POLIS | ANNUAL CONFERENCE 2023
CITIES AND REGIONS FOR TRANSPORT INNOVATION
LEUVEN, BELGIUM · 29-30 NOVEMBER 2023

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leuven

Competence node

Ideas — Inspiration — Networks — Increased ambition — Support — Capability

Projects

Idea — Pre-study — Lab — Test and demo

International engagement

SME-platform — EU financing — Increased global marketshare

Program management

Business intelligence — Engaged partners, board and program office — Shared innovation agenda
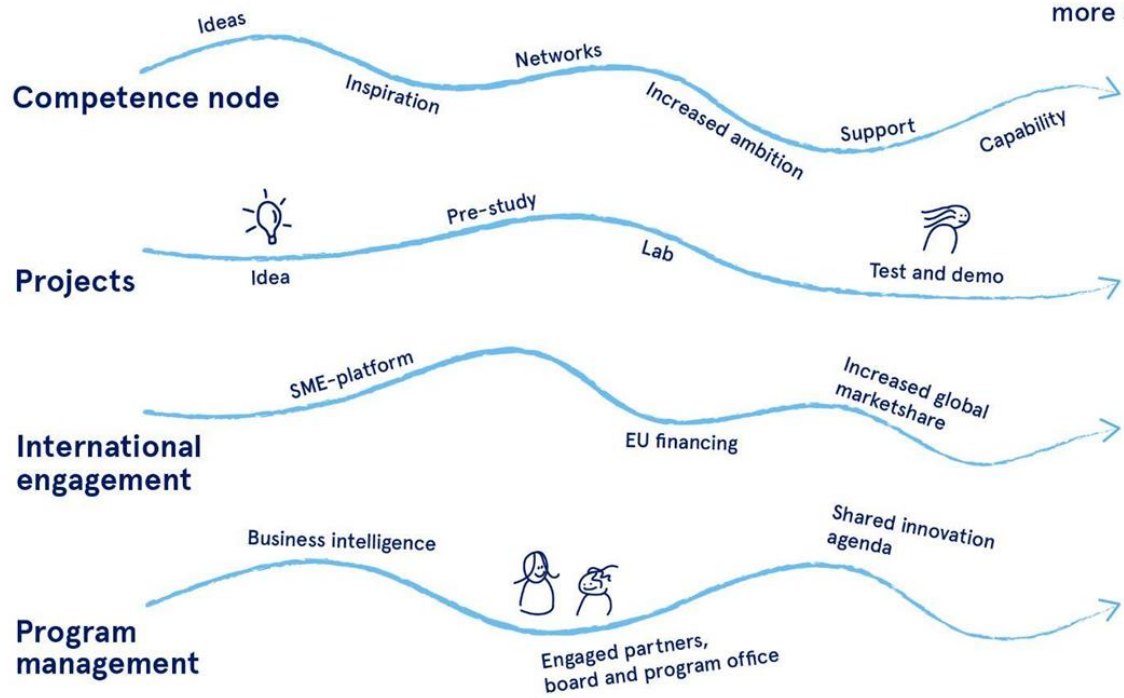
Sweden takes a leading role in leveraging digital technologies to shape more sustainable transportation systems.

Digital technologies are applied to optimize the utilization of vehicles and infrastructure.

Access to sustainable mobility is improved for both people and goods.

Environmental performance and traffic safety improved at the system level, thanks to digital technology and services.

Swedish automotive and ICT industries remain strong and competitive.

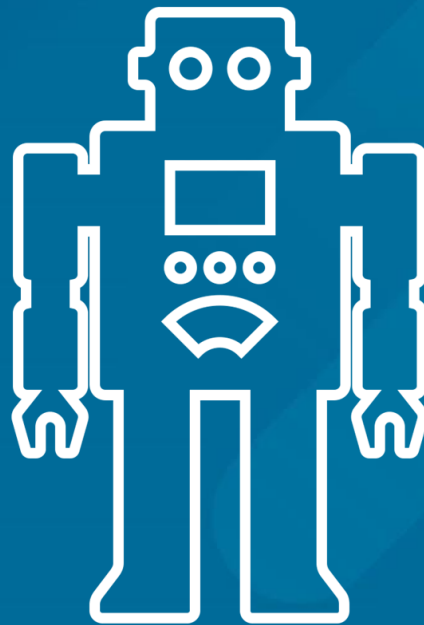The mobility service market has been expanded with new types of actors.

DRIVE SWEDEN

Group 1 (Authorities):
TRAFIKVERKET · Statens vegvesen · TRANSPORTSTYRELSEN

Group 2 (Automotive/OEM):
2getthere A COMPANY OF ZF · auvetech · CEVT · CLEAN MOTION · easymile · einride · Koenigsegg · LYNK & CO · navya · 新石器无人车 NEOLIX · NEVS · next · ohmio · Polestar · SCANIA · TOYOTA · VOLKSWAGEN GROUP SVERIGE AB · VOLVO · VOLVO

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Group (consultants):
AFRY · ARTHUR D LITTLE · ATKINS · beta mobility · ch2m · blue advisory group · EY Building a better working world · Deloitte · FEV · FORTOS · Norconsult · RAMBØLL · Sustainable Innovation · SWECO · triathlon triathlon group · Trivector · WSP

Telecom:
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ASTAZERO ACTIVE SAFETY TEST AREA · ICEMAKERS True testing since 1973

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DRIVE SWEDEN

THE TRAIN BRAIN

AI accelerates sustainable mobility

CHANGE HOW PEOPLE MOVE AROUND

Division of labour between man and machine

Crowd Analytics

Snapshots:

Positions by the hour
Resolution: 35 football fields

Introducing a new way of refining Mobile Network Positioning Data

Crowd Analytics
Snapshots:
Positions by the hour
Resolution: 35 football fields

Movement Analytics
Animation:
Positions by the minute
Resolution: 1/2 penalty box

INDIVIDUAL | COORDINATE | TIME

In what way does this help us accelerate the transition to sustainable mobility?

CHANGE HOW PEOPLE MOVE AROUND

Not only Origin-Destination Matrix – But also open ended movement analysis

UNDERSTAND MOVEMENT TO AND FROM <u>ONE</u> LOCATION

- How many? Where do they live/work?
- Where did they go to next? By which means of transportation?

FOLLOW UP INITIATIVES WHEN REDUCING CAR TRAFFIC

- How is restricting cars affecting ease of access to the area?
- Changes in types of visit (work, resident, passing through)
- Changes in mode of travel (car, bus, train, bike, walking)

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**Municipalities in Sweden
are now using Movement Analytics**

AI accelerates sustainable mobility

Shaping the cities of tomorrow

Lightweight multi-purpose vision-based algorithms
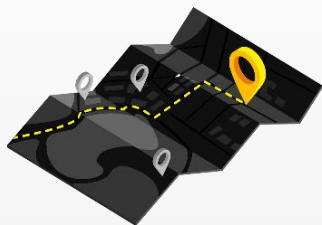
Mapping
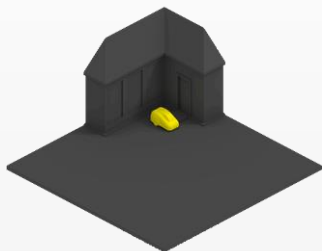
Scene Reconstruction
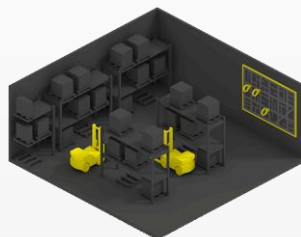
Positioning
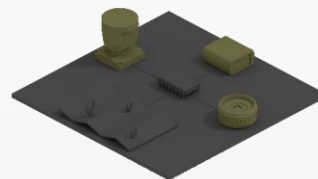
Sensor Fusion
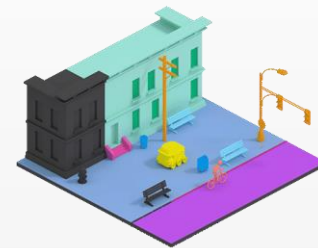
Semantics

The Problem

Rural → Urban

– 1.3 million people moving to cities each week.
– By 2050 the global population in cities will increase with 66%.

Up to 74%
traffic caused by "cruising for parking".

Up to 10%
speed limit signs display incorrect speed.

11,000
deaths caused by bad roads annually in the US

3 Bn$
annual cost of potholes in the US.

✓ **$100 B's in unrealized cost savings and operating efficiencies**   ✓ **100 Mts in unnecessary CO_2 emissions**

3DAICity™

1 Install

Data is collected using vehicles already on the road

2 Harvest

Our app processes data "on the edge" - directly on the phone
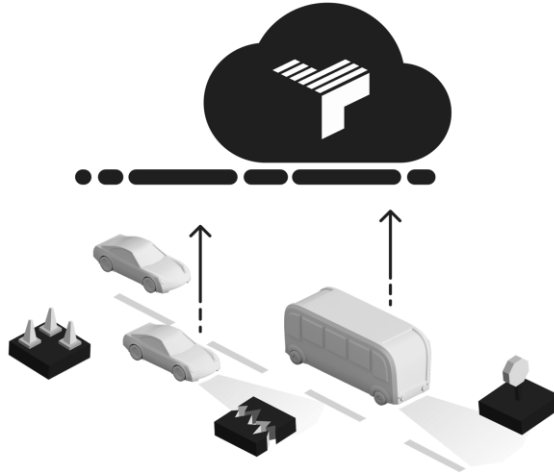
3 Access

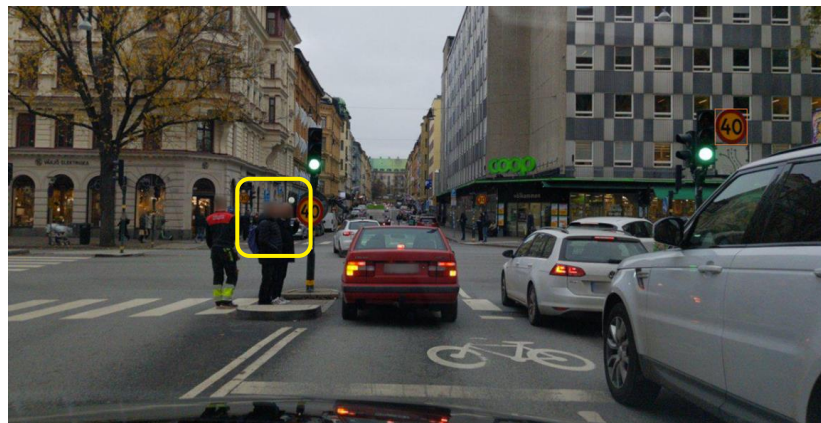Data is presented in a user-friendly format in our interactive web app

In Action

Data processed "on the edge".
No personal data is stored.

Images are anonymized, no faces or license plates are stored in the cloud. No video stream is uploaded from the phone.

Drive Sweden FORUM
webinar 8th February

Thank you!

drivesweden.net
linkedin.com/company/drive-sweden

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