Lessons learnt from MyWay Living Labs

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Methodology

Evalution of MyWay performance and assessment of its impact in three, complementary, Living Labs

Catalonia: Major urban area together with a complete region, multiple public transport modes (including innovative, i.e. Electrical Bike sharing)

Berlin: Major city

Trikala: medium sized city, to expand the adoption of MyWay

Areas of evaluation:

- ***Technical performance*** of integrated MyWay system
- ***Usability***
- ***User acceptance***
- ***Socio-economic*** issues (modal choice, environmental issues)

Design

Real" users using MyWay in naturalistic conditions in their everyday life

Performance captured by:

1. Log files
2. Background questionnaire and Subjective Evaluation Questionnaire (SEQ)

Three phases of evaluation:

- pre-phase (January to February 2015)
- Phase 1 with stable release (April to July 2015)
- Phase 2 (main phase) with final MyWay implementation (until December 2015)

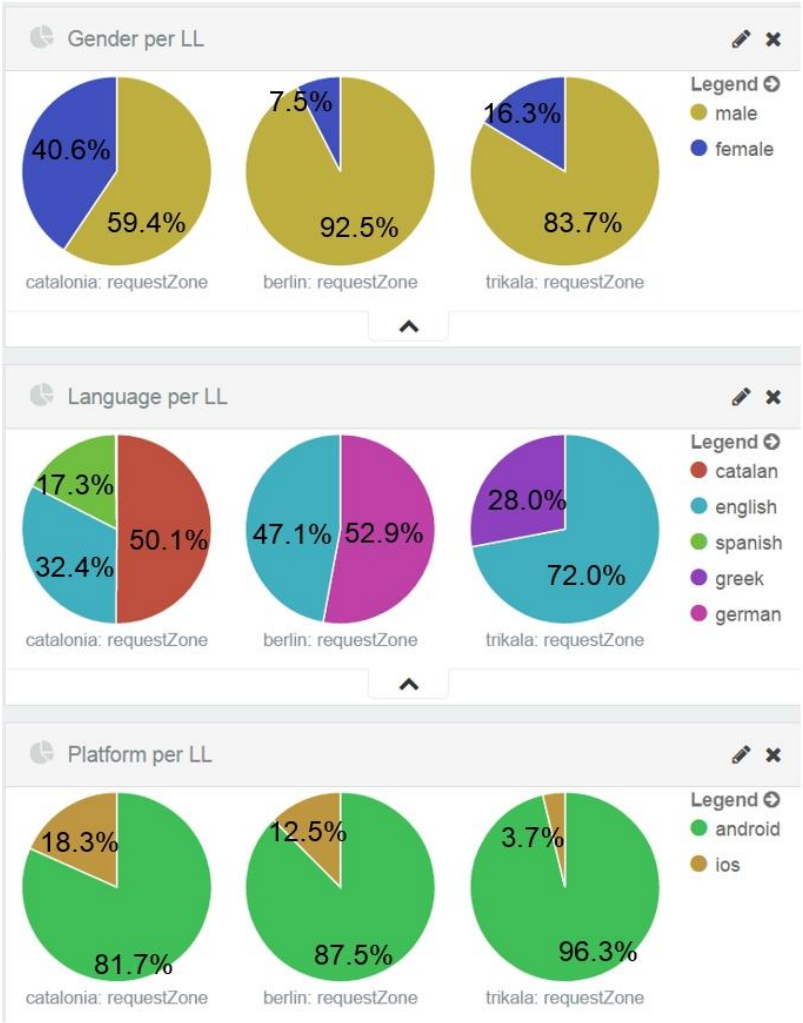
The users

371 registered users, mean age 36.2 years

211 male – 136 female

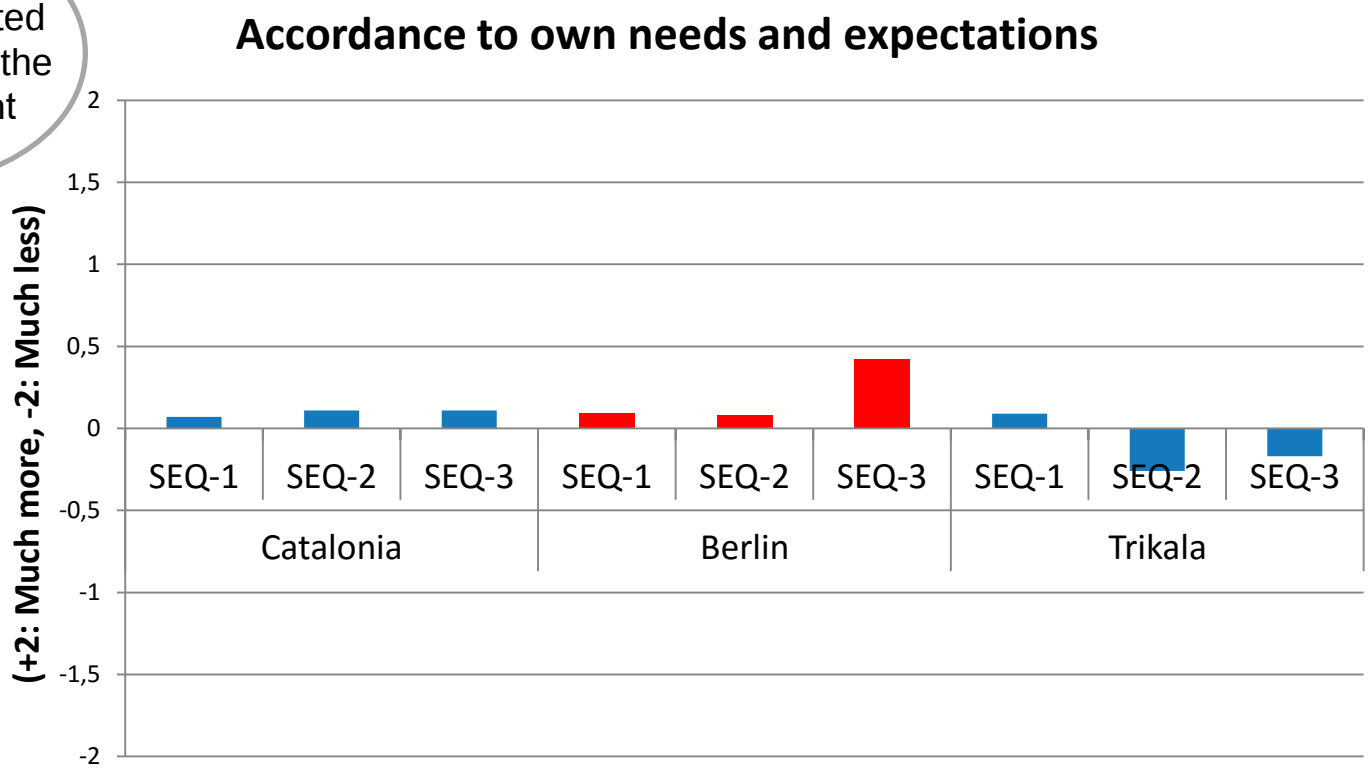
132 iOs - 234 Android users

182 from Catalonia, 110 from Berlin, 74 from Trikala



Subjective evaluation:
MyWay is more in accordance to users' needs and expectations

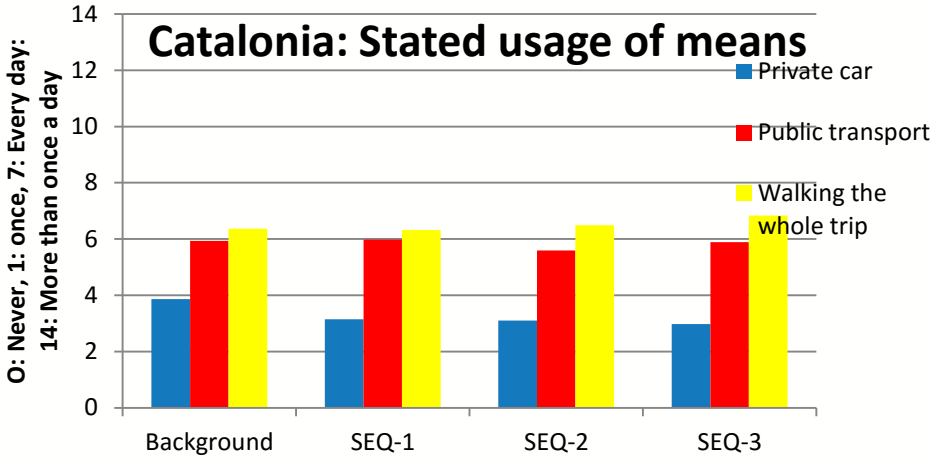
In the plots we present weighted averages over the user' different answers

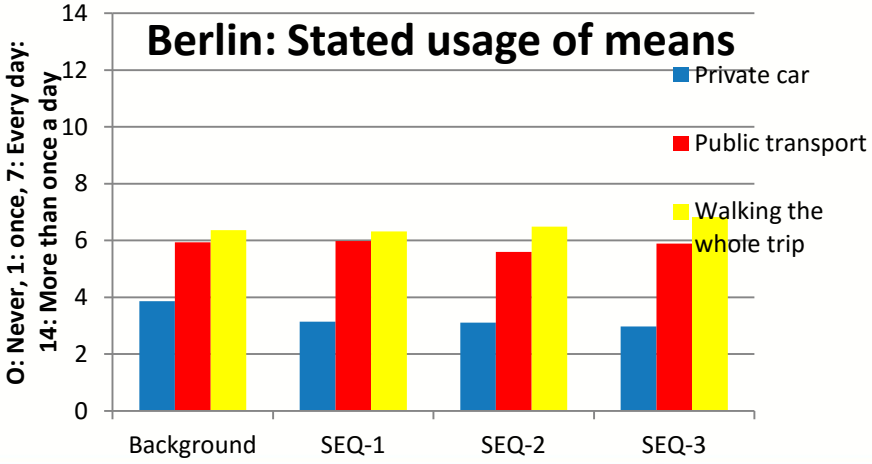


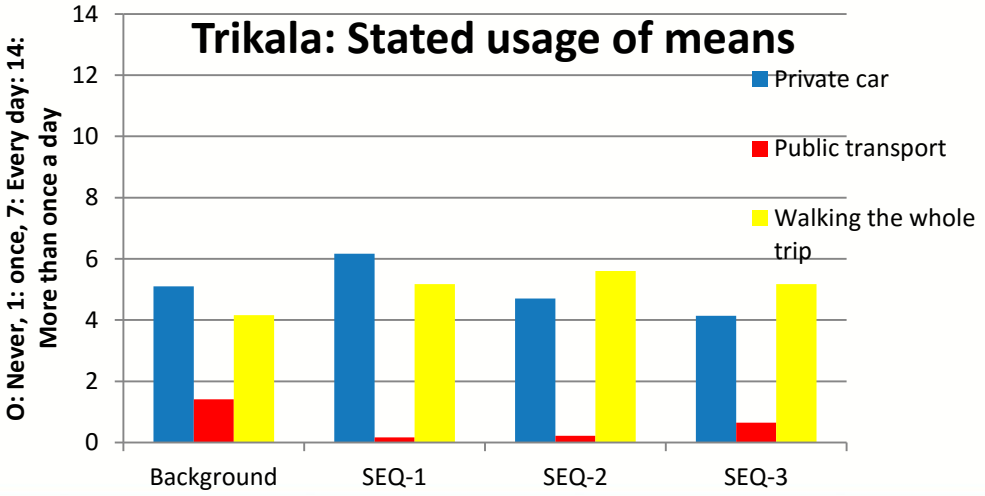
Subjective evaluation: Impact on choice of modality

MyWay seems to:

- decrease usage of private car
- Increase frequency of walking
- trend: increase frequency of public transport usage







Having a closer look…

Compared to Background: 5 - 9 percentage point increase in those using means other than private car

Stated frequency of use of **private car** as captured by questionnaires:

- one background
- SEQ 1, 2, 3

Living lab	Time point	N	More than once a day	Every day	Several (2-6) days a week	Only once	Never
Catalonia	Background	116	18.1%	3.4%	50.9%	11.2%	16.4%
	SEQ-1	85	7.1%	10.6%	28.2%	28.2%	25.9%
	SEQ-2	65	6.2%	13.9%	21.5%	36.9%	21.5%
	SEQ-3	62	6.5%	8.1%	29%	30.6%	25.8%
Berlin	Background	54	12.9%	1.8%	26%	11.1%	48.2%
	SEQ-1	22	-	22.7%	22.7%	4.5%	50%
	SEQ-2	13	15.4%	0%	15.4%	15.4%	53.8%
	SEQ-3	13	15.4	0%	23.1%	7.7%	53.8%
Trikala	Background	34	11.8%	32.3%	47.1%	8.8%	-
	SEQ-1	23	17.4%	30.4%	39.1%	4.4%	8.7%
	SEQ-2	23	4.4%	26.1%	52.2%	17.4%	-
	SEQ-3	23	4.4%	17.4%	52.2%	21.6%	4.4%

Having a closer look…

- Hard to identify a consistent trend when looking at individual answers
- On average increase of walking

Stated frequency of **walking (the whole trip)** as captured by questionnaires:

- one background
- SEQ 1. 2. 3

Living lab	Time point	N	More than once a day	Every day	Several days a week	Only once	Never
Catalonia	Background	116	34.8 %	10.7 %	10.7 %	31.3 %	12.5 %
	SEQ-1	85	27.1 %	14.1 %	36.5 %	8.2 %	14.1 %
	SEQ-2	65	24.6%	21.5%	35.4%	7.7%	10.7%
	SEQ-3	62	25.8%	22.5%	38.7%	4.8%	8.1%
Berlin	Background	54	28.3 %	5.7 %	22.6 %	32.1 %	11.3 %
	SEQ-1	22	18.2 %	13.6 %	45.5 %	18.2 %	4.6 %
	SEQ-2	13	53.9 %		15.4 %	23.1 %	7.7 %
	SEQ-3	13	38.5 %	7.6 %	15.4 %	38.5 %	
Trikala	Background	34	6.3 %	25 %	28.1 %	40.6 %	
	SEQ-1	23	17.4 %	8.7 %	47.8 %	21.7 %	4.4 %
	SEQ-2	23	21.7 %	13 %	39.1 %	8.7 %	17.4 %
	SEQ-3	23	17.4 %	13 %	43.5 %	8.7 %	17.4 %

Having a closer look…

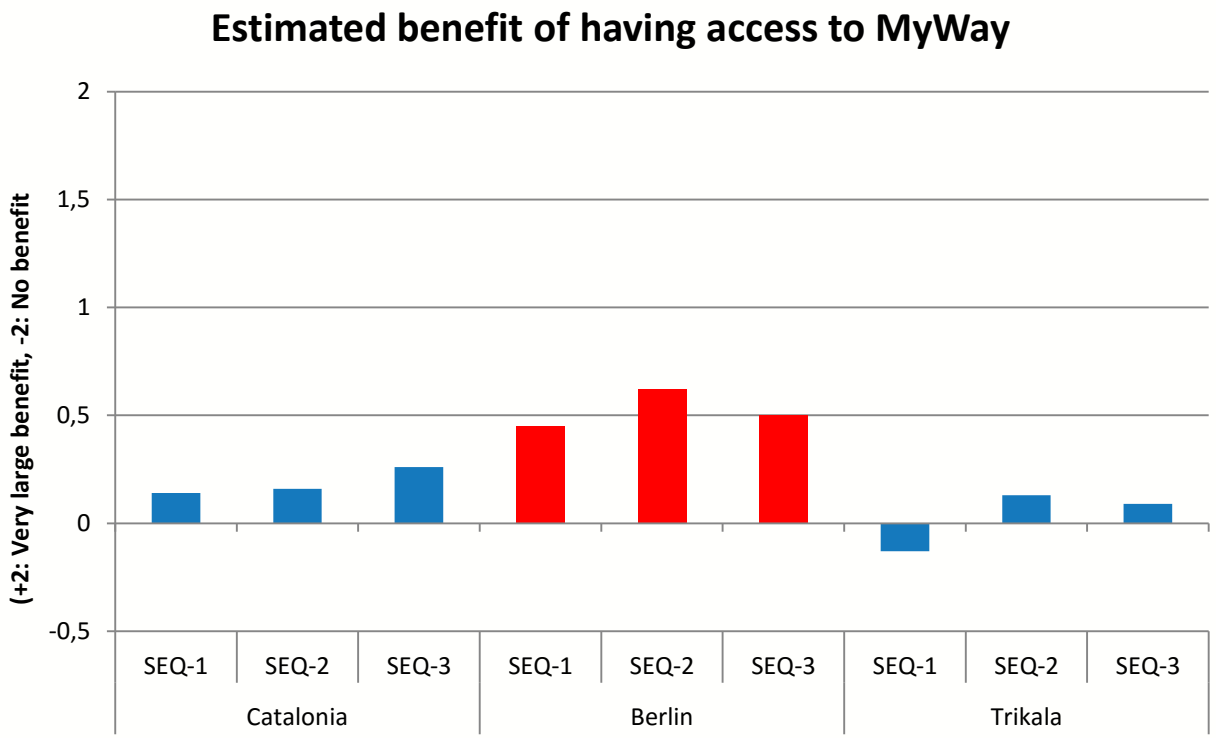
Compared to Background: around 17 percentage points of users moved to higher frequency of use

Stated frequency of use of **public transport** as captured by questionnaires:

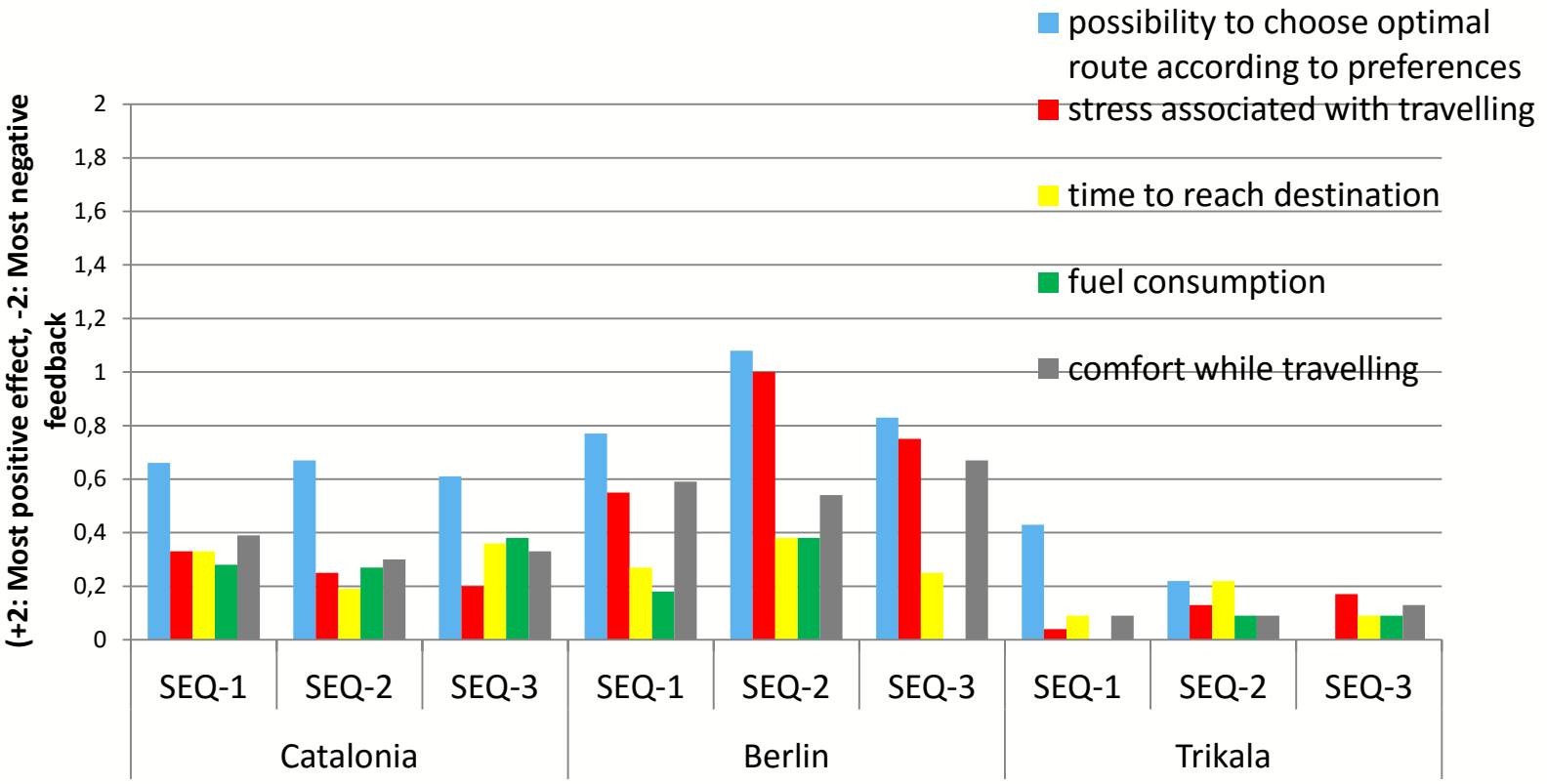
- one background
- SEQ 1, 2, 3

Living lab	Time point	N	More than once a day	Every day	Several (2-6) days a week	Only once	Never
Catalonia	Background	116	31%	3.5%	43.9%	9.5%	12.1%
	SEQ-1	85	21.2%	20%	38.8%	5.9%	14.1%
	SEQ-2	65	23.1%	12.3%	36.9%	15.4%	12.3%
	SEQ-3	62	24.2%	9.7%	45.1%	16.1%	4.8%
Berlin	Background	54	48.1%	1.9%	33.3%	5.6%	11.1%
	SEQ-1	22	40.9 %	27.3 %	13.6 %	4.6 %	13.6 %
	SEQ-2	13	38.5 %	30.8 %	30.8 %		
	SEQ-3	13	30.7%	38.5%	23.1%		7.7%
Trikala	Background	34	5.9 %		17.6 %	23.5%	52.9 %
	SEQ-1	23				17.4 %	82.6 %
	SEQ-2	23				21.7 %	78.3 %
	SEQ-3	23			13 %	13 %	73.9 %

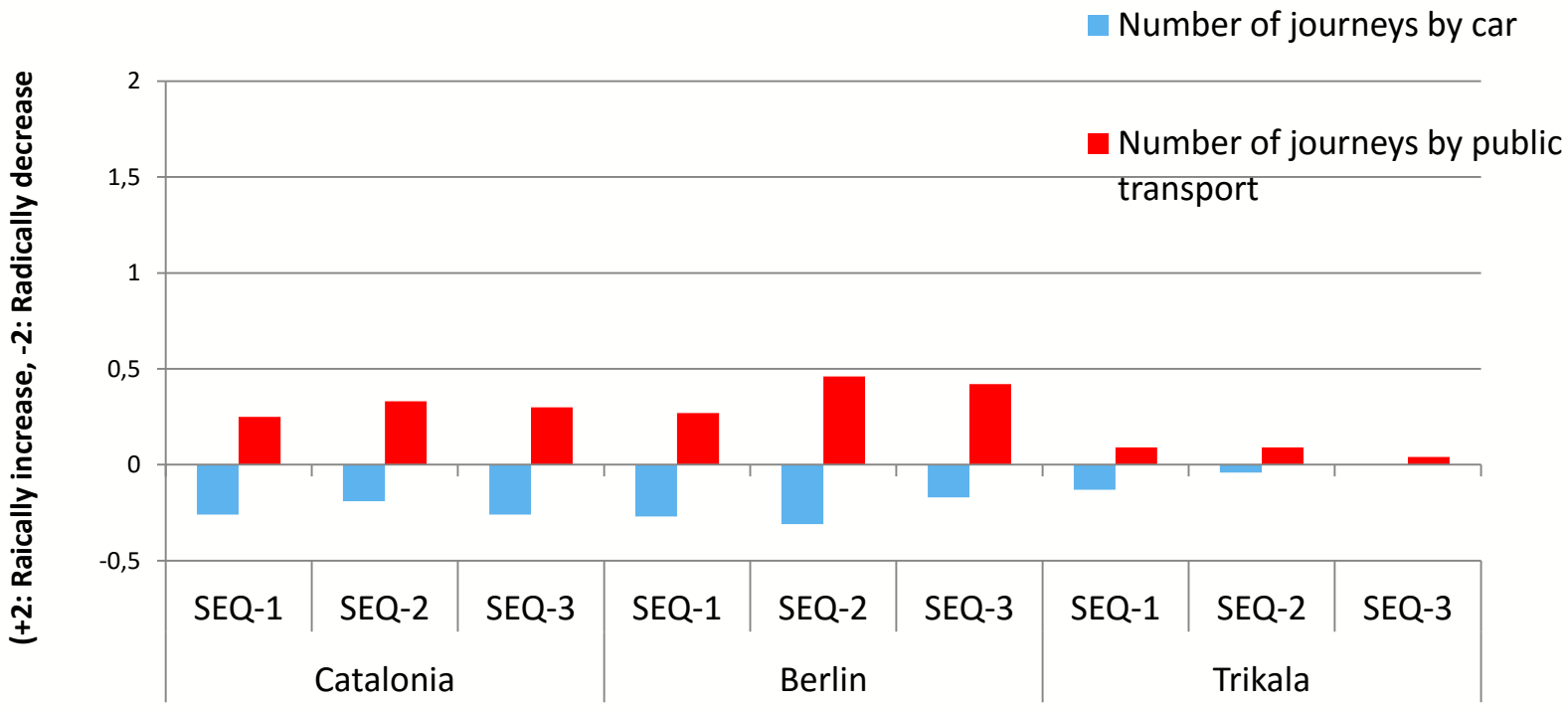
Subjective evaluation : Estimated benefit of MyWay



Subjective evaluation: Estimated impact of MyWay on mobility issues



Subjective evaluation: Estimated impact of MyWay on modal choice



Conclusions

Iterative evaluation is beneficial: it helps identifying issues early in the development procedure

Due to its personalisation functionality, MyWay seems to be more in accordance to users' needs and expectations

MyWay seems to assist:

- Decreasing the usage of private car
- increasing the usage of public transport & the frequency of walking

Users perceive that:

- It will be beneficial to have access to MyWay
- The prossibility to choose optimal route according to their preferences and their comfort while travelling will increase
- Their stress while travelling, time to reach destination and fuel consumption will decrease

Users expect that:

- The number of journeys by car will decrease
- The number of journeys by public transport will increase

THANK YOU!

MyWay

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