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Berlin, Germany



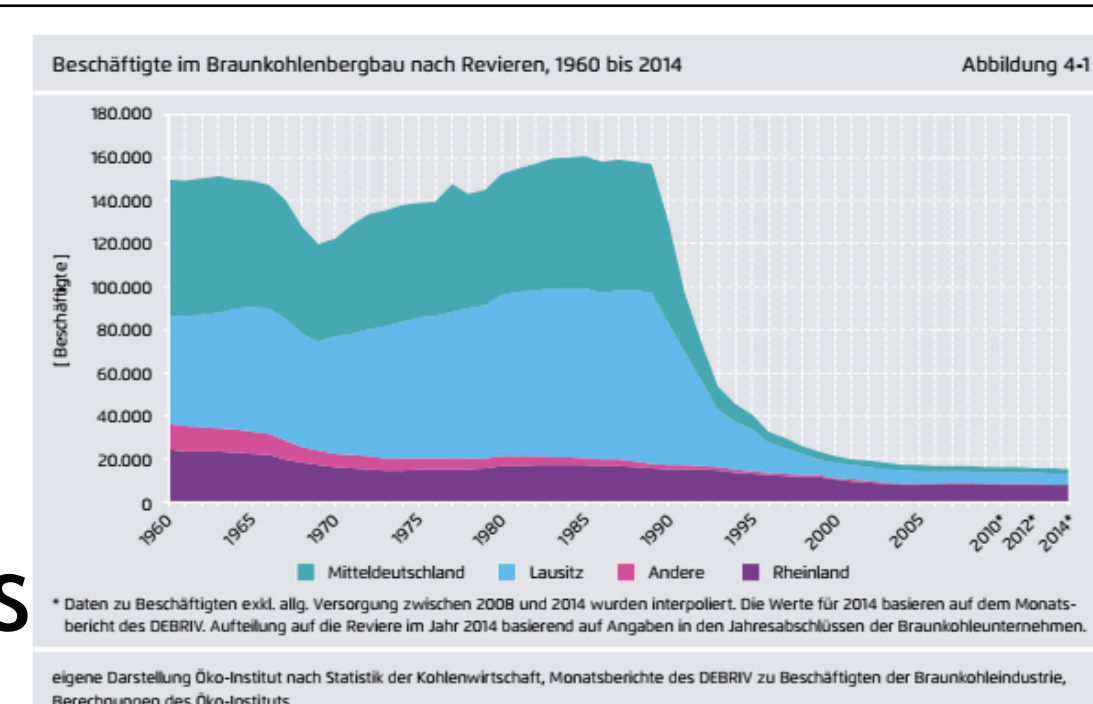
Preferences for new public transport options in a lignite mining area - an app-based qualitative usability approach

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Challenges

On-going change of structures:

- decline in coal industry
- impact on economy, jobs, population, mobility patterns
- Low density of infrastructure



Employees in coal industry 1960-2014 by region
Source: https://static.agora-energiestudie.de/fileadmin/Projekte/2017/Deutsche_Braunkohlenwirtschaft_Agora_Die-deutsche-Braunkohlenwirtschaft_WEB.pdf

Rural mobility:

- increasing car use
- decreasing attractiveness of public transport
- groups depending on p.t. (e.g. children, elder women)
- long headways, insufficient during mornings and at night

| BUS 443 Eisenhüttenstadt - Schernsdorf - Müllrose - Frank (O) | | Montag - Freitag | | | | | | | | | | |
|---|--|------------------|------|------|------|-------|-------|-------|-------|-------|-------|----|
| Haltepunkt | | 01 | 03 | 05 | 07 | 09 | 11 | 13 | 15 | 17 | 19 | 21 |
| Eisenhüttenstadt, Frank-Geb. ab | | | | | | 13.55 | | | | | | |
| Schernsdorf ab | | | | | | 13.56 | | | | | | |
| Müllrose ab | | | | | | 13.57 | | | | | | |
| Frank (O) ab | | | | | | 13.58 | | | | | | |
| Eisenhüttenstadt, ZOB an | | | | | | 14.02 | | | | | | |
| Schernsdorf an | | | | | | 14.06 | | | | | | |
| Müllrose an | | | | | | 14.06 | | | | | | |
| Frank (O) an | | | | | | 14.06 | | | | | | |
| Eisenhüttenstadt, Frank-Geb. ab | | 6.17 | 6.35 | | | | | | | | | |
| Schernsdorf ab | | 6.17 | 6.35 | | | | | | | | | |
| Müllrose ab | | 6.17 | 6.35 | | | | | | | | | |
| Frank (O) ab | | 6.17 | 6.35 | | | | | | | | | |
| Eisenhüttenstadt, ZOB an | | 6.27 | 6.40 | 6.11 | 6.11 | 12.50 | 14.07 | 14.40 | 14.56 | 15.50 | 17.20 | |
| Schernsdorf an | | 6.27 | 6.40 | 6.11 | 6.11 | 12.50 | 14.07 | 14.40 | 14.56 | 15.50 | 17.20 | |
| Müllrose an | | 6.27 | 6.40 | 6.11 | 6.11 | 12.50 | 14.07 | 14.40 | 14.56 | 15.50 | 17.20 | |
| Frank (O) an | | 6.27 | 6.40 | 6.11 | 6.11 | 12.50 | 14.07 | 14.40 | 14.56 | 15.50 | 17.20 | |
| Eisenhüttenstadt, Frank-Geb. ab | | 6.32 | 6.45 | 6.16 | 6.16 | 12.55 | 14.12 | 14.50 | 15.01 | 15.53 | 17.25 | |
| Schernsdorf ab | | 6.32 | 6.45 | 6.16 | 6.16 | 12.55 | 14.12 | 14.50 | 15.01 | 15.53 | 17.25 | |
| Müllrose ab | | 6.32 | 6.45 | 6.16 | 6.16 | 12.55 | 14.12 | 14.50 | 15.01 | 15.53 | 17.25 | |
| Frank (O) ab | | 6.32 | 6.45 | 6.16 | 6.16 | 12.55 | 14.12 | 14.50 | 15.01 | 15.53 | 17.25 | |

Example for a bus time-table in rural areas
Source: https://bos-fw.de/images/pdf/plaene-regional-stadt/443_beide_altern_211212.pdf

Research question

How to develop new mobility concepts for lignite mining and rural areas by involving users of an interactive mobility app?

New mobility options

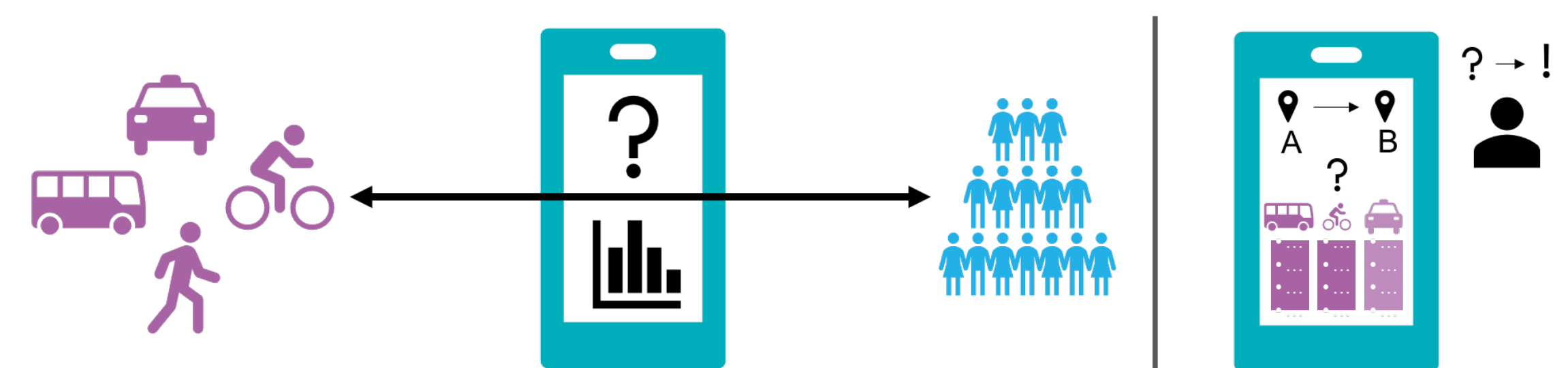
On-Demand-Bus

Automated Ferry (crossing 'Ostsee')

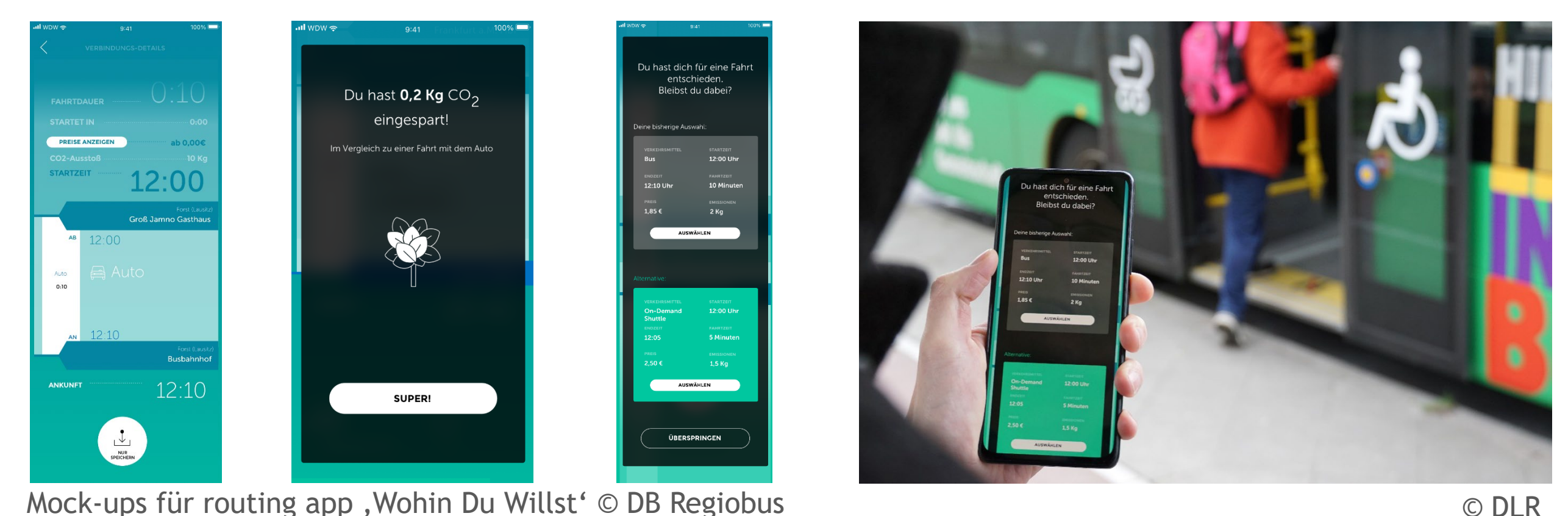
Ride-sharing

E-Bike-sharing

Approach of the research project



- quasi discrete choice experiment (500 participants planned): use extension of existing routing app to collect data on the potential choice of (new) mobility options and actual trips and modes used
- use transport models to assess potential
- workshops on mobility needs in rural areas and usability



Mock-ups für routing app 'Wohin Du Willst?' © DB Regiobus

First results

Two stakeholder workshops:

- 2-3 hours
- 5-8 participants (different age, gender, mobility)
- Tasks: e.g. search route to home

- test of the research version of the app: ideas and opinions regarding functionality and design
- challenges and needs in daily mobility: trips at the end of the day not possible; facilitate taking bike on bus and flexibility of transport options desired
- new mobility options preferred: ridesharing and on-demand bus to the next city

Project partners and funding



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