



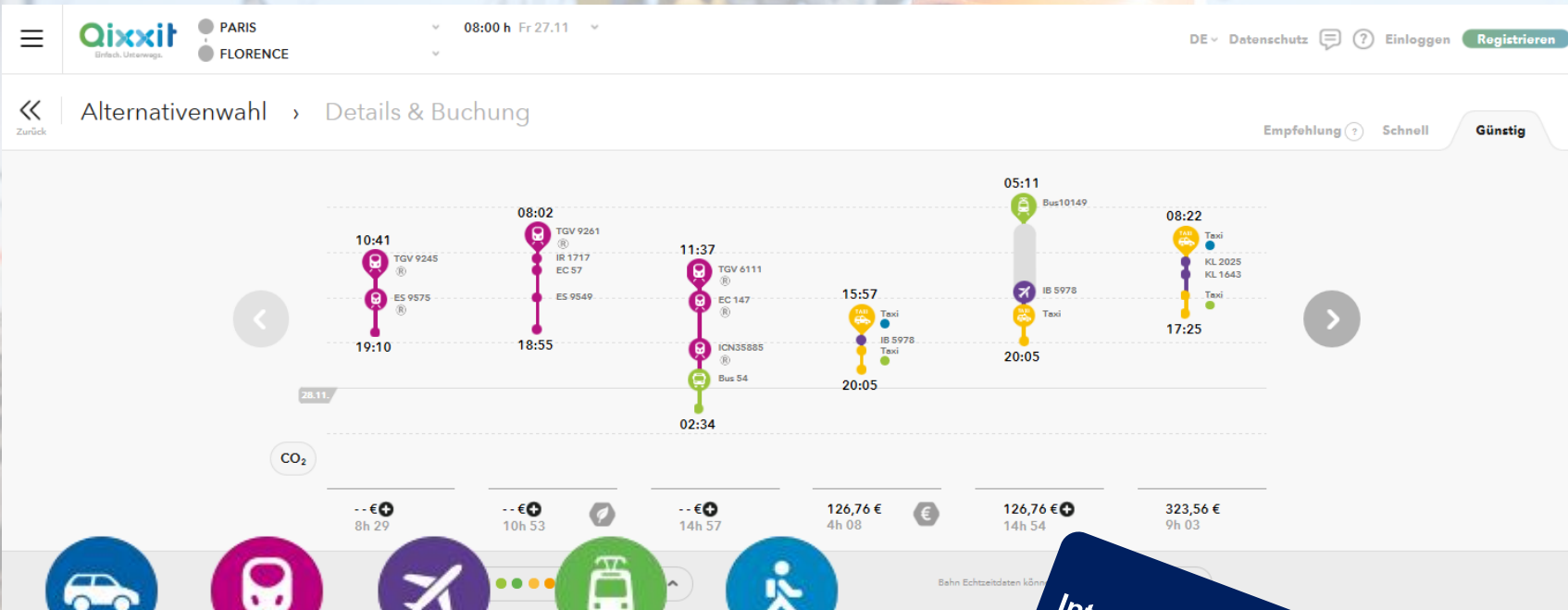
SBB CFF FFS



# Impact of the Digitalization on the Railway Sector.




Florence School of Regulation  
November 27th, 2015.




Markus Basler  
Deputy Head of Digital  
Transformation

# The Digitalization Enables New Forms of Competition.








Qixxit  PARIS  FLORENCE 08:00 h Fr 27.11

DE  Datenschutz  Einloggen  Registrieren

Alternativenwahl  Details & Buchung Empfehlung  Schnell  Günstig

Option	Departure	Arrival	Price	Duration
Train (TGV 9245)	10:41	19:10	-- €	8h 29
Train (TGV 9261)	08:02	18:55	-- €	10h 53
Train (TGV 6111)	11:37	02:34	-- €	14h 57
Train (ICE 3585)	15:57	20:05	126,76 €	4h 08
Train (IB 5978)	05:11	20:05	126,76 €	14h 54
Train (KL 2025)	08:22	17:25	323,56 €	9h 03

CO<sub>2</sub>

Bahn Echtzeitdaten können...

**Transparency.  
Intermediaries Entering the Market.**



Source: <https://www.qixxit.de/>

# The Potential of the Digital Transformation Goes Beyond New Business Models.



**Interaction with  
Customers & Partners**

**New Products &  
Business Models**

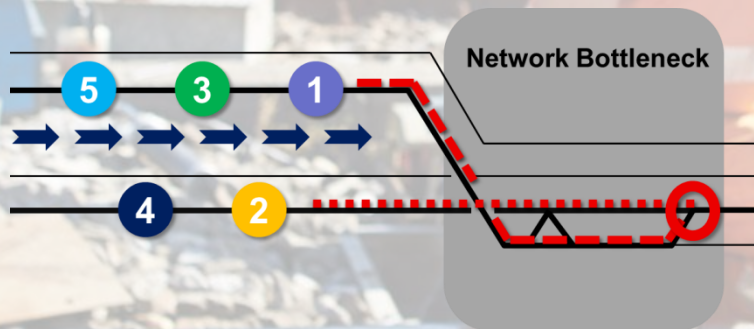
**Capacity  
Management**

**Optimization**

**Chances of the Digital Transformation.**

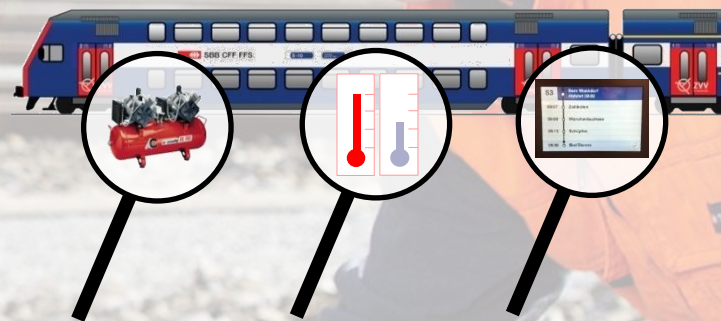
# Increased System Capacity Through Advanced Capacity / Traffic Management Systems.

## Rail Control System Hub Optimization Technology



27% Increase in Capacity.

## Traction Power Network Demand Side Management / Peak Shaving



- 25 MEUR CAPEX  
for Capacity Expansion.

# Interconnection of Infrastructure and Rolling Stock Multiplies the Potential for Optimization.



**Faster. More Comfort.  
Reduction of >70 GWh/a.**

Acceleration Chart without ADL.



Energy Consumption: **350 kWh.**  
Time of Travel **651 s.**

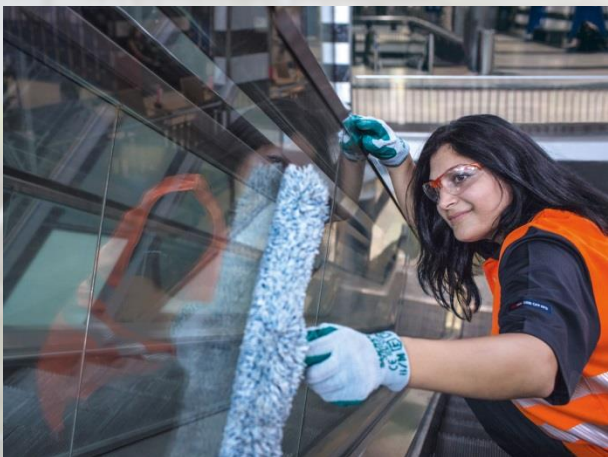
Acceleration Chart with ADL.



Energy Consumption: **204 kWh.**  
Time of Travel: **626 s**

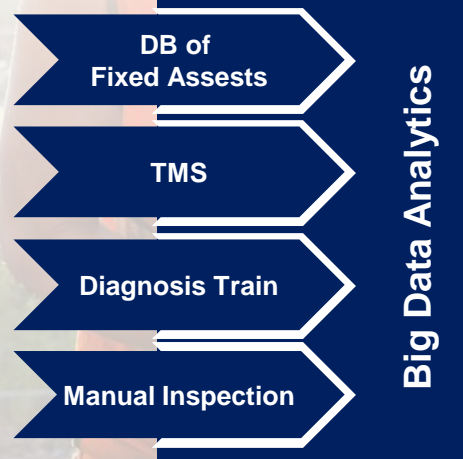
# Increased Efficiency Through Process Support Systems.

## Resource & Information Management System for Field Force Staff.



**>20% Increase in Efficiency.  
30'000+ Devices Deployed.**

## Predictive Maintenance on Railway Infrastructure.



**Predictive Maintenance.  
Service Levels on  
Railway Infrastructure.**

# Access to Public Transportation at Your Fingertip.

Abfahrt Départ Partenza

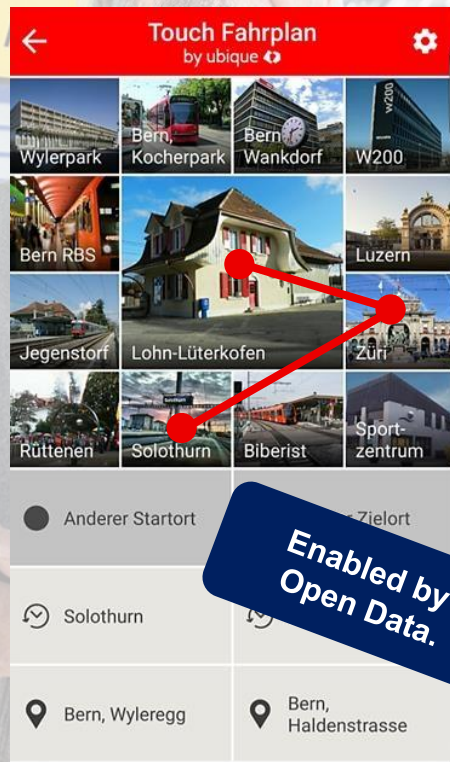


**SwissPass**

**Bürgermeister  
Katrin**

10.04.1969 F  
QYM677  
010-636-393-4

**140+ Companies.  
Revenue Share.**

**Touch Fahrplan**  
by ubique

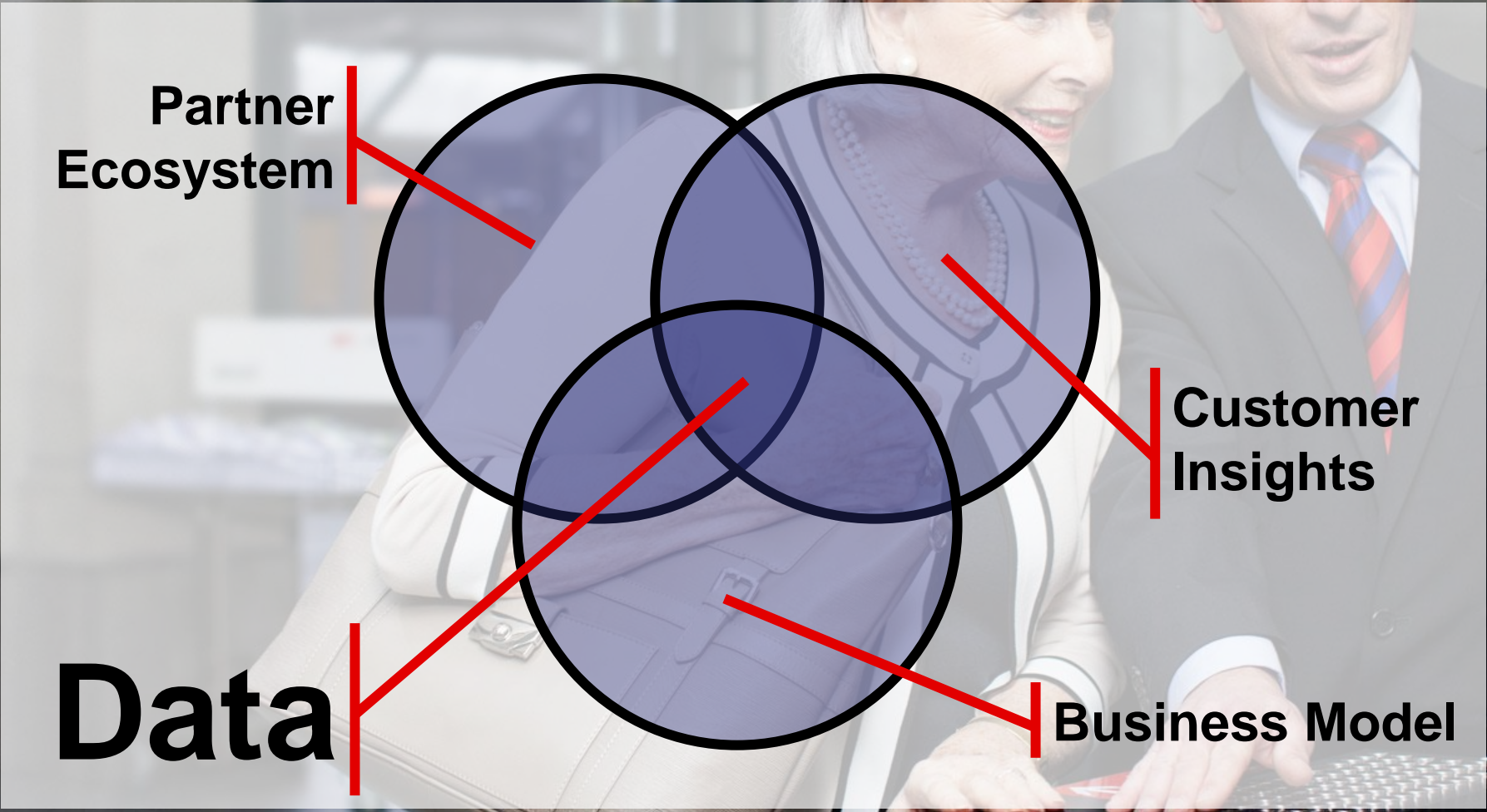
Locations shown: Wylerpark, Bern, Kocherpark, Bern, Wankdorf, W200, Bern RBS, Luzern, Jegenstorf, Lohn-Lüterkofen, Zuri, Rüttenen, Solothurn, Biberist, Sportzentrum.

Startort: Solothurn  
Zielort: Bern, Haldenstrasse

**Enabled by  
Open Data.**



**It's the Data, Stupid.**





# Different Nature of Competition in Different Markets.

## Intermodal Competition.



VS.



Attractiveness &  
Level Playing Field.

## Over the Top Competition.



VS.



Business Model.



# Think Beyond the Railway Track.



**Deep Understanding of the Mobility Needs of Our Customers.**

**Ability to Design the User Experience Across Layers.**

**Expertise on Plan, Build & Run Complex Mobility Systems.**

**Strong Partner Network & Access to Mobility Hubs (Train Stations).**

**Ideal Prerequisites & Plenty of Room to Shape Tomorrow's Joint Mobility Solution.**



**Act Now.**



SBB CFF FFS

 SBB CFF FFS

**Markus Basler**

Senior Consultant  
Strategy & Organizational  
Development

Deputy Head of  
Digital Transformation

**SBB AG**

IT  
Lindenhofstrasse 1 / Worblaufen  
CH-3000 Bern 65, Switzerland

Mobile +41 79 712 42 81  
[markus.basler@sbb.ch](mailto:markus.basler@sbb.ch)

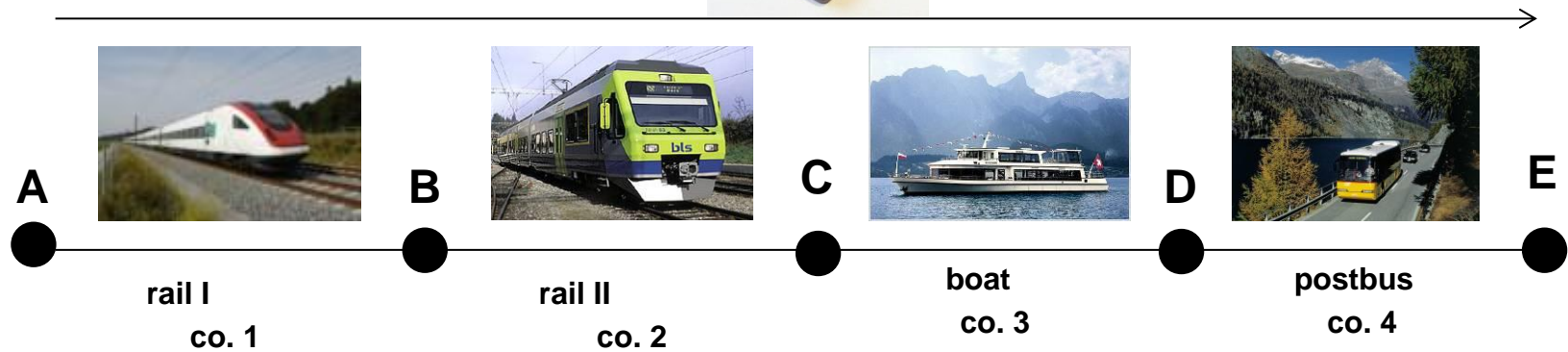
**Get in Touch.**



**Backup.**

# Swiss Ticketing.

*A single key for the entire journey*



## **ONE journey, ONE ticket:**

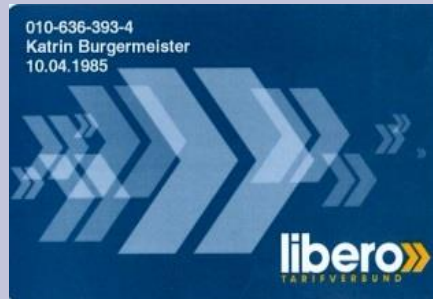
- 140 companies, including SBB, share a common fare system
- 12,740 stops, including 819 SBB stops
- Tickets for each company can be bought at any point of sale
- Revenues are shared.

# Travel cards.

*Strong takeup*



**430,000**  
GA travel cards



**1.3 million regional & point  
to point travel cards**



**2.5 million**  
half-fare travel cards

**1/4 of the population doesn't care  
about tickets for (most) of their trips.**

**2/3 of customers are identifiable and thus accessible  
for personal marketing but also committed to the system.**

# Trends zur individuell begleiteten Mobilitätsträger übergreifenden Reise.

