New technologies enable innovative tariff approaches



Transport Ticketing Global London 2020



Munich Transport and Tariff Association (MVV)



- Area: 5.530 km²
- City of Munich and 8 surrounding rural districts with 175 municipalities
- Population: 2.9 million inhabitants
 (1.5 million in the city of Munich)
- Main benefit: one network – one timetable – one tariff



Organisation of the Munich Transport and Tariff Association (MVV)









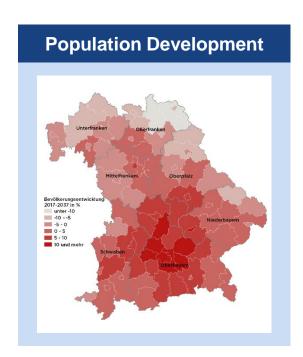
political decisions share holders of MVV

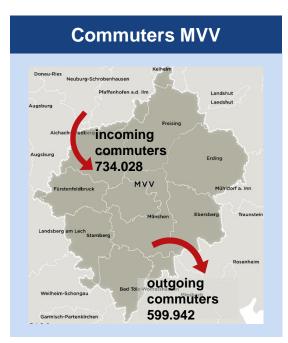
transport management

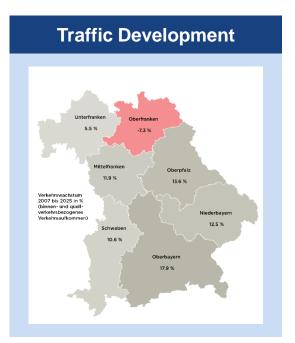
transport supply

The population of Munich region is growing – and with it the traffic.





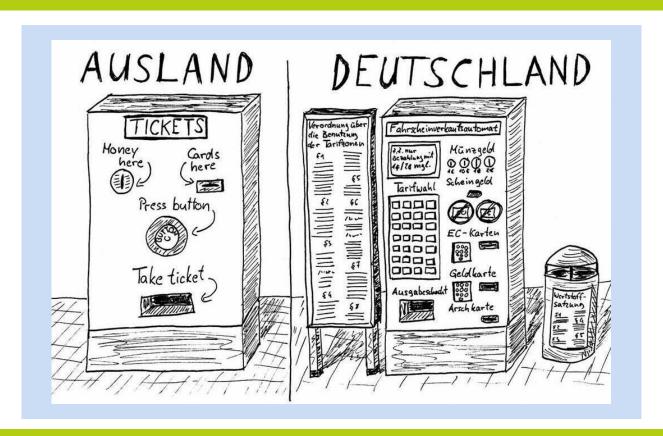




Source: unknown

We need to simplify the access to information and ticketing.



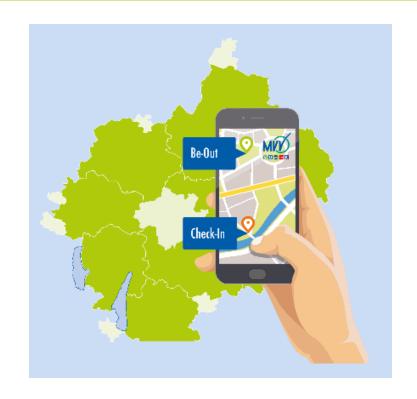


Source: unknown

Digital solutions as in-/out-systems can be motivating for using public transportation.

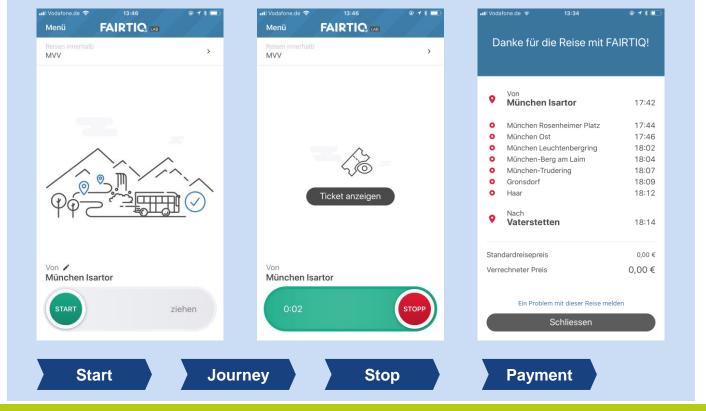


- Two-year project with a limited number of customers (start planned July 2020)
- Sales: In-/out-system based on a smartphone technology with no infrastructure planned (service provider: Fairtiq, since autumn 2019)
- Pricing: Development of an electronic tariff for occasional and flexible users as well as new customers (Consultancy: mobilité, since autumn 2018)
- Accompanied by market research (qualitative und quantitative methods)



The technical base of the MVV pilot project is the FAIRTIQ Lab App.





The in-/out-technology will be tested with FAIRTIQ Lab App in several, consecutive steps.



Technical Test

Friendly User Test

Go live pilot test

Evaluation

- Functional test of the journey mapping (validation)
- Focus on edge cases like rural areas, subway, busy stations
- Testing by members of the project team

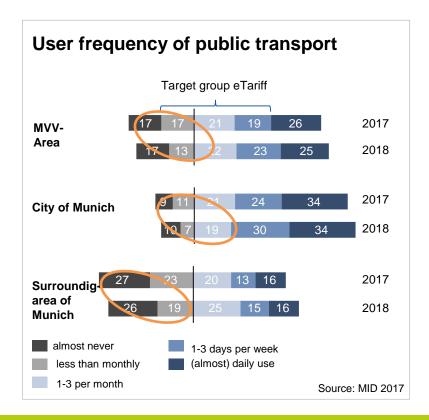
- Functional test of the overall system
- Integration of the new electronic tariff
- Integration of the payment process and inspection (barcode)
- Testing by employees of the participating partners

Testing by a limited of "real" customers (< 10.000)

- Evaluation of the project
- Requirements for a permanent in-/out system including an electronic tariff

Change in passengers behaviour.



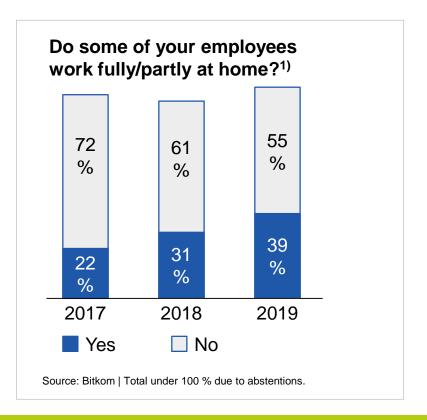


Challenges for occasional users

- Irregular user behavior
- Complex pricing and sales systems
- Missing cost overview
- Pre-planning necessary, but often not possible

Change in working behaviour.





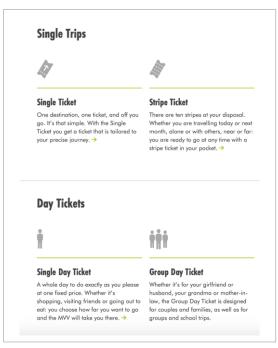
New work models change mobility needs

Due to homeoffice, project work etc.
 passengers do not have the same travel
 patterns any more (monday to friday, 9 to 5)

Current products are based on strict travel patterns: day – week – month – year.



MVV Ticket Portfolio



Challenges for customer individuality

- Complex systems of products
- Pre-planning is essential, but does not meet the expectations of the customers

Source: MVV GmbH, 2020

How do we define a digital pricing system?

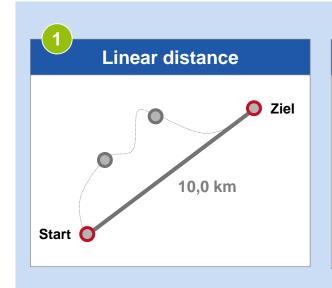




- Flexible, transparente und valued pricing
- Based on IN-OUT-Systems
- No need for tariff zones

Pricing model for our test: price per trip + price per linear distance (km).





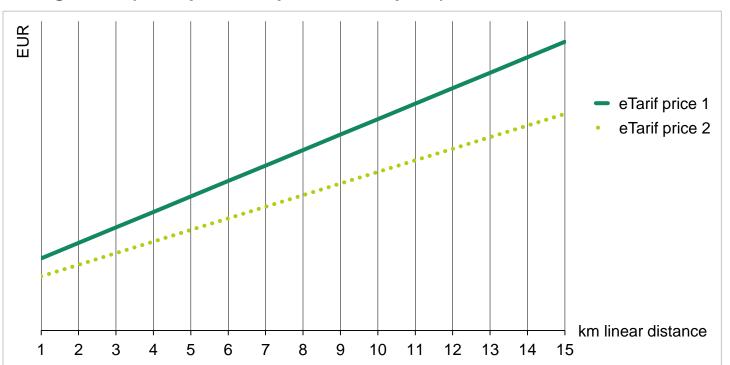




Price differentiation is needed due to market acceptance.



Pricing model (basic price and performance price)

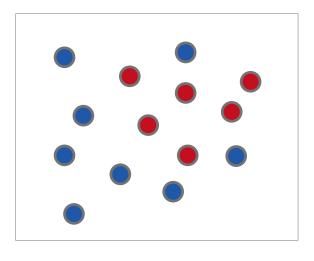


Source: MVV GmbH, 2020

The modified price differentiation is based on the quality of a stop.

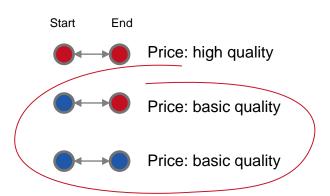


Categories of public transport stops



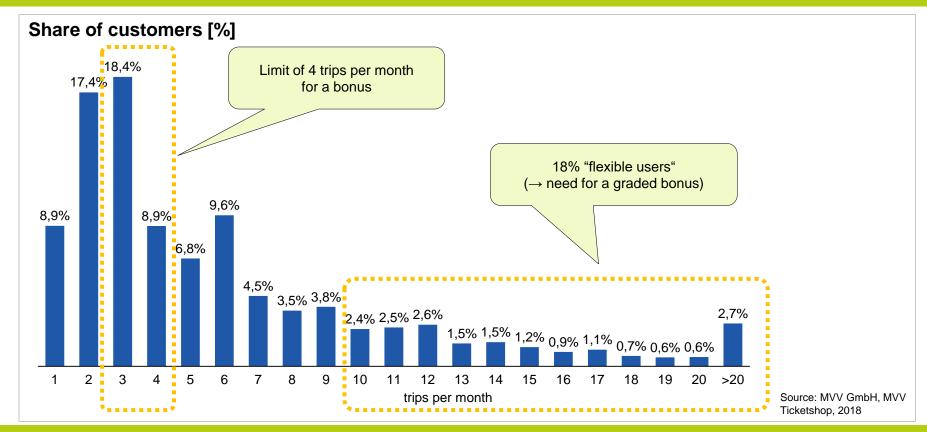
- Stop with basic quality
- Stop with high service quality

 Service quality of a stop (number of departures per day) is a criteria for the price differentiation



How do our occasional passenger behave – ideas for a targeted bonus within the electronic tariff.





Pricing and sales merge into one service.





Source: MVV GmbH, 2019



Thank you!

Contact:

Ivanka Lazinica (ivanka.lazinica@mvv-muenchen.de)
Theresa Schwegler (theresa.schwegler@mvv-muenchen.de)