



AI-Driven Fare Evasion Prediction for Smarter, Targeted Inspections

Vy @ Transport Ticketing Global

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Agenda

1. Introduction to Vy
2. Background and Context
3. Project Description and Timeline
4. The Solution
5. Effects





Vy is the largest land-based transport group in the Nordic region



Train

Local, regional, intercity and airport express trains



Bus

Norway's largest bus company



Freight

Norway's largest freight operator on rail



Train

2 720 employees
Revenue: 8 531 MNOK



Bus

8 273 employees
Revenue: 9 564 MNOK



Freight

489 employees
Revenue: 1 371 MNOK

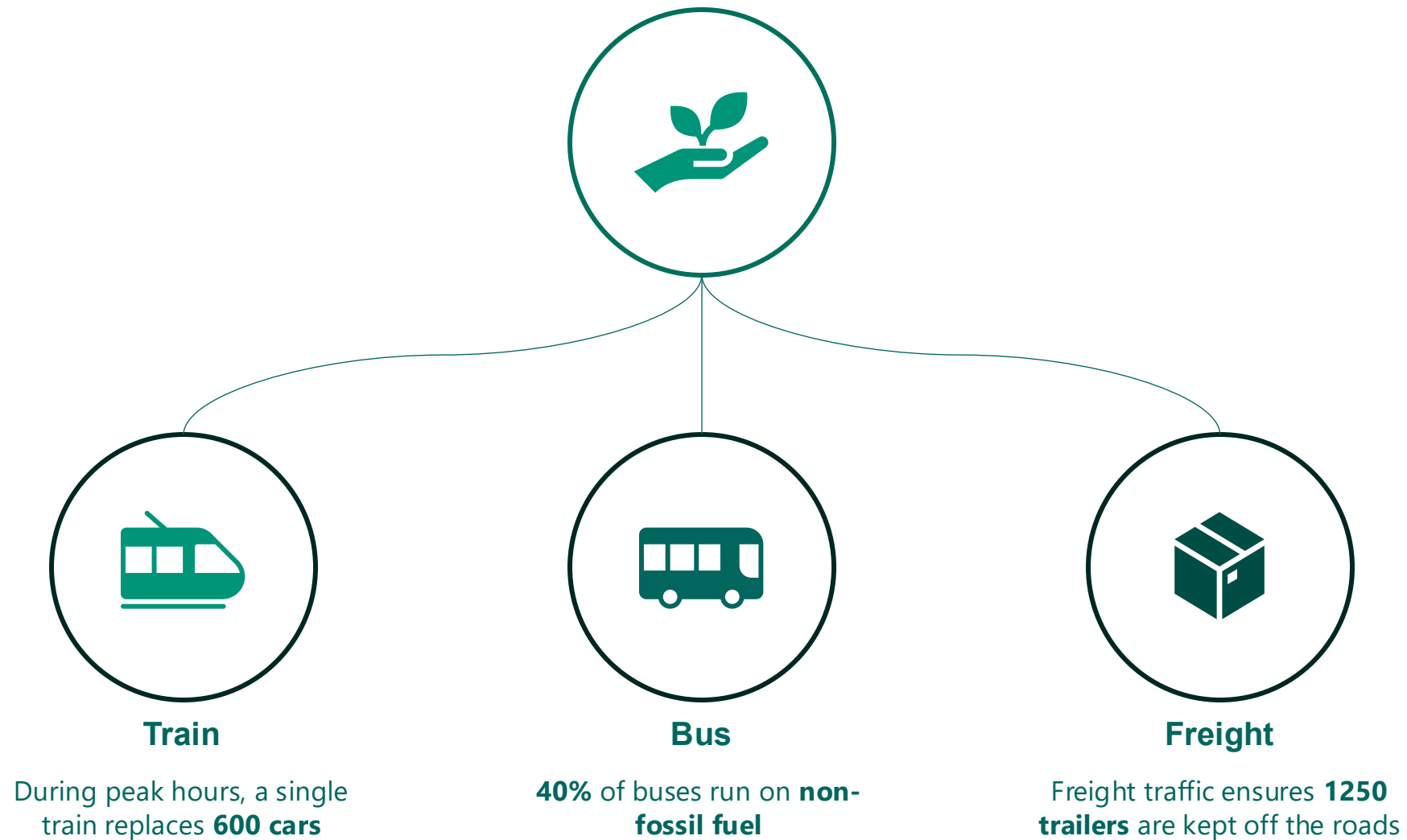


Airport Express Train

356 employees
Revenue: 1 068 MNOK



Norway aims to reduce greenhouse gas emissions in the transport sector in half by 2030



Background and Context

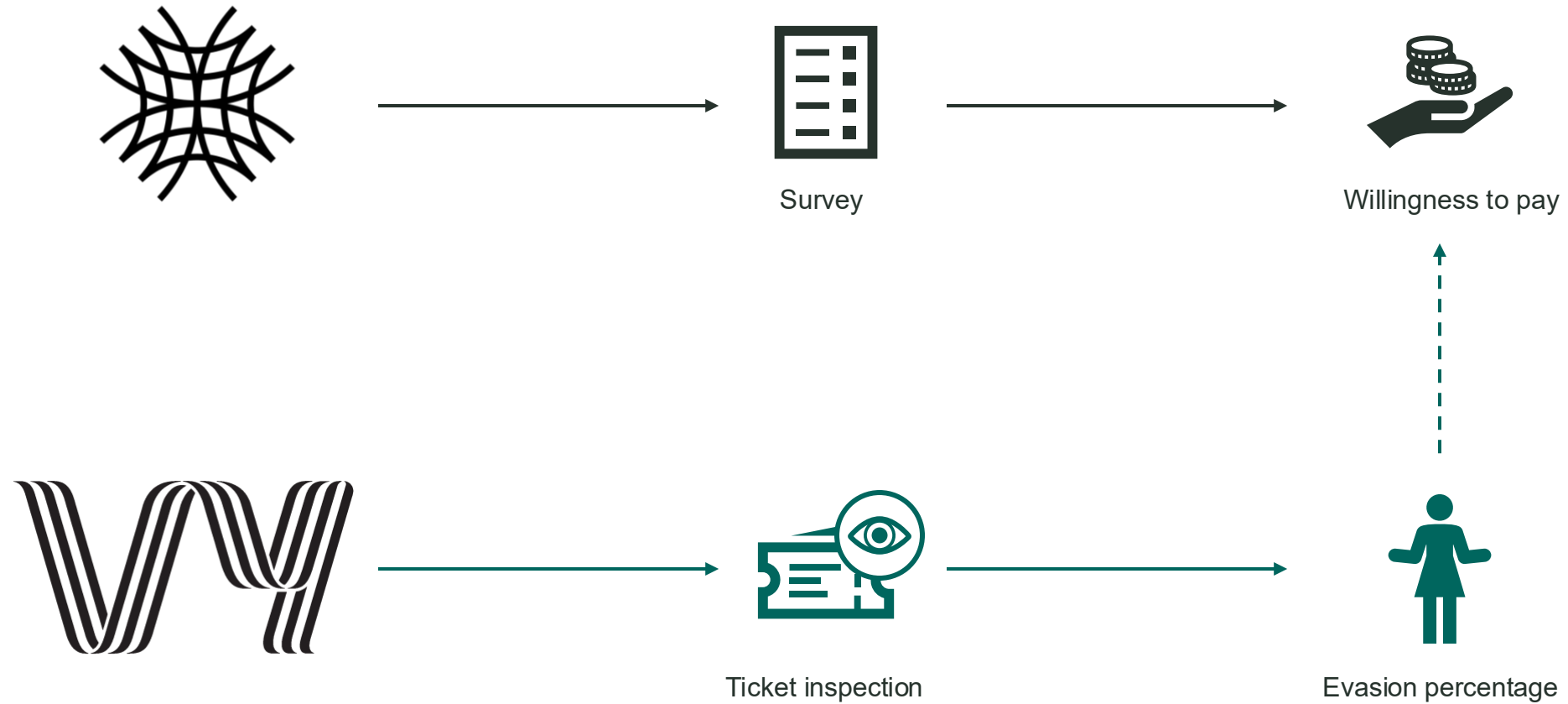
Operational Model



Operational Model



Operational Model

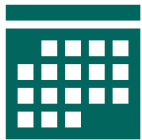


Project Description and Timeline

Project Description



Local trains



Historical data from ticket inspections

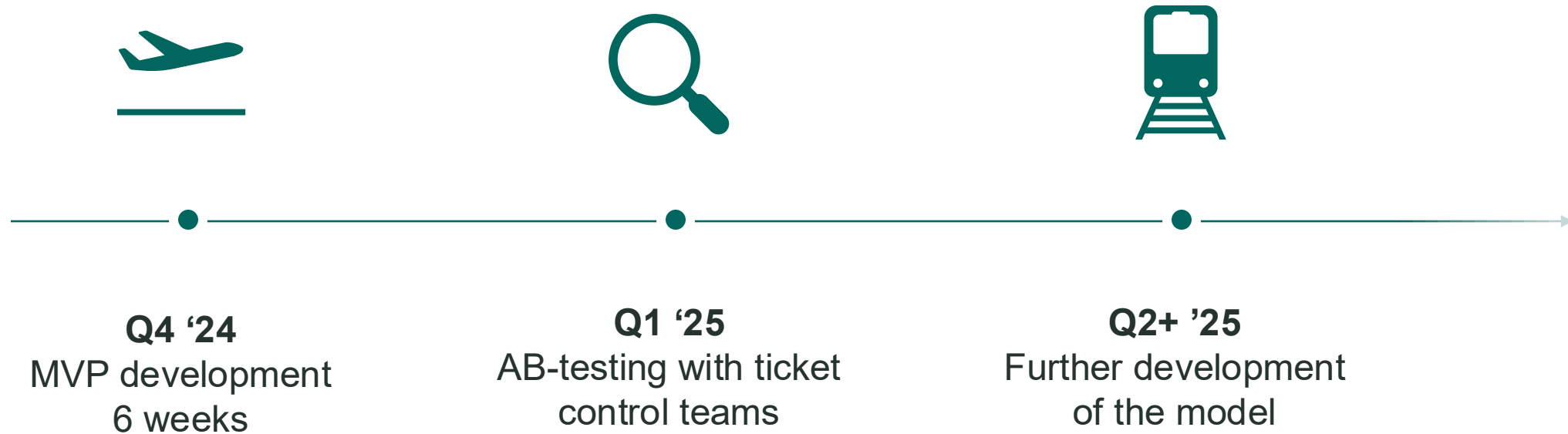


Likelihood of evasion above threshold



Recommendation to inspect or not inspect

Timeline



Timeline



Q4 '24

MVP development 6 weeks



Test for case-specific value



Key constraint

Timeline



Q1-Q4 '25

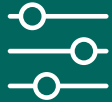
AB-testing with ticket control teams



Collect feedback



User adoption



Limited exploration of new segments

Timeline



Q4+ '25

Model refinement & scaling



Incorporate operational feedback



Improved dialogue with users



Version 2 deployed (February 2026)



Going forward

The Solution



The prediction model



Leg



Time of day



Date



Traveler statistics



High evasion alert

How are the predictions utilized



Prediction model



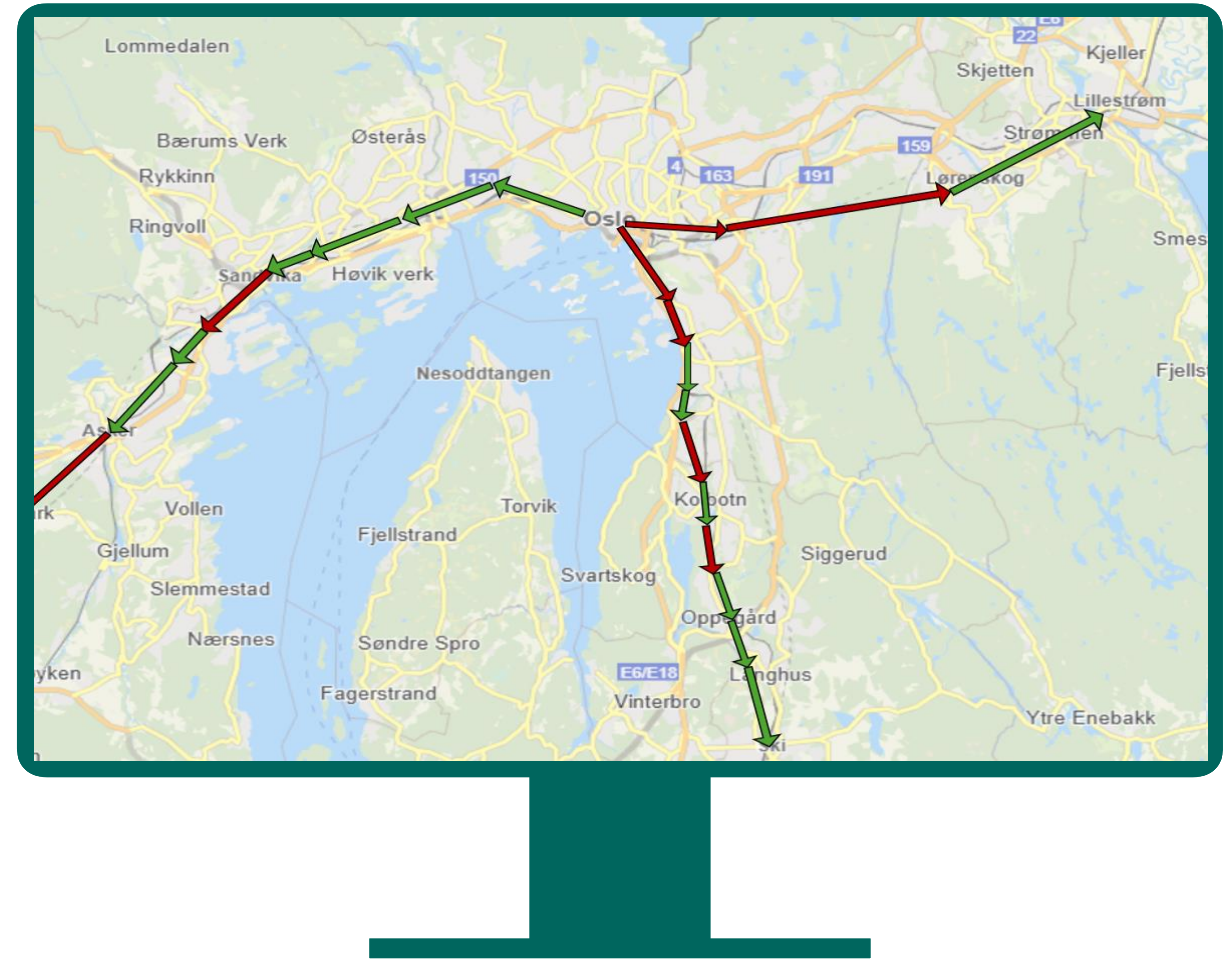
User interface

Operational Risk Dashboard

Illustrative interface using simulated data

Predicted Fare Evasion Risk – Outbound from Oslo

- Low risk
- High risk



How are the predictions utilized



User interface



Inspection team

How are the predictions utilized

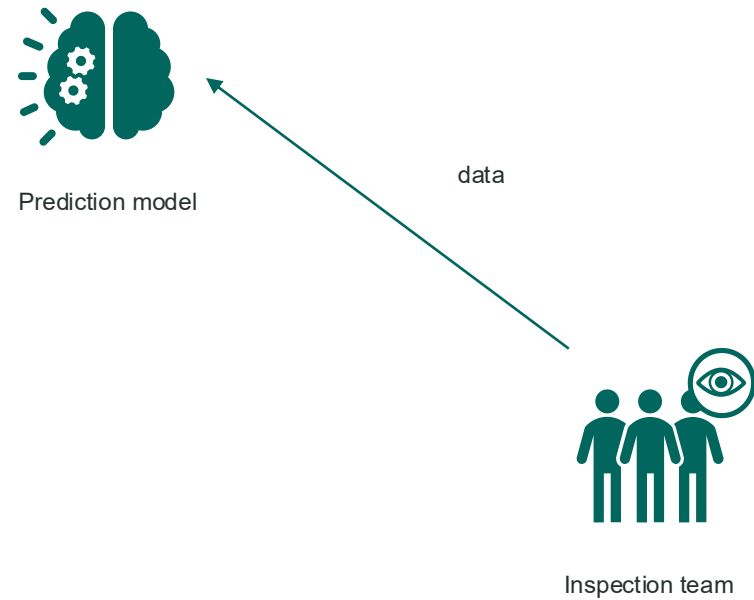


Inspection team

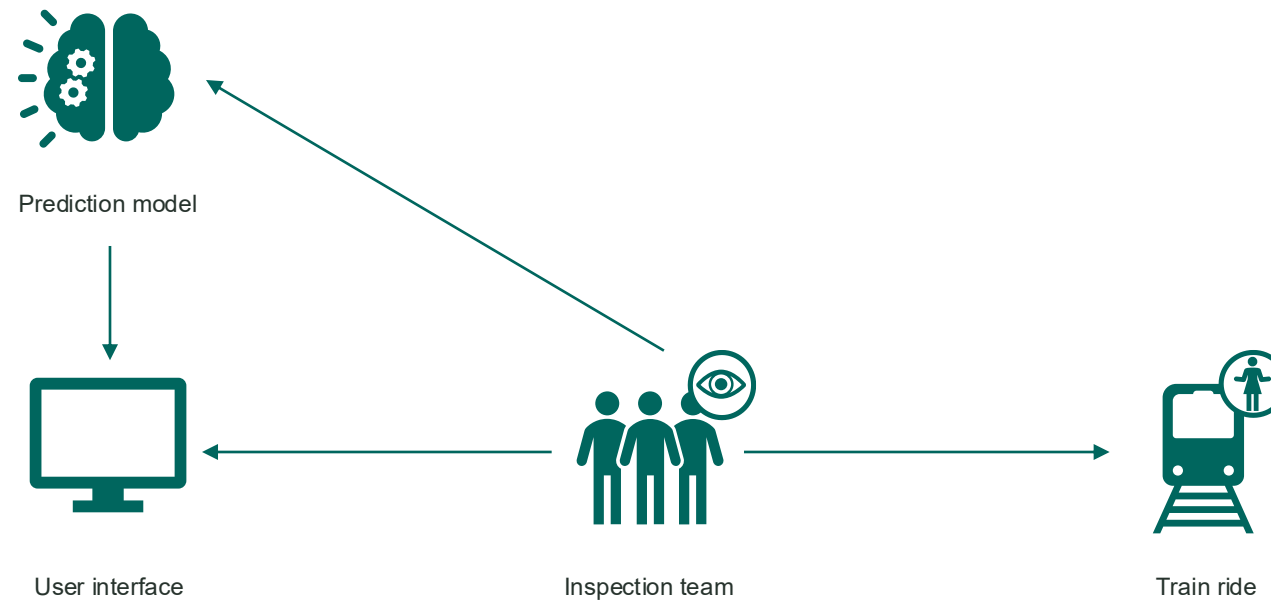


Train ride

How are the predictions utilized



How are the predictions utilized



Effects

Effects/wins – Positive benefits



Increased
detection of fare
evasion



Systematic, risk-
based approach



Improved data
quality and
data volume