

BridgeRoute Pro

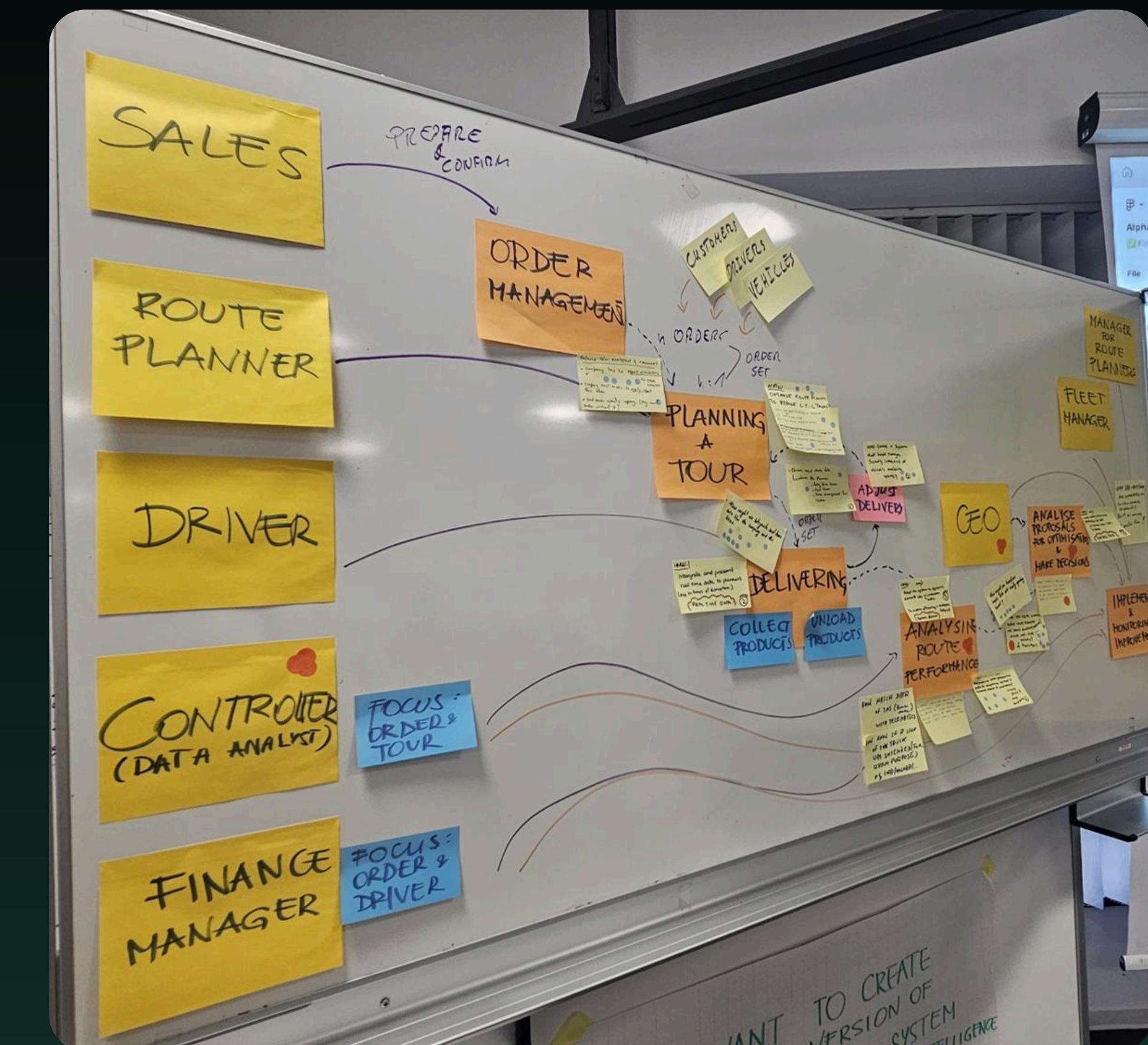
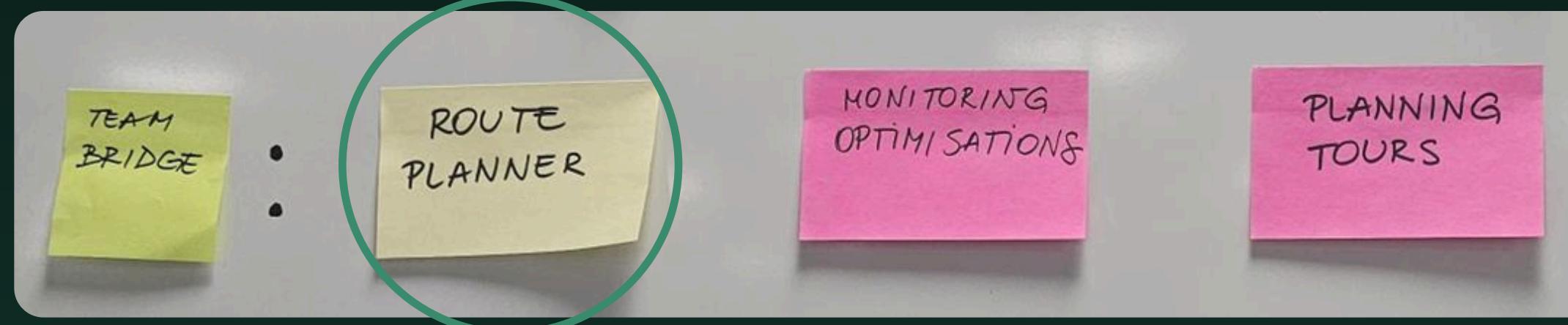
We are the bridge to your new paths



The Challenges of Route Optimization

How might we optimize route planning to

- Reduce Less-Than-Truckload (LTL) shipments?
- Optimize fuel consumption?
- Reduce CO₂ emissions ?
- Ensure that ETA targets are met?



The User



Route planners—*the magicians behind the board*

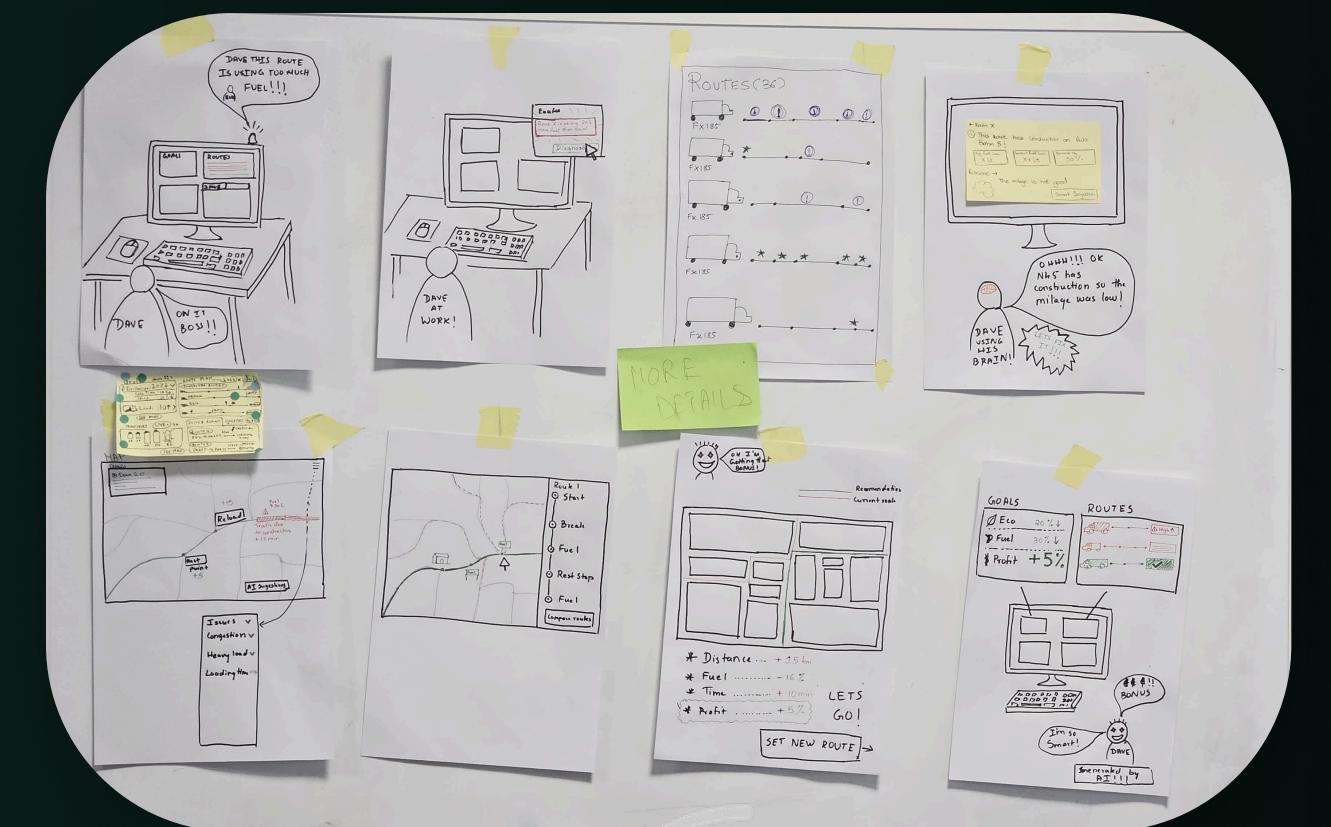
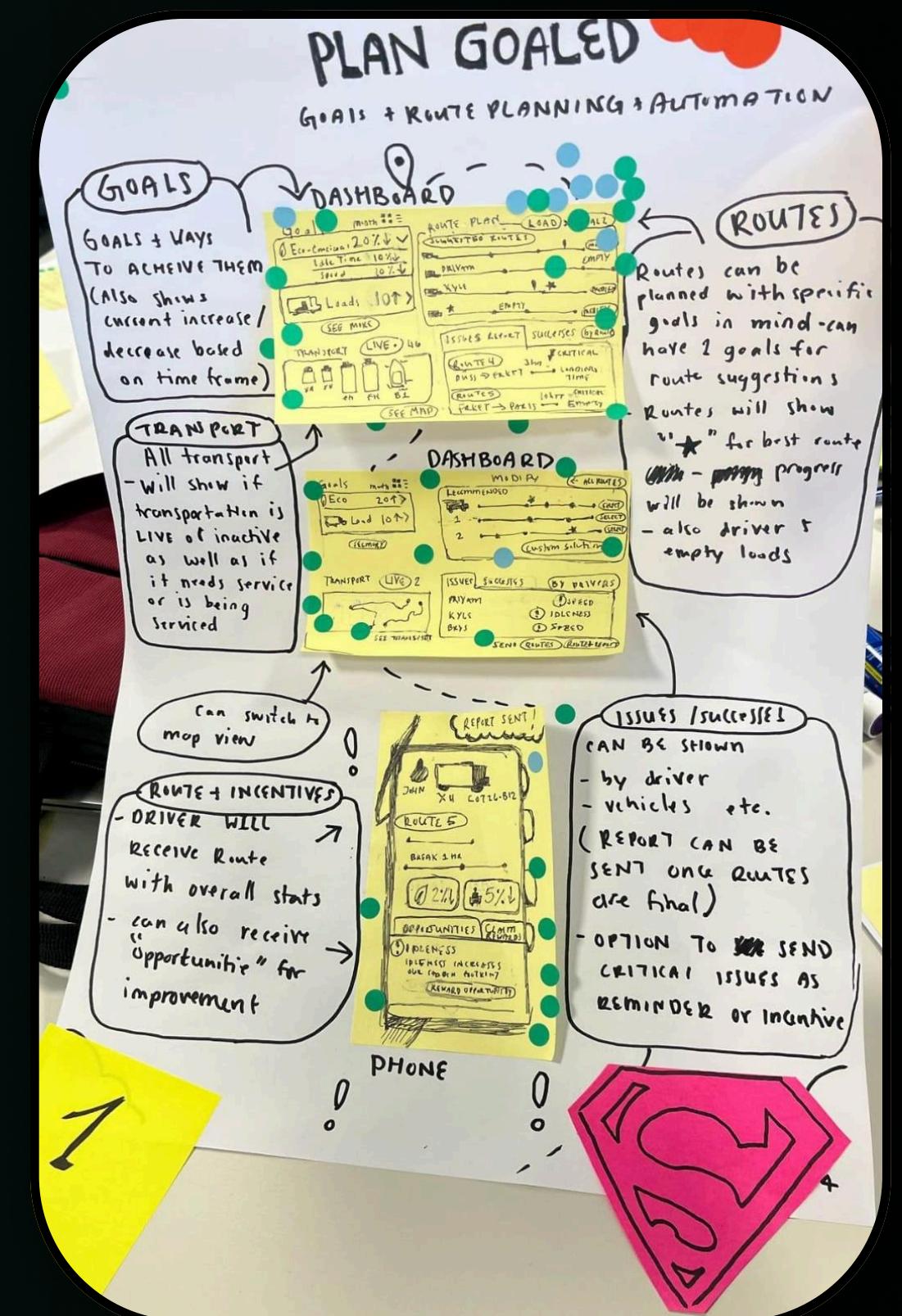
Goals

- Optimize on-time and accurate deliveries
- Maximize truck load efficiency (FTL > LTL)
- Reduce fuel and route costs
- Propose efficient solutions

Pain points

- Incomplete or late shipment data
- Last-minute changes and delays
- Manual planning tools and processes
- Pressure to cut costs without compromising service

The Evolution of a Solution



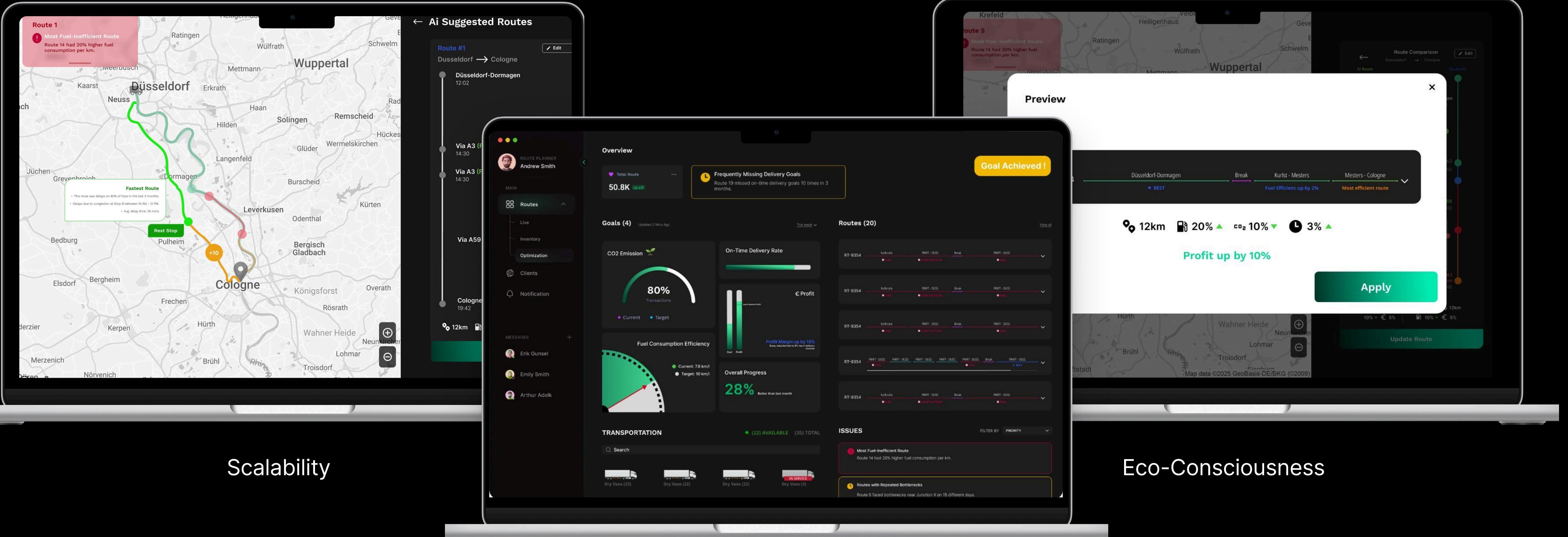
Storyboard

Ideation

Assets and data

Six steps

Sketch



Scalability

Optimization

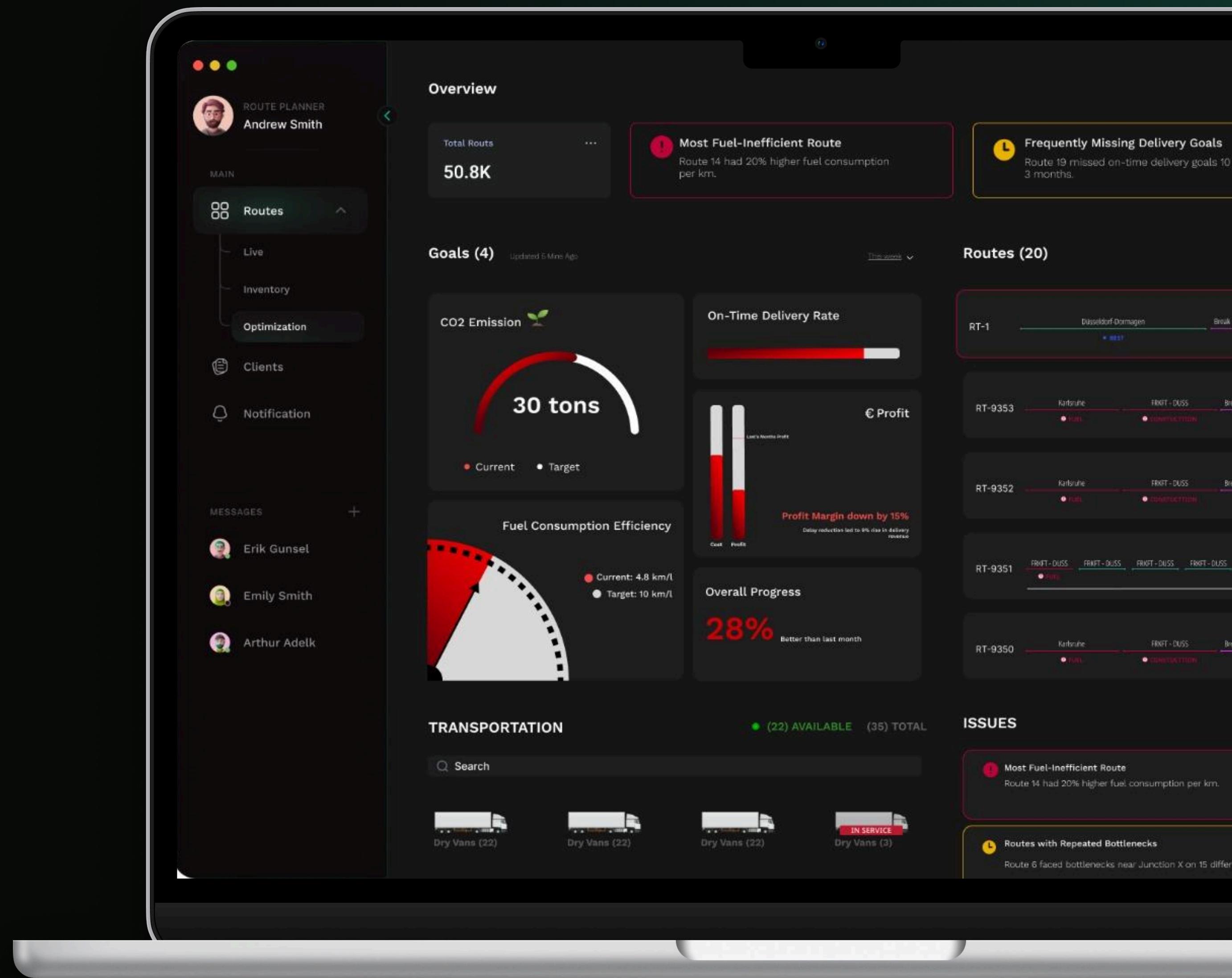
AI Support

Eco-Consciousness

Vision & Concept

Prototype Design

Logistics dashboard that focuses on goals, AI support, automation, and optimization.



ROUTE PLANNER
Andrew Smith

MAIN

Routes

Live

Inventory

Optimization

Clients

Notification

MESSAGES

Erik Gunsel

Emily Smith

Arthur Adelk

Overview

Total Routs 50.8K

Most Fuel-Inefficient Route: Route 14 had 20% higher fuel consumption per km.

Frequently Missing Delivery Goals: Route 19 missed on-time delivery goals 10 times in 3 months.

Goals (4)

Updated 5 Mins Ago

This week

View all

CO2 Emission 30 tons

Current: 30 tons Target: 30 tons

On-Time Delivery Rate

€ Profit

Profit Margin down by 15%

Cost Profit

Overall Progress 28%

Better than last month

TRANSPORTATION

(22) AVAILABLE (35) TOTAL

Search

Dry Vans (22)

Dry Vans (22)

Dry Vans (22)

Dry Vans (3) IN SERVICE

Routes (20)

RT-1 Düsseldorf-Dortmagen Break Dortmund - Worringen Worringen - Cologne * BEST FUEL CONSTRUCTION

RT-9353 Karlsruhe FRKFT - DUSS Break FRKFT - DUSS FUEL CONSTRUCTION

RT-9352 Karlsruhe FRKFT - DUSS Break FRKFT - DUSS FUEL CONSTRUCTION

RT-9351 FRKFT - DUSS FRKFT - DUSS FRKFT - DUSS FRKFT - DUSS Break FRKFT - DUSS * BEST FUEL CONSTRUCTION

RT-9350 Karlsruhe FRKFT - DUSS Break FRKFT - DUSS FUEL CONSTRUCTION

ISSUES

Most Fuel-Inefficient Route: Route 14 had 20% higher fuel consumption per km.

Routes with Repeated Bottlenecks: Route 6 faced bottlenecks near Junction X on 15 different days.

Krefeld

Route 1

! Most Fuel-Inefficient Route
Route 14 had 20% higher fuel consumption per km.

Usage frequency : High
Revenue Contribution: 5%
Average Litres Burned: 20%
Impact on Fleet: High
CO2 Emission Per Trip: 100KT

CO₂ 20% ▲ 12km 10% ▲ € 5% ▲

Düsseldorf

Frequent Delay on this route
This node saw delays on 80% of trips in the last 3 months.
Avg. delay time: 25 mins

Driver Break
This node saw delays on 80% of trips in the last 3 months.
Delays due to congestion at Stop B between 10 AM - 12 PM.
Avg. delay time: 25 mins

Cologne

Map data ©2025 GeoBasis-DE/BKG (©2009)

Timeline View

← Timeline View

Route #1
Düsseldorf → Cologne

Düsseldorf-Dormagen 12:02

Dormagen, Break 14:30-15:00

Via A3 15:00

High Traffic Area (Fuel Efficiency Dropped by 12%)

Via A59 18:59

Cologne (Total Fuel Efficiency dropped by 6%) 19:42

12km 20% ▲ 10% ▼ € 3% ▲

Optimize Route >

Krefeld

Route 1

! Most Fuel-Inefficient Route
Route 14 had 20% higher fuel consumption per km.

Düsseldorf

Wuppertal

Neuss

Dormagen

Leverkusen

Cologne

Rest Stop

+10

Fastest Route

- This node saw delays on 80% of trips in the last 3 months.
- Delays due to congestion at Stop B between 10 AM - 12 PM.
- Avg. delay time: 25 mins

Map data ©2025 GeoBasis-DE/BKG (©2009)

← Ai Suggested Routes

Route Comparison Düsseldorf → Cologne

AI Route

Düsseldorf

Dormagen 13:02

VIA A3 12:02

VIA A59 12:02

Route 543 Intersection 12:02

Route #5

Düsseldorf

Dormagen 13:02

VIA A3 12:02

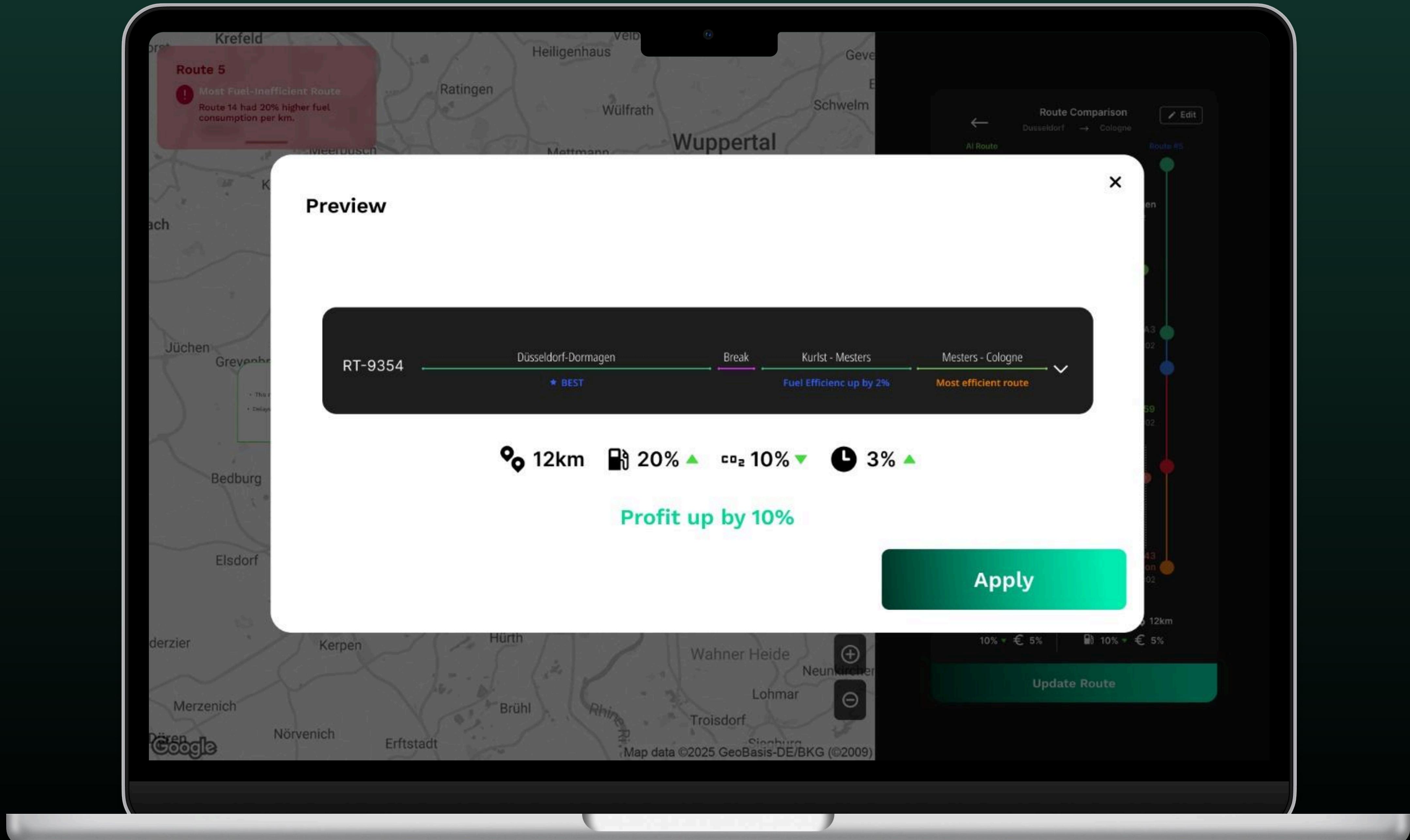
VIA A59 12:02

Route 543 Intersection 12:02

20% ↑ 13km | 20% ↑ 12km

10% ↓ € 5% | 10% ↓ € 5%

Update Route



ROUTE PLANNER
Andrew Smith

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Overview

Total Routes: 50.8K (28.4%)

Frequently Missing Delivery Goals: Route 19 missed on-time delivery goals 10 times in 3 months.

Goal Achieved!

Goals (4)

Updated 5 Mins Ago

This week

View all

CO2 Emission 80% Transactions

On-Time Delivery Rate

€ Profit

Fuel Consumption Efficiency Current: 7.8 km/l Target: 10 km/l

Overall Progress 28% Better than last month

TRANSPORTATION

(22) AVAILABLE (35) TOTAL

Search

Dry Vans (22)

Dry Vans (22)

Dry Vans (22)

Dry Vans (3) IN SERVICE

Routes (20)

RT-9354 Karlsruhe → FRANKFURT - DÜSSEN Break FRANKFURT - DÜSSEN

RT-9354 Karlsruhe → FRANKFURT - DÜSSEN Break FRANKFURT - DÜSSEN

RT-9354 Karlsruhe → FRANKFURT - DÜSSEN Break FRANKFURT - DÜSSEN

RT-9354 FRANKFURT - DÜSSEN → FRANKFURT - DÜSSEN → FRANKFURT - DÜSSEN Break FRANKFURT - DÜSSEN

RT-9354 Karlsruhe → FRANKFURT - DÜSSEN Break FRANKFURT - DÜSSEN

ISSUES

FILTER BY PRIORITY

Most Fuel-Inefficient Route: Route 14 had 20% higher fuel consumption per km.

Routes with Repeated Bottlenecks: Route 6 faced bottlenecks near Junction X on 15 different days.

User Feedback & Learnings | Insights

Route Planning

The information has to be relayed to the drivers and implemented by the drivers

On Time Delivery

Companies want to see information about the trucks and delivery details in their own systems

Factors Impacting Costs

Delivery and wait times for any trip, working time of the companies so that the deliveries are made before the end of the day and toll costs

Next steps



- Test prototype with actual route planners
- Gather insights on route editing & predictive comparisons

- Collect real-time feedback from drivers & field teams
- Identify friction points and route planning gaps

- Fuel Consumption Alerts: Highlight inefficiencies directly in the UI
- Efficiency Indicators: Show cost & time metrics per truck
- Smart Rerouting: Improve decision support through data-driven iterations

- Turn field data into actionable intelligence
- Continuously evolve the system to meet real-world demands

The Team



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