



FLIX

Data Science at Flix

Daniel Krauss | Co-Founder & CIO at Flix

› Flix SE at a Glance

WE DRIVE SUSTAINABLE AND AFFORDABLE TRAVEL FOR EVERYONE

- › As a global travel-tech company, we are at the forefront of the travel industry revolution
- › We stand for convenient and sustainable travel options via exclusive bus partners and our train operations
- › We are providing an innovative tech platform underlined by an asset-light business model

FLIX



> Flix today in numbers around the world



45

countries



8700+

destinations



25+

offices
globally



5400+

Flix
employees



500m+

passengers since
launch



1000+

operating
partners



4700+

FlixBuses
on the road



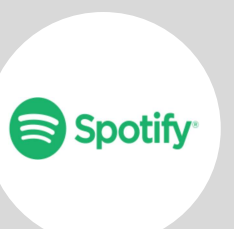
15

FlixTrains
on the rail

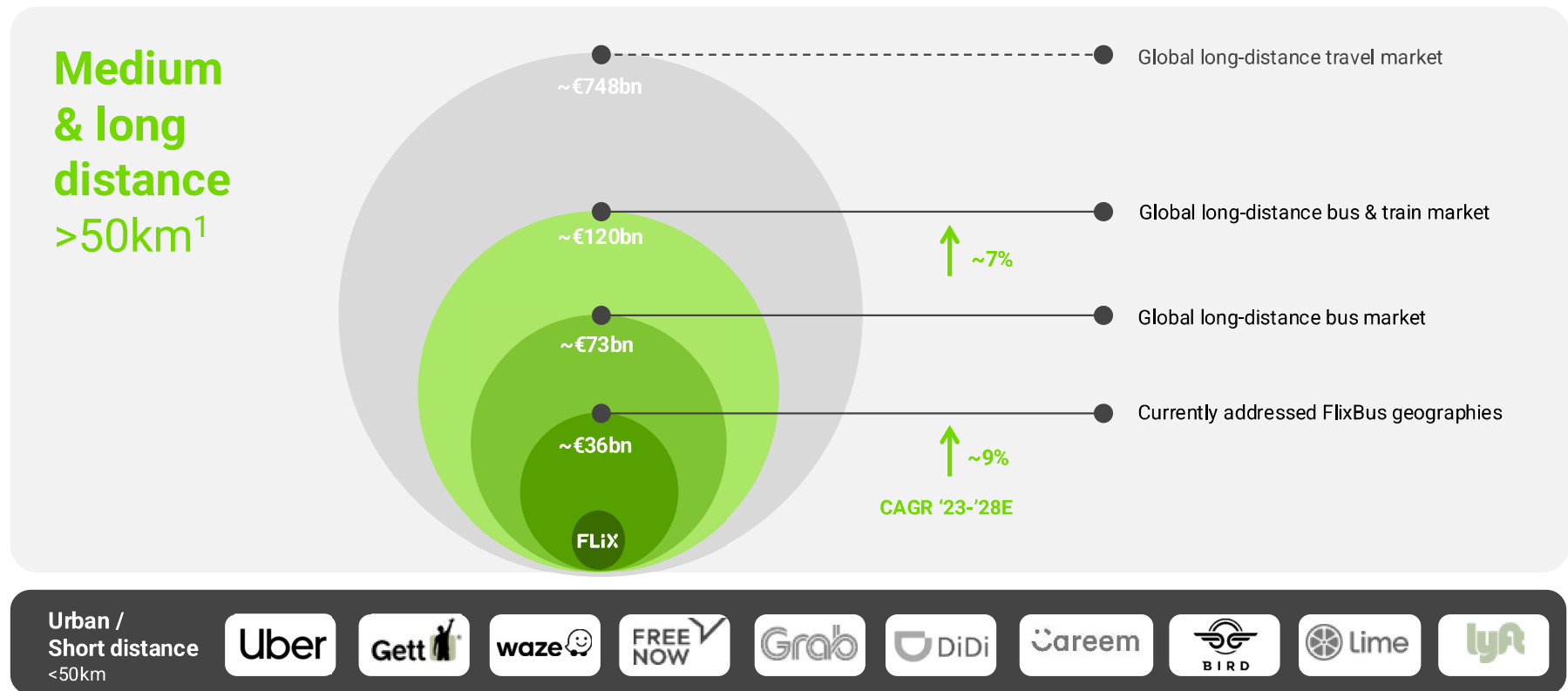
FLIX



➤ Flix is a global category leader in long-distance travel

	Intercity travel	Urban mobility	Accommodation	Music
Global category leaders				
Exclusive supply	✓	×	(✓)	×
Followers	Tech players × Legacy players megabus.com SINDBAD METRO	Tech players lyft DiDi FREENOW Legacy players NYC TAXI TAXI	Tech players Booking.com trivago Expedia Legacy players Hilton MARRIOTT HYATT	Tech players Apple Music deezer amazon music Legacy players SONY MUSIC UNIVERSAL MUSIC WARNER MUSIC GROUP

➤ Flix addresses a vast and expanding market...



› ...which is fueled by strong megatrends



Resilient growth
in travel market

+6%

Average growth p.a. in global travel
activity since 1960



Importance of
sustainable travel

~59%

Of travelers determined
to make more sustainable
travel choices



Decrease in
"car culture"

~12p.p.

Decline in driver licenses among
young adults



High share of online
penetration

~80-85%

Of tickets booked online
in Europe

- › Flix provides an unmatched platform for long-distance travel via exclusive partners



› Flix technology meets partners' operational excellence

FLIX

Supply and demand steering



Network planning



Marketing & web product



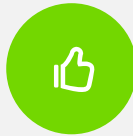
Sales & Shops



Pricing & yield



Operational excellence



Brand & PR

Bus Partners

Drivers and daily operations management



Onboard customer service



Fleet management



Vehicle sourcing & maintenance



Compliance to quality & safety standards



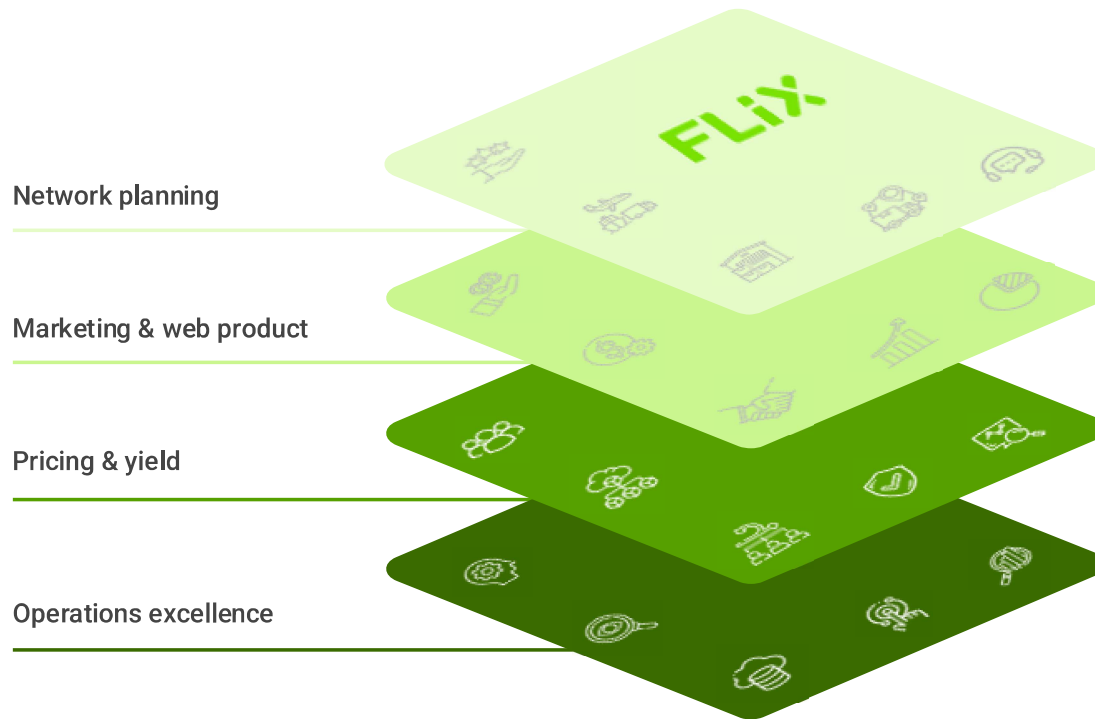
Driver management



Onboarding equipment



› Flix has built a scalable tech stack that is tailor-made to succeed in long-distance travel



FLiX



Demand matching & optimized production



Efficient traveler acquisition & high CLV/CAC



Optimized revenue management



High quality travel experience

Data at Flix



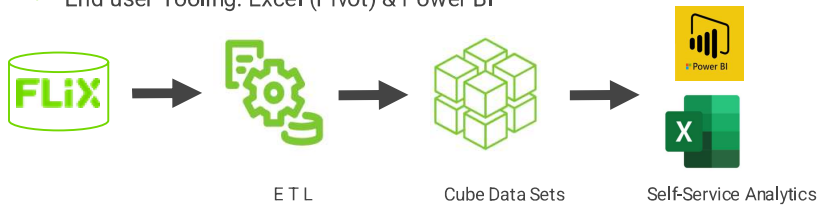
FLiX

› Data at Flix

starting 2014

Simple analytics stack with a focus on Self-Service early on

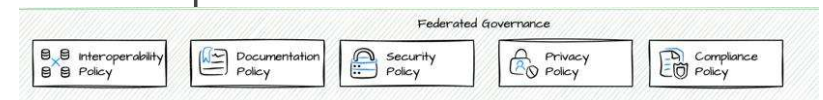
- 2 FTE Team quickly developed in a 5-6FTE Team
- Team BI created Cube Data Sets
- End-user Tooling: Excel (Pivot) & Power BI



2026+

data governance & standardization

- Enhance Snowflake internal Marketplace for standardized Data Products
- Compliance Policies
- Consulting



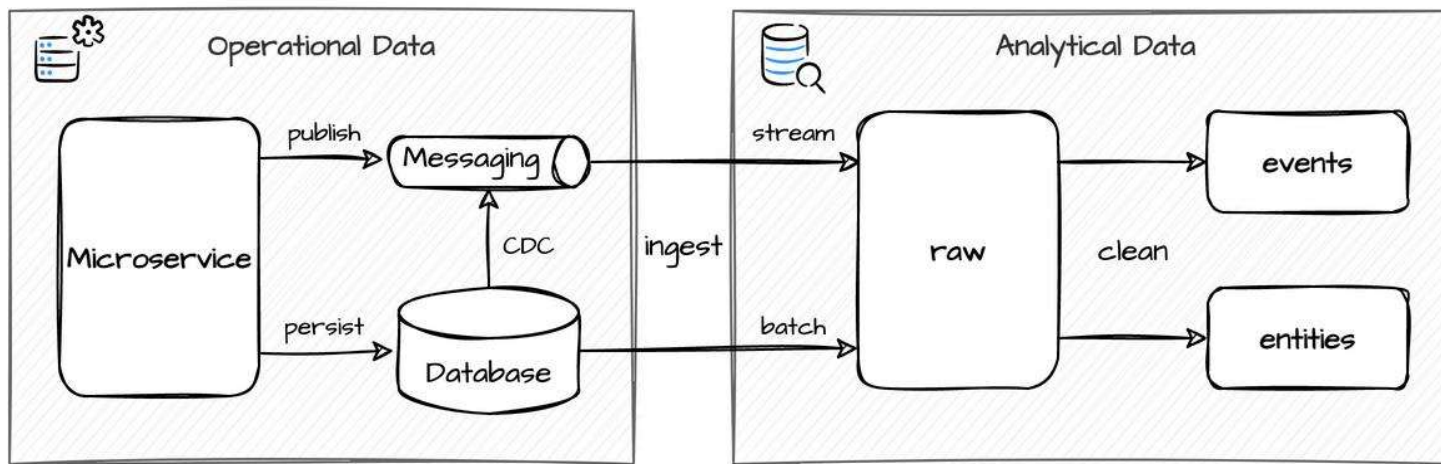
Simple Analytics Stack

Decentralized Data Org & Data Mesh

~2020 Decentralized Data Organization

- Tech Stack: Monolith → Decoupled Services
- Tech People Org: hierarchical → agile teams
- Data: central BI team → decentralized Data-Org

› Data Ingestion and Cleaning

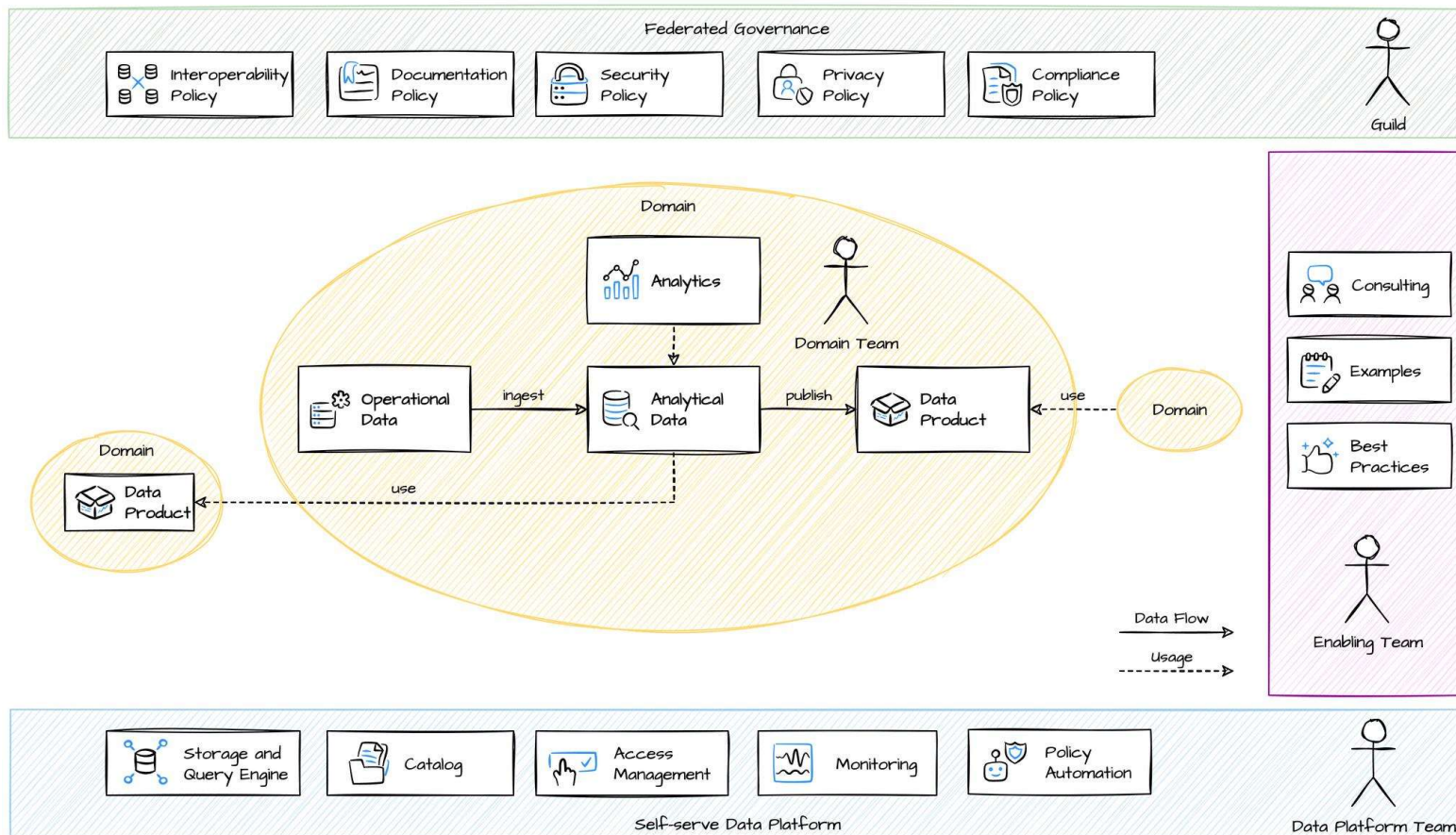


Decoupled services
Monolith
Third Party

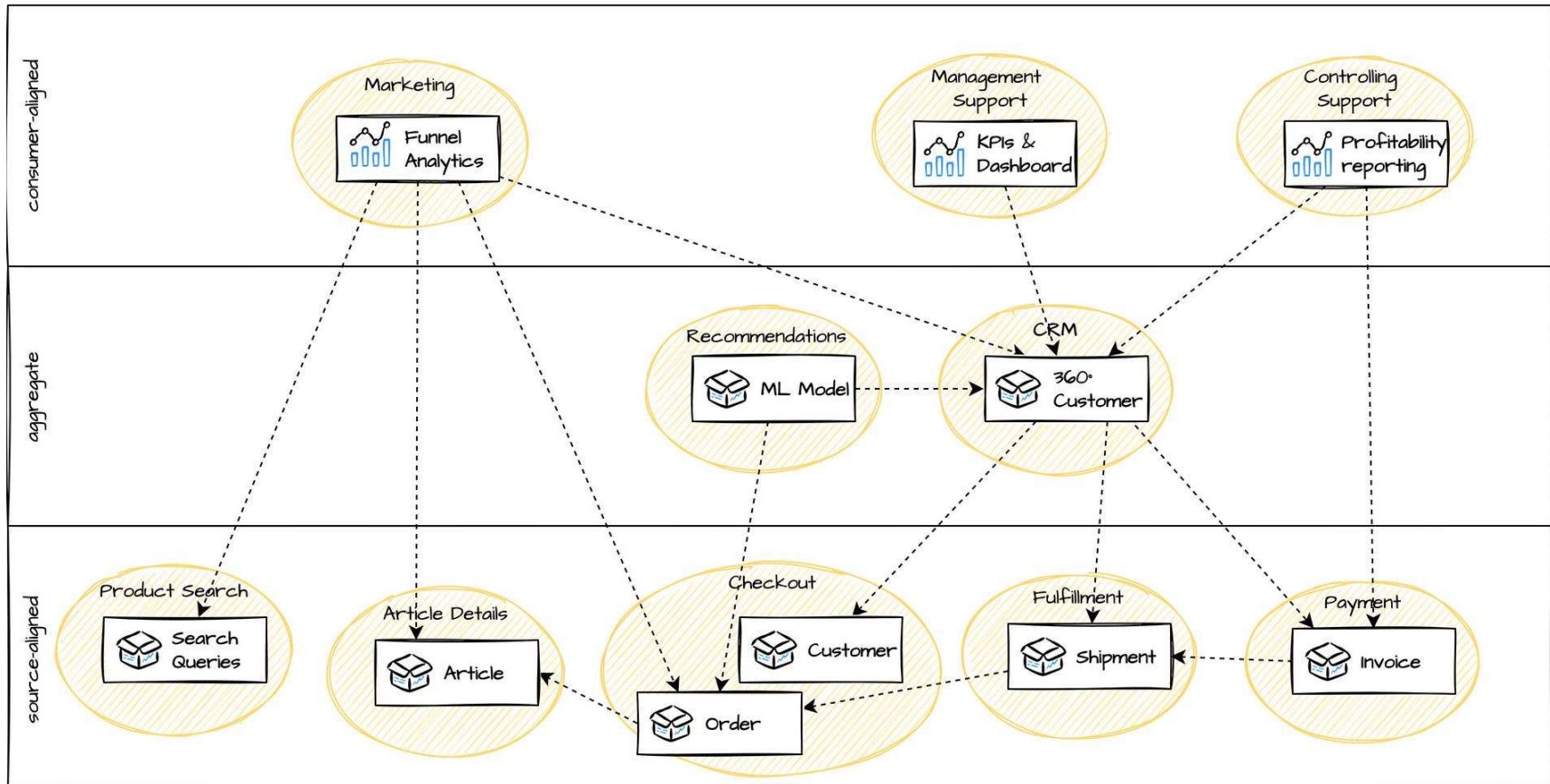


FLiX

› Data Mesh: our data teams transform source data into Data Products



› Data Mesh: mesh of data sets

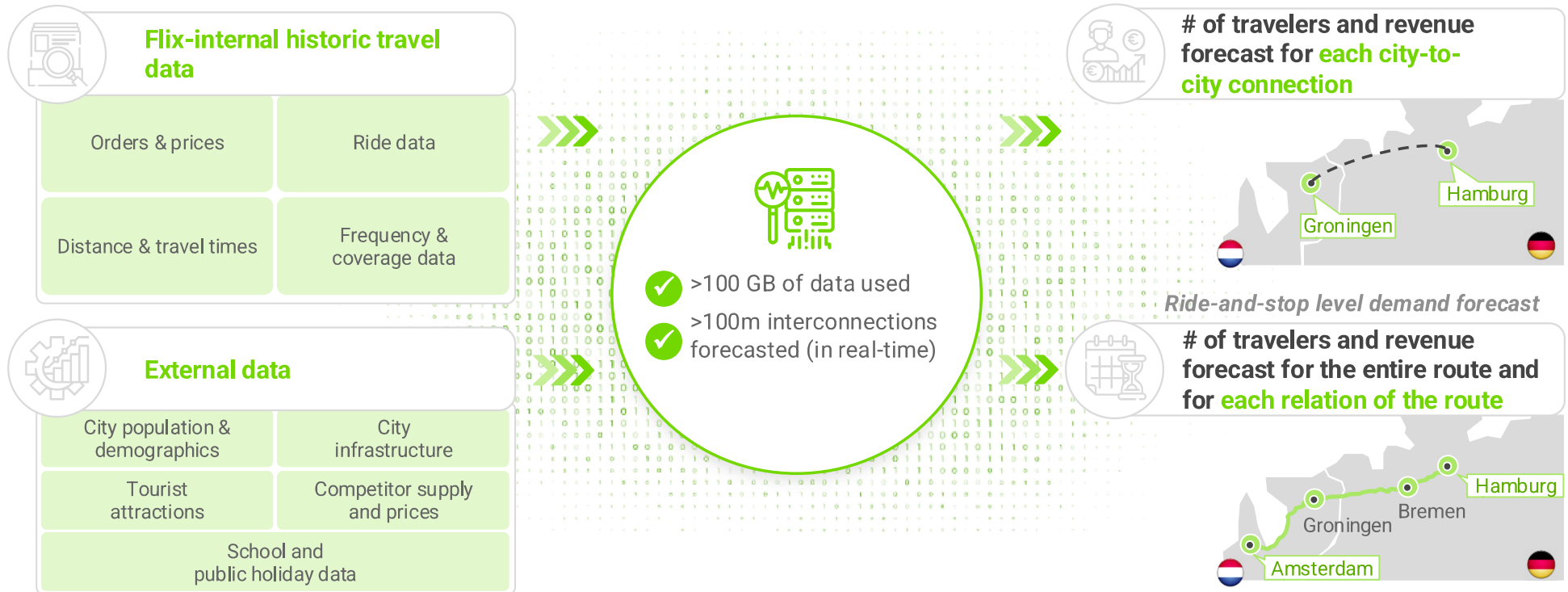


Use Cases



FLiX

› Machine learning allows us to forecast travel demand for all our 5,600+ destinations...



› ...and we tailor our supply to closely match forecasted travel demand patterns



Search and orders data



Competition data



Travel demand forecasts & supply data



Public- and school holidays data



Identification of opportunities
for network improvements



FLiX

Relation overview Deep-Dive

Select your region
Germany Bus

Customize columns

Recommendations

Search

A to b	Recommendations	Total Pax	Ride Count	Optimization potential
All	All	All	All	All
Hamburg – Berlin	Deep dive	200,000	10,000	80%
Hamburg – Copenhagen	Improve weekly curve (3)	40,000	2,500	80%
Hamburg – Amsterdam	Consider growth/ cut (1)	30,000	2,500	70%
Hamburg – Paris		10,000	500	100%
Hamburg – Warsaw		5,000	500	100%
Hamburg – Groningen	Consider growth/ cut (1) Improve daily curve (6)	15,000	3,000	60%
Hamburg – Malmö	Consider growth/ cut (2) Improve weekly curve (3)	5,000	1,000	60%

Illustrative
output
for network
planner¹



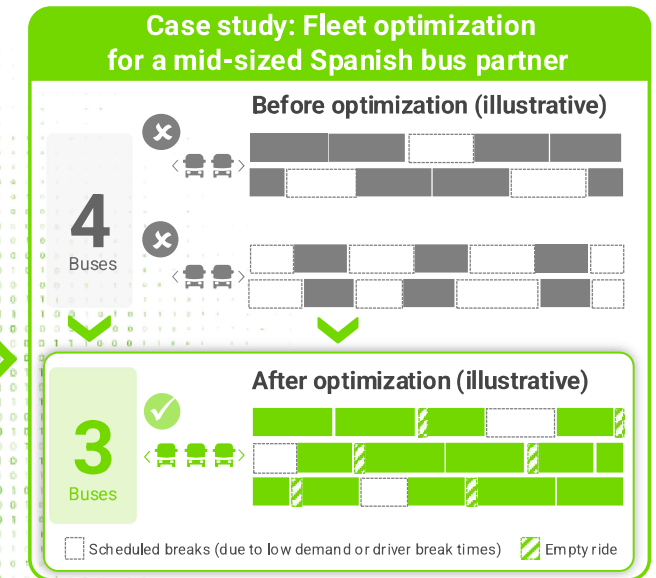
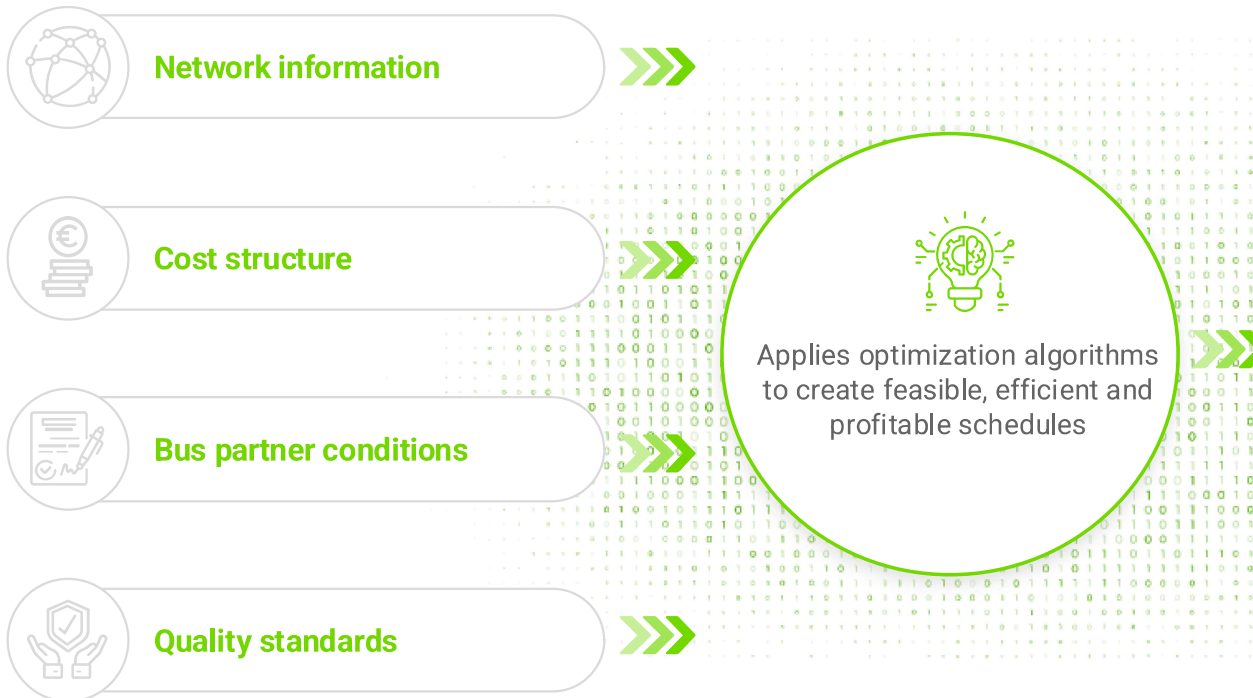
Focus on biggest levers for network optimizations



Actionable recommendations for the network planner

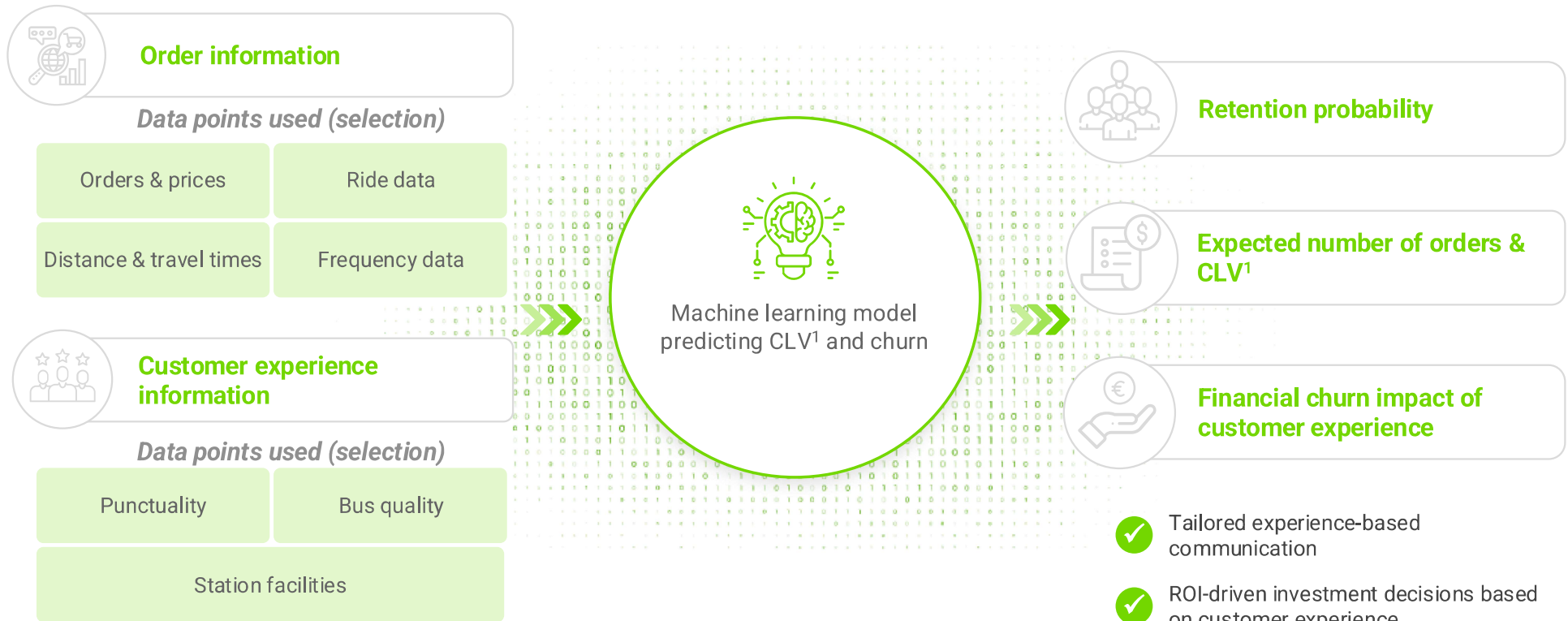
FLiX

› Mathematical optimization drives network profitability



- ✓ Optimized schedules for buses & drivers
- ✓ Increased utilization of vehicles
- ✓ Roll-out to all Flix regions started – savings potential of >70 buses identified

➤ Customer retention can be predicted via machine learning to derive CLV¹ and churn



- ✓ Tailored experience-based communication
- ✓ ROI-driven investment decisions based on customer experience

› Our proprietary data-driven pricing engine allows for optimal revenue management



¹ Refers to the total number of seats that are on sale in the whole Flix network counting each segment individually.

FLiX

**Build for
generations**



FLiXBUS

FLiXTRAIN



KÂMİL KOÇ¹⁹²⁶