174	73%
Portugal (Coimbra Region)	52	25%	180	12%
Romania (Timisoara and Bucharest)	14	7%	55	50%
Scotland (Sotheast Scotland)	37	18%	120	57%
Sweden (Stockholm)	21	10%	133	62%
<b>Total</b>	<b>211</b>	<b>100%</b>	<b>809</b>	<b>50%</b>

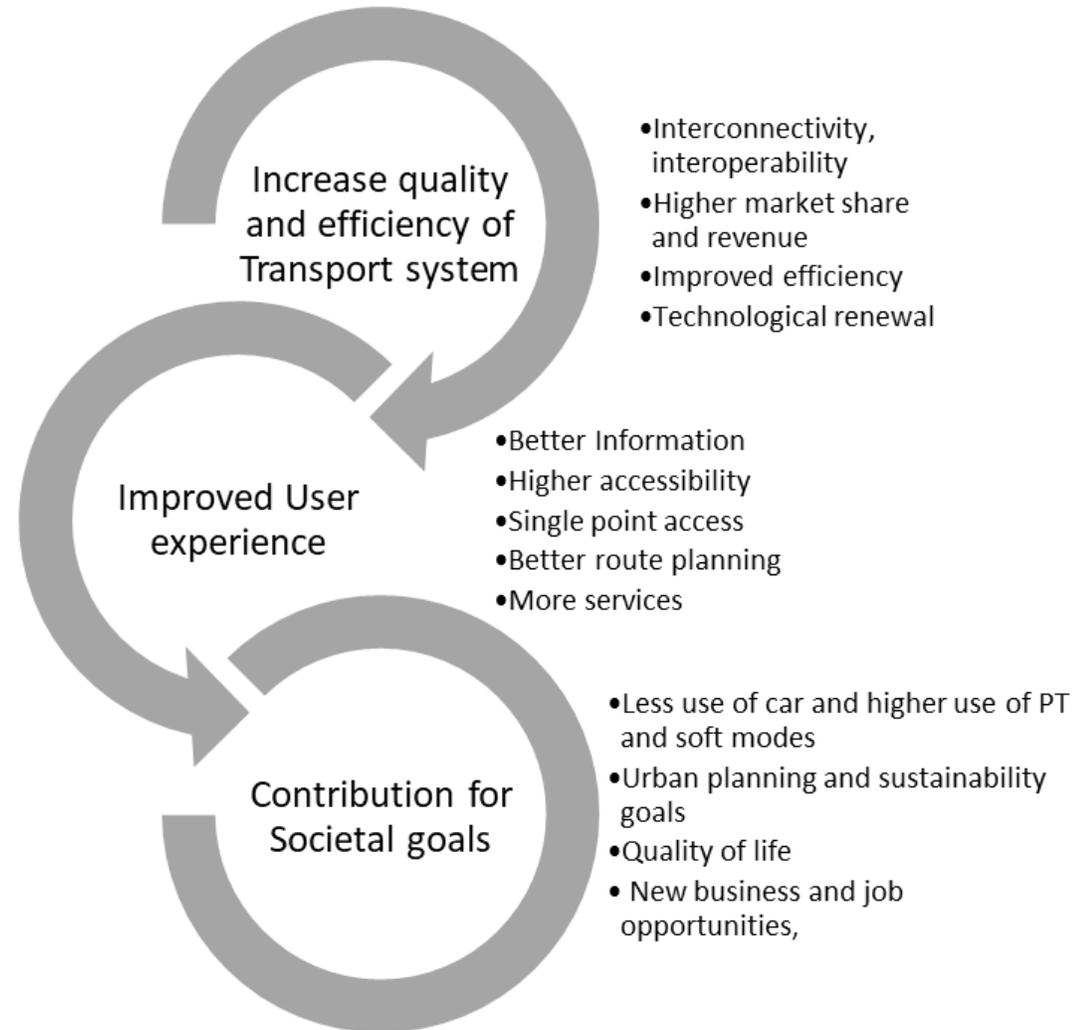


What are the main barriers regarding a collaborative MaaS App;

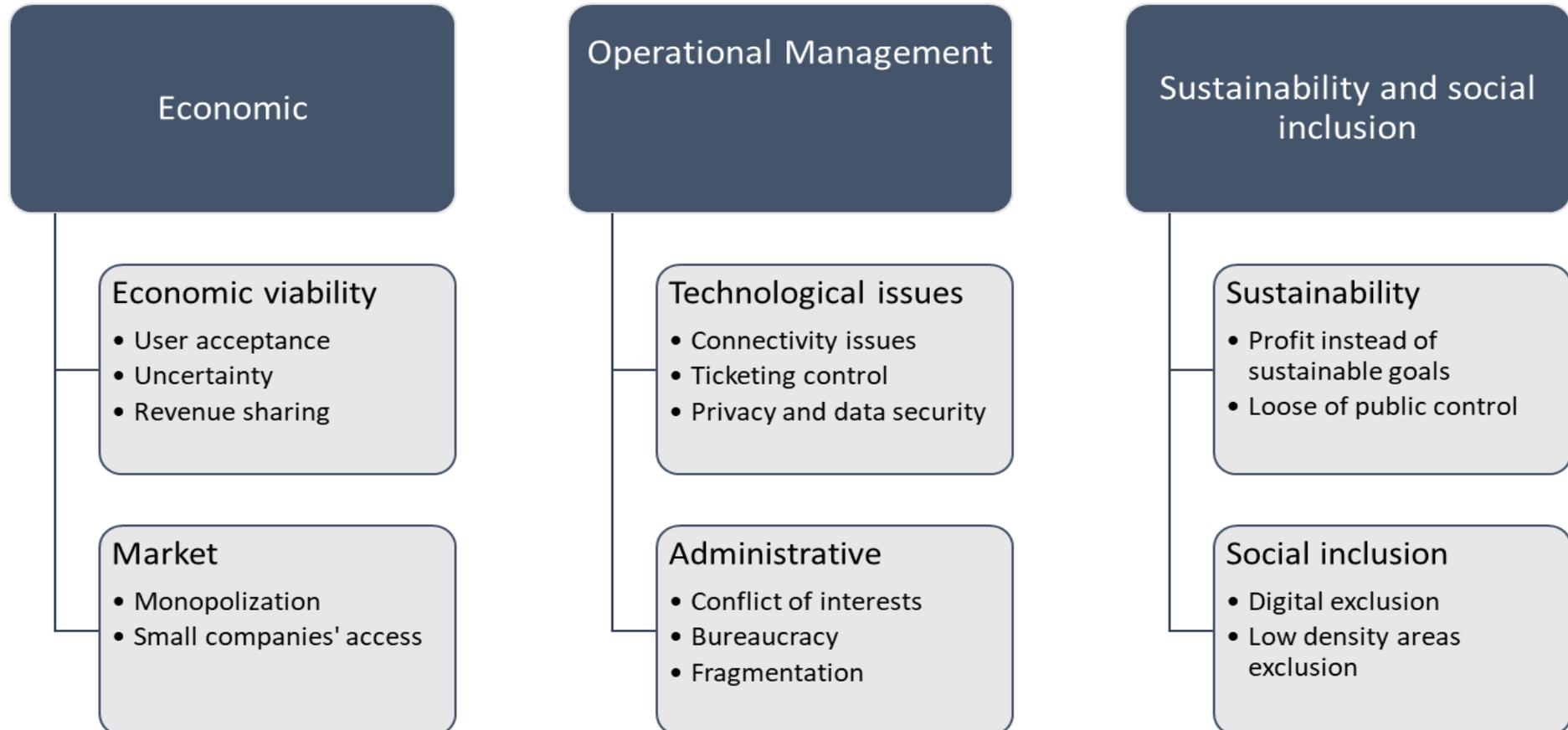
What are the main risks regarding a MaaS App?

What are the main opportunities that may result from MaaS?.

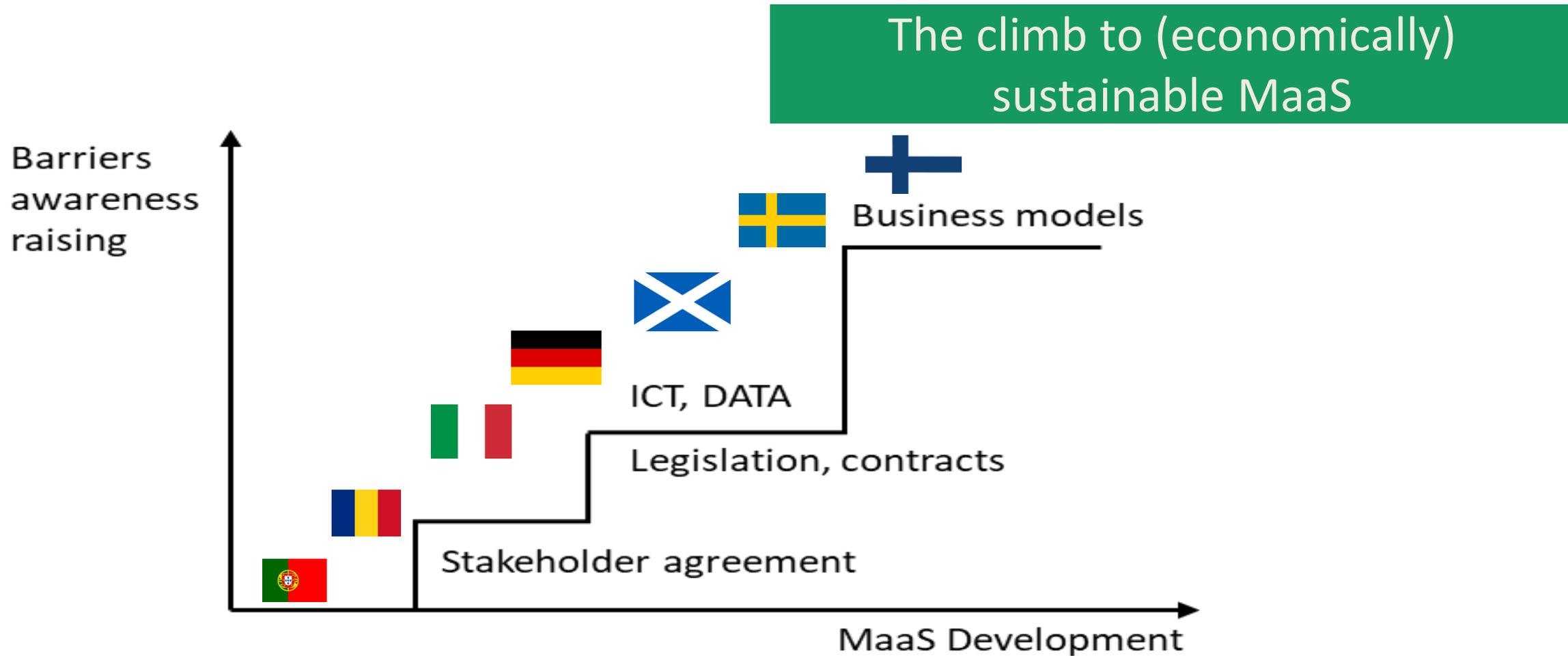
# MaaS Benefits – stakeholder perspective open questions



# MaaS risks – stakeholder perspective (open questions)



# MaaS Barriers – stakeholder perspective open questions



# Conclusions

**Digitalization**, literacy and **Human Capital** impacts MaaS development

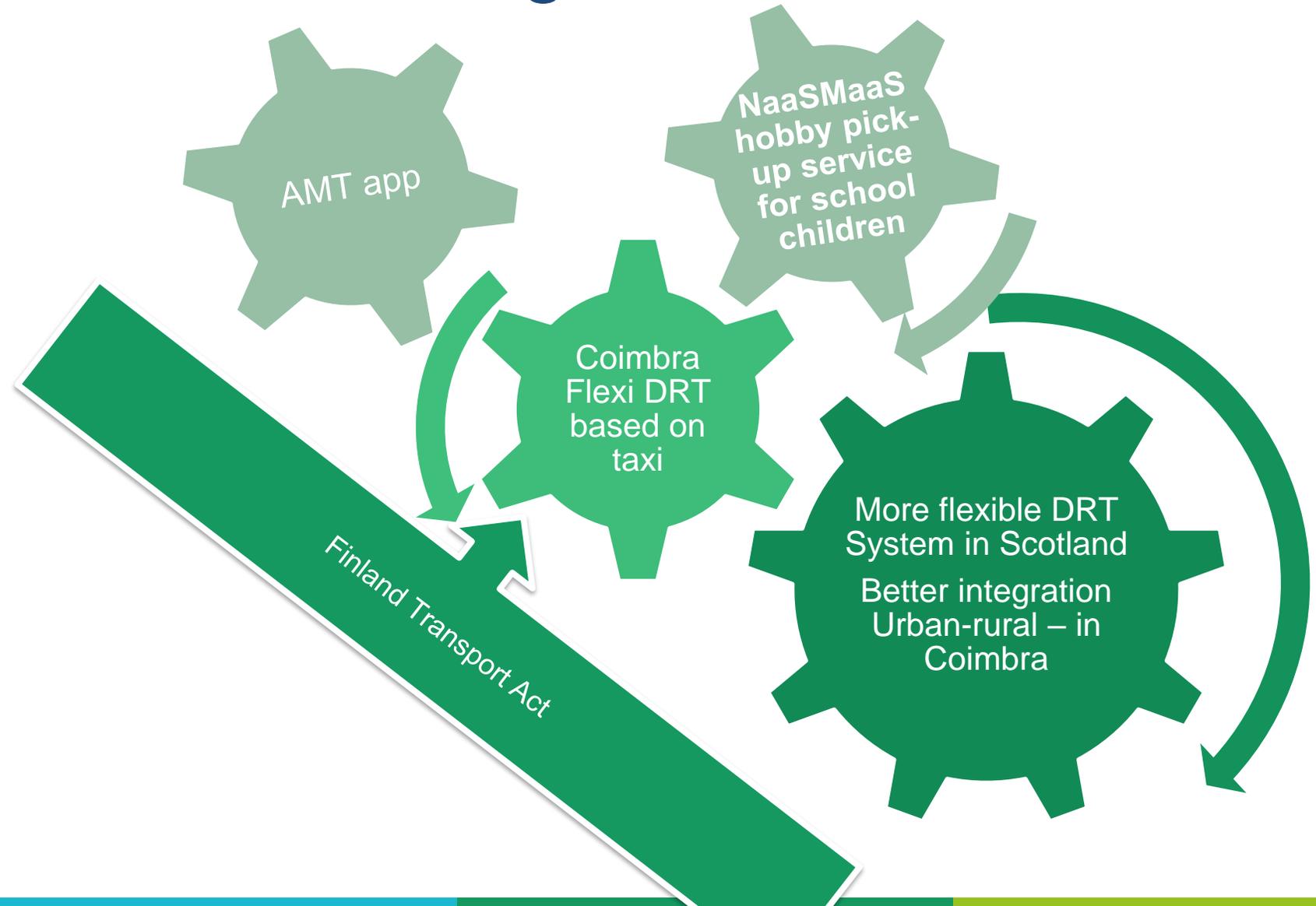
More integration => Lower transport costs => Higher PT resilience

(Better Accessibility and PT => More integration => Less transport costs => Higher PT resilience)

**Trust** => Legislation => Data => Business models

# Action plans -- Policy Improvement

# Win-Win collective Learning



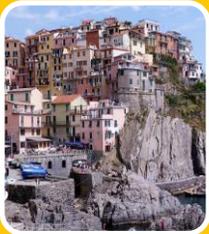
# Time for Action (Plans)



Linking Urban and Rural Areas in **Coimbra Region**- the path to a MaaS system



Creation and placement of a specific MaaS funding line in the RIS Thuringia.



Smart Ticket **Liguria**: towards the renewal of the Liguria Public Transport tariff system



Adding Sustainable Mobility as a mission in the Tampere region strategy in order to ensure funding  
Adding MaaS Dimension to the regional traffic System Planning



New measures for implementing a MaaS service **Timisoara Growth Pole SUMP**  
Implementing a new ticketing system that will have the possibility of integrating other



Develop a MaaS scheme for the SEStran region  
Develop a Demand Responsive Transport (DRT) service for the SEStran  
Promote the adoption of Open Data Standards in the SEStran region

# Next steps

## Multidimensional assessment online calculator

- **New Good practices**
- **Partner Staff Exchanges**
- **MaaS Bundling - tailored to specific regional contexts**
- **Action Plans conclusion**

## 2nd Phase

- **Action plans Implementation and monitoring**
- **Final dissemination conference**



  
**PriMaaS**  
Interreg Europe

Thank you!

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