

## “WorkAnywhere”

### Utilizing mobile and flexible work to avoid peak traffic periods: Results of a field study with two Swiss companies



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### Switzerland: Public Transport at full capacity

Switzerland won the World Cup...

... of travelling by train:

2'274 km per Person in 2012, highest worldwide

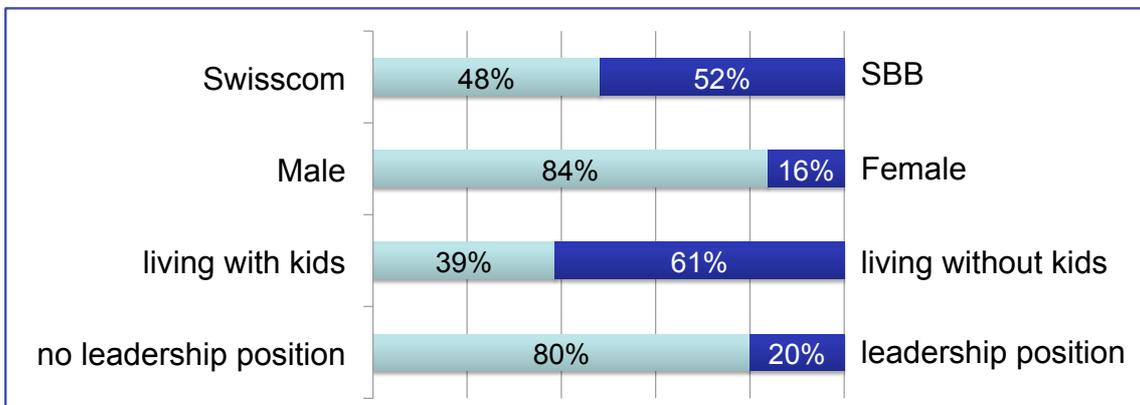
- SBB, Switzerland's Federal Railways, are transporting half of their passengers in only a quarter of the time
- Can commuters use mobile and flexible work to avoid the peak traffic periods?

PROCEDURE	<ul style="list-style-type: none"> <li>• 260 employees from two companies</li> <li>• Research period: two months in early 2013</li> <li>• Assignment: use work flexibility to try to travel outside of peak times whenever possible (7:00 to 8:30 am and 5:00 to 6:30 pm)</li> </ul>
DATA COLLECTION	<ul style="list-style-type: none"> <li>• Pre- and post-survey (experience with flex work; productivity; work satisfaction; life balance; ...)</li> <li>• Daily entries in an online mobility journal (times travelled and places used for work)</li> <li>• Additional qualitative interviews and group discussions</li> </ul>

**Sample: N = 228 Completes**

Conditions for participation:

- Commuting time of at least 20 minutes (one way)
- Supervisor's approval

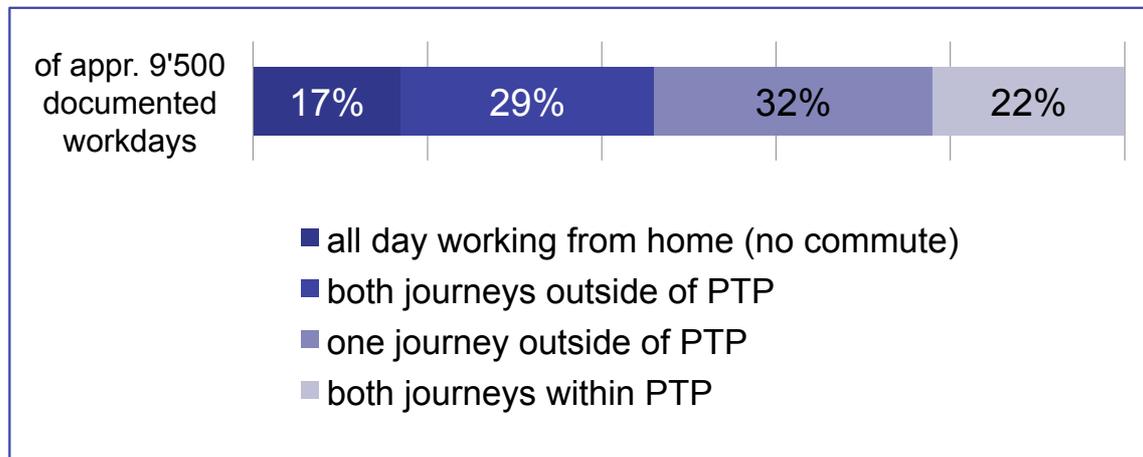


average working hours per week: 44 h

average commute (one journey): 64 minutes, mostly by train

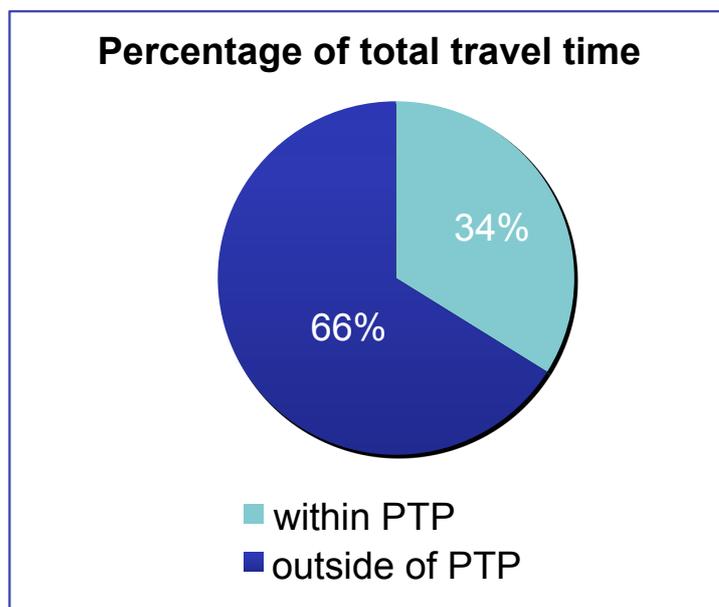
### Successful avoidance of peak travel periods (PTP)

PTP = 7.00 am to 8:30 am and 5:00 pm to 6:30 pm



62% of all journeys either not taken or not during PTP („base rate“ = 25%)

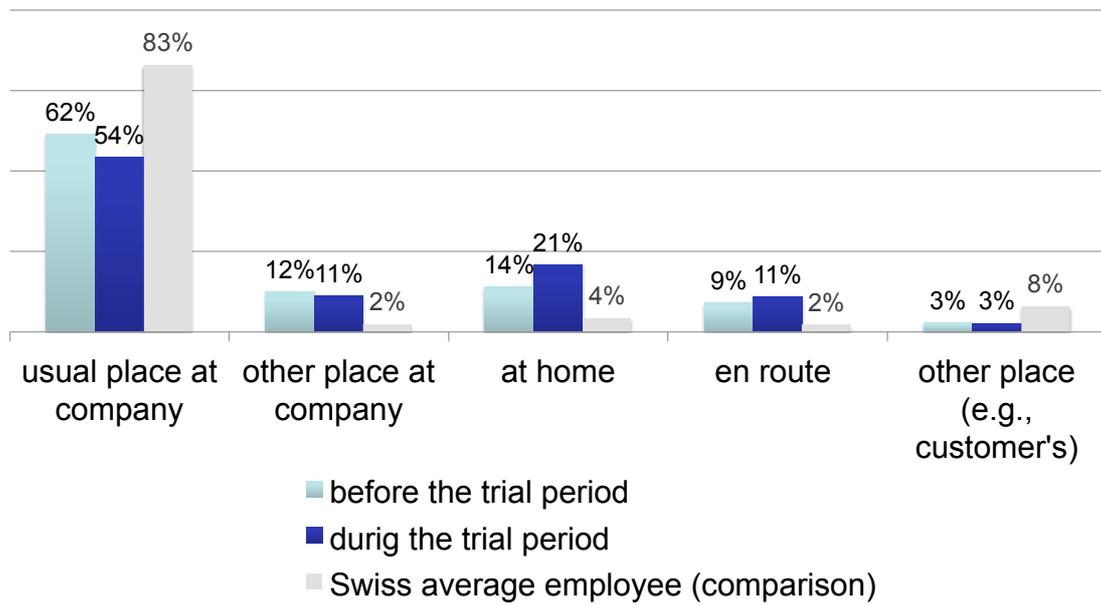
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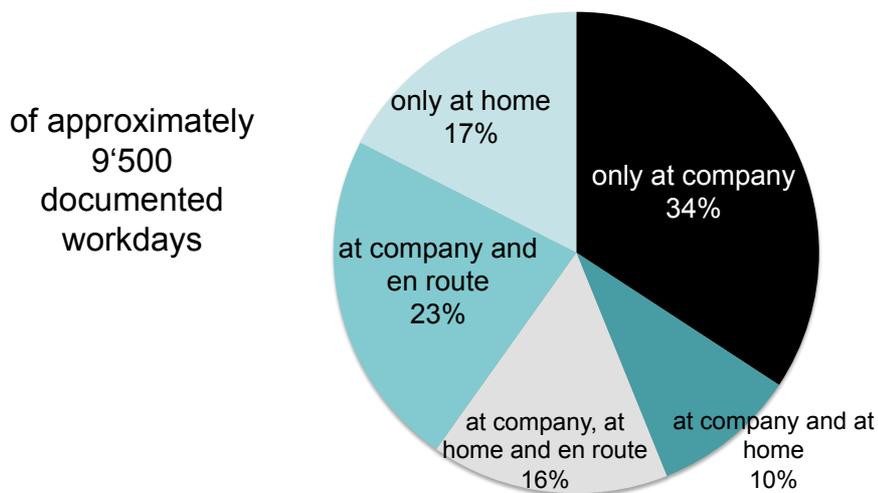
Participants were extraordinarily successful in avoiding the peak travel periods.

How did they do it?

### Distribution of work hours across different places



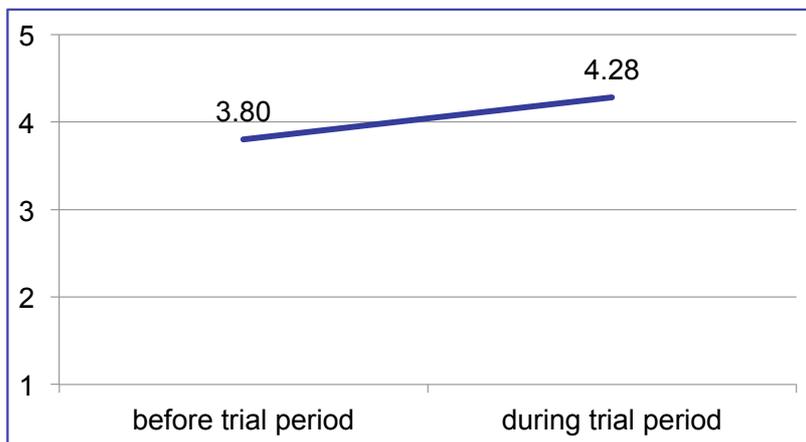
### How many places of work during one day?



## Significant increase in satisfaction with work mobility

*„Overall, I am very satisfied with the distribution of my work hours across different places (at home, en route and at my company).“*

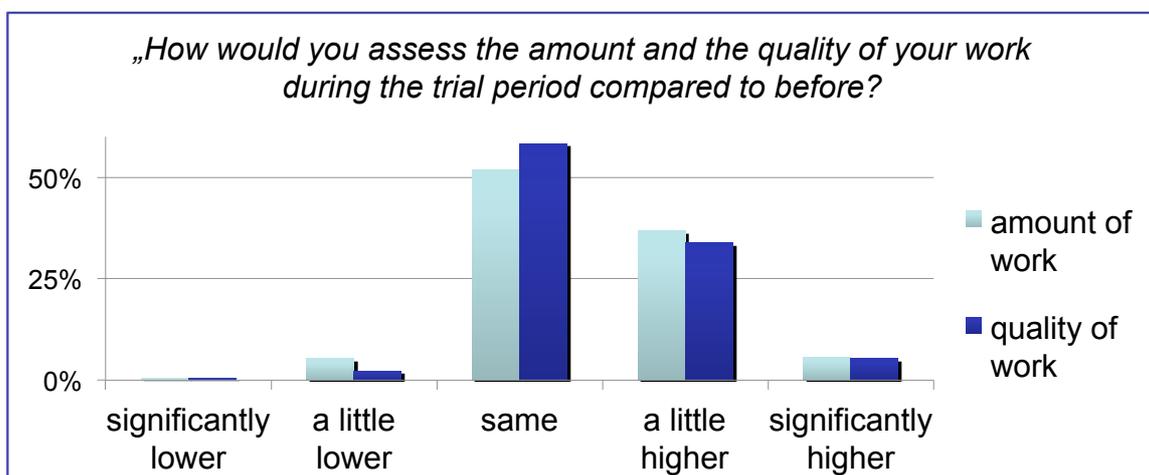
Scale of 1 “completely disagree” to 5 “completely agree”.



What were the effects of this high level of work mobility on performance and work satisfaction?

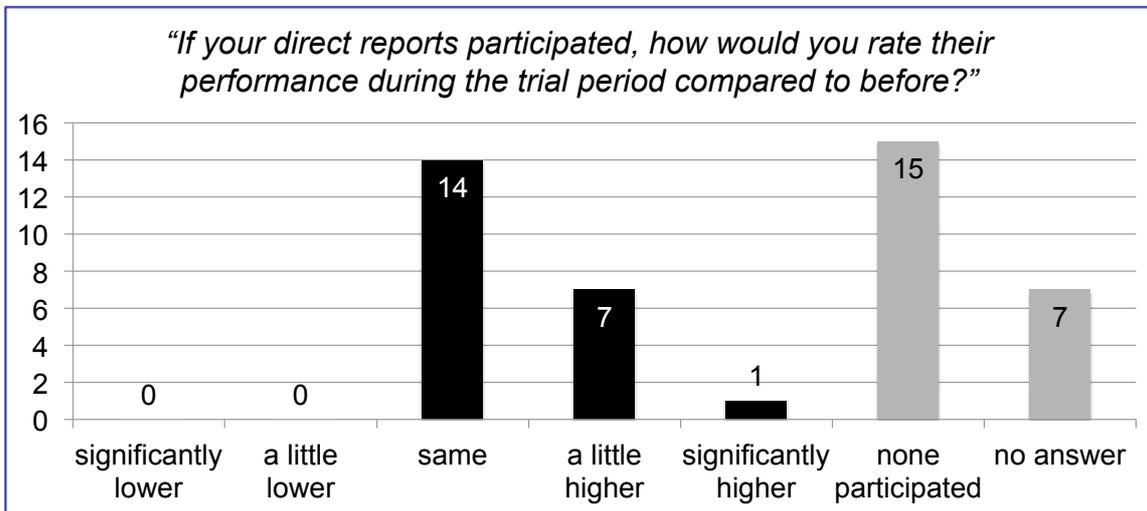
## Work performance

- about 40% assessed their work output as greater and better
- almost none reported a decrease in productivity
- hours worked per week stayed the same at 44 h

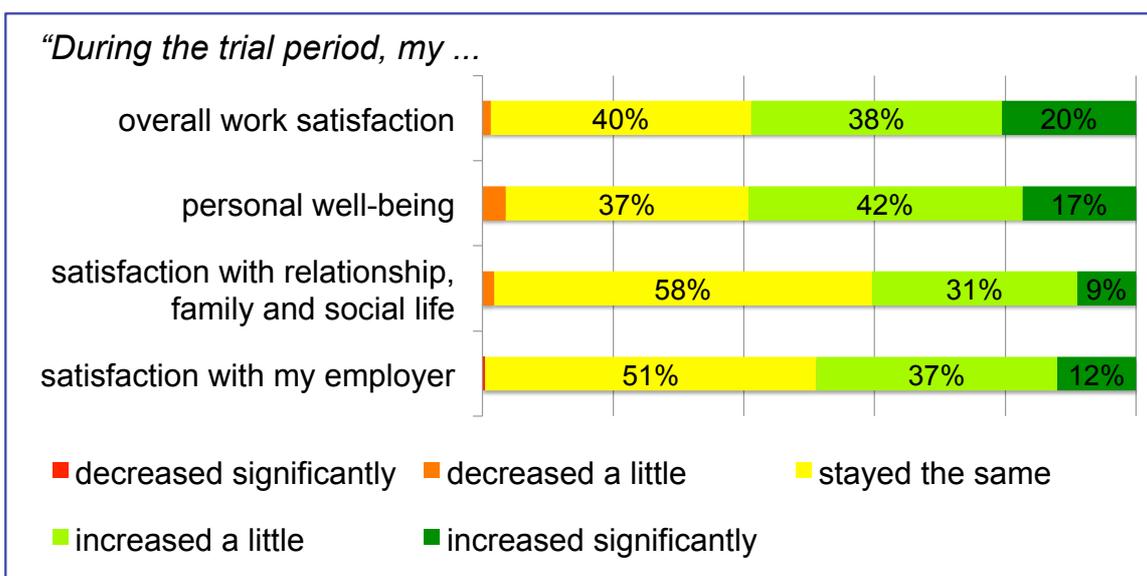


### Work performance: supervisors' assessment

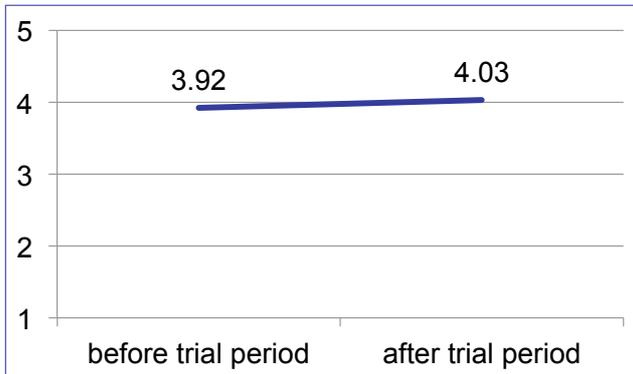
22 out of 44 leaders rated the performance increase of their direct reports about the same as in the self assessment.



### Satisfaction and well-being



More than half of the participants reported an increase in satisfaction, almost none a decrease. No significant differences among age, gender or family status.

**Life-Balance**

8-item-scale measuring life-balance

1 = problematic

5 = good

difference is not significant

Item with the most problematic results: *“I find it difficult not to think about work issues when I’m not working.”*

8% “completely agree” and 24% “tend to agree”

mean values: 3.11 (before) and 3.10 (after)

**Summary of results**

- extraordinary success in avoiding peak travel periods
- with slightly positive effects on work performance and satisfaction
- no other negative effects
- but: near optimal conditions in regard to prior experience with flexible work and support by supervisor & company
- and: high number of work hours per week;  
slight problem with “switching off” from work

What could be the potential for reducing peak travel in Switzerland?

## Potential for reducing peak travel in Switzerland

	scenario 1 (optimistic)	scenario 2 (conservative)
additional avoidance of PTP (base rate = 25%)	37%	20%
avoidance potential in number of person-commutes	71'900	25'900
effective reduction of person-commutes outside of PTP	-13%	-7%

If all Swiss employees who can and want to work flexible (ca. 33%)...

... would avoid the PTP as during the trial period → 13% reduction

... would avoid two additional PTP journeys per week → 7% reduction

A noticeable reduction in commutes during the peak hours of up to 10 per cent should be possible, given a wide spread of flexible work practices.

## Discussion

### Limitations:

- ideal conditions: high experience, supportive culture,
- only self-reports
- mainly single-item measurements

### Implications:

- flexible and mobile work can contribute significantly to leveling peak traffic periods
- adverse effects should not be expected
- but: certain conditions necessary (especially supportive culture)

**Thank you for your attention!**

**Team effects**

- no change in team performance, team cohesion, or team climate
- almost no acceptance problems reported

