



PowerHUB
Power for Ventures

Future City Tech 2021 Bootcamp
OCTOBER 4, 2021 PRAGUE, CZECHIA



Future City Tech 2021 Bootcamp Programme

Opportunity to meet and network with innovative Czech and European startups in the field of modern and sustainable mobility and with representatives from various cities and the ministry of transportation.

The event is focused on:

- Addressing the cities needs and their expectations
- Cooperation with the cities and pilot projects
- Venture Fund Investments & City Pilots financing

The mobility startups will present solutions for the next steps of mobility evolution in urban areas such as:

- Autonomous driving,
- Electromobility, infrastructure, e-vehicles and related topics,
- Digitalisation
- Last-mile delivery,
- Active Mobility
- Making commuting more comfortable...

Venue: **Prague, Florentinum, Na Florenci 15, Praha 1**
Date: **October 4th, 2021**



SCHEDULE

10:00 – 10:15 h	Welcome by PowerHUB
10:15 – 10:25 h	EIT UM Living Labs concept
10:25 – 10:45 h	Venture funding (Pilot projects financing)
10:45 – 11:00 h	Ministry of Transportation keynote speech
11:00 – 11:50 h	Introduction of cities needs and priorities
11:50 – 12:40 h	Presentation of startups (followed by Q&A) <i>Case studies</i> <i>Implemented projects in cities</i> <i>Pilot expectations</i>
12:40 – 13:40 h	Lunch break + networking
13:40 – 15:30 h	4 Thematic Workshops (startups, cities & industry) <i>Autonomous vehicles</i> <i>Digitalization (eg. 5G technologies in cities)</i> <i>Electromobility</i> <i>Active mobility, Multimodal transportation and Commuting</i>
15:30 – 17:30 h	Expert consultations and networking on site
17:30 – 19:00 h	Evening break
19:00 - 22:00 h	Networking dinner with sightseeing of Prague

www.agilelogistics.es

AGILE LOGISTICS

When & where customers wants



Mission

We are a logistics company focused in Last Mile. Our base logistic system are urban city hub + different kind of electrical vehicles (walk, mopped, three wheel, etc).

We have our own technology (Geocoding, boots, BI, AI routing) that let us deliver when and where customer wants.

Highlights

-



Technology Field:

Last mile delivery and green logistics

Looking for

- Funding
- Pilots with cities
- Pilots with industry players



Problem solved

Last mile delivery in any city bigger than 30,000 inhabitants. Our solution is able (proved in other countries) to reduce 30% pollution, improve mobility, and 50% in productivity (less vehicles in the city moving).

- New logistic model based in Micro hubs
- Use of appropriate electrical vehicles (bike, mopped, rickshaw, others)
- Use of ownwd tech
- Geocoding instead of ZIP code
- BI to control, manage and improve process
- AI/TMS for optimal routes.
- Chatbot, that let direct communication between customer and system

Competition

Paack, Mox, Local delivery companies, Actual curriers (UPS, FEDEX, DPD, MRW, ...)

Market

B2C, B2B, D2C, Horeca and eGrocery

Business Model

B2C

www.asimob.es/en

ASIMOB

Advanced Services In Mobility

ASIMOB helps to keep streets and roads safe, using IoT and AI to automate regular road inspections.

Mission

ASIMOB supports regular road inspection, to optimise maintenance resources and increase road safety.

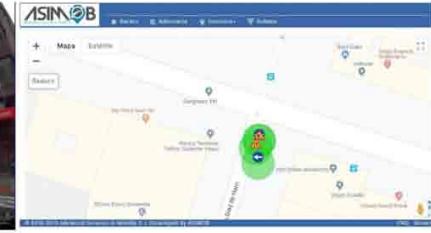


Technology Field:

Mobility services

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners



Highlights

Speed-up SW devlp. / International sales



Problem solved

Visual inspections are not efficient in large road networks.

Competition

No competitor covers the range of services ASIMOB does, but they have some overlapping:

- MobilEye (Israel) for road surface monitoring.
- Mapillary (Sweden) for traffic sign inventories.
- RoadBotics (USA) for road surface monitoring.

Market

Road/Urban Maintenance & Ops. / Road safety inspections.

Business Model

Automated road inspections for maintenance teams: B2G / B2B

www.atlasaero.eu

Atlas Aero

Reinventing Transport for the People:
An efficient hybrid-electric aircraft
capable of vertical take-off and landing.



Mission

Atlas Aero is building Origin – an airplane which combines the advantages of fixed-wing aircraft with vertical take-off and landing capabilities leading to unrivaled efficiency in forward flight.

Technology Field:

Autonomous vehicles and systems

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Problem solved

Roads get more congested day-by-day, increasing people's frustration and the economic damage through lost time. Due to unsustainable urbanization and generally population growth, this problem is set to get worse in the future.

Together with the expansion of public transport networks, one should consider extending individual transport to the third dimension, using either the aerospace or tunnel networks for the realization.

Until now, most concepts for taking individual transport to the air are either inefficient (multicopter concepts), impractical – when completely new infrastructure is needed – or simply too expensive, even when produced in higher quantities.

Purely electric concepts are also severely limited by their possible range, as the high weight of lithium batteries renders ranges above around 200 km uneconomical at the current stage of technology. While being enough for the daily commute, a purely electric concept does not allow for mid- and long-range individual travel without the need for a well-established supercharge network which would also incur additional time-loss when recharging.

Competition

For our first market, we are competing with helicopter suppliers like Robinson. We are not aware of other eVTOL startups targeting those markets, apart from the first responders, whom are being targeted by Volocopter, albeit their range will be limiting.



When it comes to UAM, there are over 200 eVTOL concepts – whereas ours is the most efficient in forward flight.

Market

The first version of Origin will be tailored to fit into a market for individual aerial transport and VIP transports as well as for first responders (beachhead market strategy). Compared to helicopters, it is way more convenient to fly, less noisy, faster, higher in range and far more efficient.

The second (autonomous) version will target the Urban Air Mobility market.

Business Model

B2C

Highlights

Article in German Magazine Wirtschaftswoche 47/2020 (s. <https://gruender.wiwo.de/atlas-aero-wir-werden-fliegende-autos-bauen/>), coverage from some technical magazines



www.auve.tech

Auve Tech

Auve Tech builds future transportation solutions for today's problems.

Mission

We bring autonomous shuttles to cities and other environments to decrease congestion and pollution with a solution that is cost-effective and easily adaptable. At Auve Tech, we're building the world's most flexible last-mile transportation ecosystem with our autonomous shuttles. We specialise in the development and manufacturing of autonomous vehicles. Developing lightweight and compact SAE Level-4 autonomous shuttles, Auve Tech offers a full-scope service that entails the autonomous vehicles, their integration to various environments and fleet management.

Highlights

Auve Tech has managed to succeed in the proof of concept phase within the last two years and moved from a single prototype vehicle to public road operations in 7 different countries and we are now ready to scale the solution.



Technology Field:

Autonomous vehicles and systems

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners



Problem solved

We offer a service that expands the current public transportation offering by filling the gap in last-mile transportation. This way, we help cities cope with peak hours, make the public transportation more accessible and demand responsive and also help people find ways to forego their personal cars for commuting, which helps to decrease congestion in cities.

Competition

Our direct competitors are last-mile shuttle (and service) providers (Navya, EasyMile, LocalMotors) or companies that provide a part of the service we use that is similar to ours (Sensible4, Nuro, Einride). Auve Tech currently provides the most all-round, flexible and cost-effective solution on the market.

Market

Autonomous last-mile shuttle market that varies from public roads (urban and suburban environments) to closed areas (airports, harbours, tourism sector, campuses, industrial parks etc). Currently, most of our pipeline revolves around Europe, but we are working closely with our partners in order to expand our activities outside Europe as well.

Business Model

Auve Tech offers a full-scope service for autonomous last mile mobility solutions that entails the development and manufacturing of the autonomous shuttles, their integration to the environments and fleet service. We offer a rent-a-fleet model for the customer and the service can be customised to suit the specific environments and customer needs.

www.biapower.io

BIA Power Inc.

We optimize and simplify electric vehicle charging for the cheapest and greenest charge, smoothest loads, and lowest battery degradation.

Mission

We have developed a platform featuring high performing forecasting algorithms and a powerful optimization engine to intelligently predict and optimize flexibility in EV charging.



Technology Field:

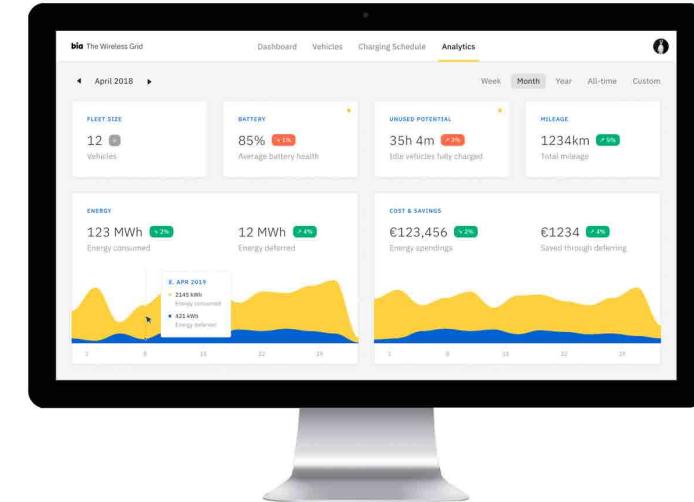
Energy

Looking for

- Funding
- Partnerships
- Potential customers
- Cities

Highlights

Acciona ImNovation, AWS Startup Architecture 2020, Rockstart, Ship2B



Problem solved

Currently, most EV operators are not equipped with tools to operate their charging facilities efficiently nor are they well prepared to manage increased demand for electric vehicle charging.

Competition

Unlike most of our competitors, we are addressing the current needs of our EV customers (data management, charging costs, peak loads, green charging, battery degradation), while setting up the foundation for providing grid services with their assets.

Market

We estimate our Total addressable Market at 3 billion euros (growing to 50 billion euros by 2030). In 2019, there were 5.2 million EV chargers deployed globally. Bia's expected annual contract value per charge point is 510 EUR – derived from optimized charging service subscription (8 EUR/month/charger) and grid services revenue sharing (410 EUR/year/charger).

Business Model

B2B

www.blockcity.tech

Block

Don't just park your bike.
BLOCK it!



Mission

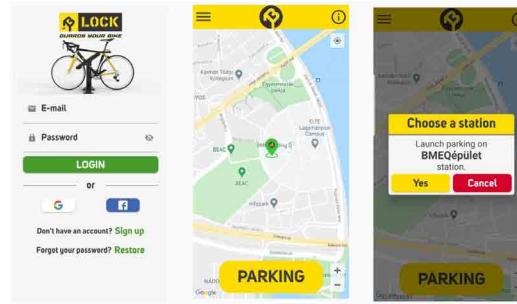
Block provides smart and secure bicycle racks to foster a sustainable and smart urban mobility, making cyclists' life worry-free and convenient.

Technology Field:

Mobility services

Looking for

- Funding
- Pilots with cities
- Connection with EIT UM partners



Highlights

- 2018 EIT Climate-KIC Launchpad national winner
- 2018 EIT Climate-KIC Launchpad international Top6 in Urban Transitions
- 2019-2020 EIT Climate-KIC Accelerator Stage 2 & 3 grant winner



Problem solved

We fight against bicycle/scooter theft and wish to make cyclists' life worry-free and convenient.

Competition

At the moment, we only have one direct competitor, BiKeep. Compared to them, we offer a 21% faster ROI, a complete 2 point locking for most urban bicycles and a 38% less LCC.

Market

Hungary is our SOM that we can fully serve. We use our sales strategy which applies to neighboring countries as well. The CEE region is our SAM. Our TAM then would be the whole European peninsula, North-America, ASEAN countries and parts of the Middle-East. Basically, wherever there's cycling, we can sell our product and its associated services.

Business Model

B2B2C

www.breeze-technologies.de

Breeze Technologies

Artificial intelligence against air pollution.



Mission

Breeze Technologies' air quality sensors measure the most common air pollutants and climate indicators, including carbon monoxide, particulate matter, nitric oxides, ozone and many more. The data is plausibility-checked and calibrated by Breeze's Environmental Intelligence Cloud that supports partners to analyse and aggregate air quality data.

Based on a catalogue of more than 3,500 known clean air actions and best practice examples, decision-makers are offered actionable insights how to improve challenging air quality situations. The data is also integrable into other platforms through APIs.

Technology Field:

Air Quality Monitoring and Management

Looking for

Breeze is able to provide factual data about the impact of mobility projects. They are looking to participate in smart city / mobility projects where air quality is a key component. The startup is looking for additional partners to scale internationally.



Highlights

Breeze Technologies has been endorsed among others by the German Ministry of Economy, the European Parliament and UN's Citypreneurs Program for their work on air pollution. The founders are Forbes 30 Under 30. The company operates in 9 countries.

Key Team Members Robert Heinecke | Antonia Focke



Problem solved

Air pollution is the single biggest environmental health threat of our time, but data-driven decision-making remains unfeasible due to the lack of data. Breeze Technologies provides hyperlocal comprehensive air quality data and AI-based decision support for clean air actions, potentially raising the efficiency and effectiveness of clean air action plans by the factor 10.

Competition

Compared to legacy air quality monitoring solution, Breeze Technologies' air quality sensors are up to 50,000 times smaller and 1,000 times more affordable. This is thanks to Breeze's cloud- and AI-based calibration technology. Breeze has access to more than 13,000 monitoring stations world-wide, and also recommends the more efficient and effective clean air actions based on artificial intelligence.



Market

According to MarketsAndMarkets, Breeze Technologies is a leading provider in the air quality monitoring and management field. The startup's solution is targeted at both the B2B and governmental market, leveraging a unified technology stack. The solution is used by facility managers of larger corporates, municipal administrations and industrial manufacturers (e.g. city of Neckarsulm, European Commission's JRC).

Business Model

Breeze Technologies' air quality are provided in an as-a-service subscription model that includes a license to access and use the cloud software, as well as ongoing cloud calibration and hardware maintenance in the startup's service centers as necessary. Recommended air quality interventions come from a partner catalogue that is monetised through implementation success fees.

Contact Robert Heinecke | **Email** robert@breeze-technologies.de | **Phone** +49 407 66 29 22 62

www.bringauto.com

BringAuto

We are working on the interconnection of HW and SW in transport solutions for the development of a remotely controlled, later autonomous robot.

Mission

Our mission is to make people's lives easier. We are working on a vision of last mile delivery by autonomous robots. We want to leave the tedious repetitive tasks such as driving a car to last mile delivery robots.

Highlights

In November 2020 we tested delivery robot controlled by teleoperation at the BorsodChem MCHZ in Ostrava.

BRING AUTO

Technology Field:

Automatization & Robotics

Looking for

In this program, we expect the opportunity to meet customers from the field of last mile delivery and city counsellors who want to realize the idea of smart cities. We are looking forward to meet partners from start-ups with whom we can implement a project together. And also experts and investors who will help us in BringAuto further development.



Problem solved

Transport accounts for almost 30 percent of all EU carbon dioxide emissions, with road transport accounting for 72 percent. The significant part of road transport is the import of consignments. So we decided to use LMD robots running on electricity.

Competition

We have 4 main competitors - Nuro, Boxbot, Udi and Neolix. The advantages of our solution - the BringAuto robot's boxes can be customized according to the customer's needs.

Market

We target last mile delivery companies that want to reduce costs and operate more socially responsibly. And also to city councilors who think ecologically and want to improve the quality of life of people in cities.

Business Model

B2B2C

www.cargio.io

Cargio industries s.r.o

Deliver joy.



Mission

Cargio provides a flexible subscription service for cargobikes that takes care of everything except pedalling.

Technology Field:

Last mile delivery and green logistics

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

We are the winner of Best of Mitteldeutschland and many other Competitions and Prices. We were part of many international accelerators and have successfully made our Seed-Investment, second VC-Investment. We have big partners and first customers.



Problem solved

- Cities are too congested
- CO₂ emissions are high
- Van drivers are not happy at work
- Banks are not willing to lease cargo bikes
- Cities are doing everything they can to calm traffic

Competition

- White van manufacturers / leasers
- Cargo bike sellers
- Swapfiets

Market

Primarily, we focus on parcel delivery, in future we would love to look into grocery delivery as well.

Business Model

B2B

www.chargex.de

ChargeX

Modular charging solutions



Mission

ChargeX develops modular charging solutions for electric cars. Our charging system Aqueduct is specifically designed for underground parking garages and employee parking lots. It enables infrastructure providers to set up and later scale-up large-scale charging infrastructure affordably and with little installation effort. After initial set-up, additional charge points can be added plug&play. Aqueduct reduces the cost of hardware and installation by 50 % compared to existing solutions whilst also reducing complexity for the customer. The unique sequential load management guarantees, that the grid will never be overloaded. Our charging algorithms then decide on historic user data, which car charges at which time.

Highlights

We have closed a 1 million Euro crowd investment in 2020 and already have 400 chargers in the field.

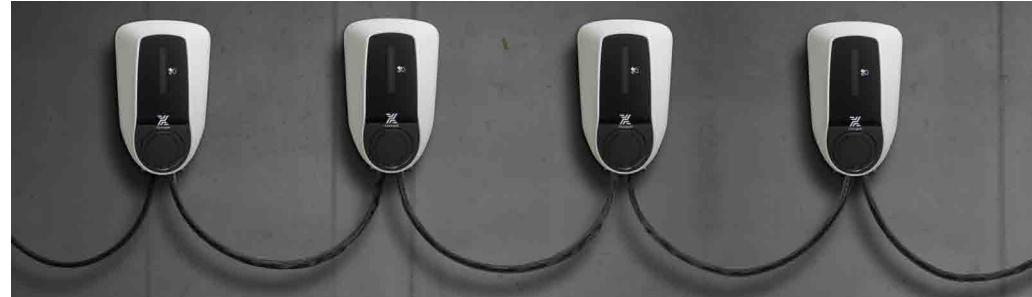


Technology Field:

IoT - Charging Infrastructure

Looking for

We are looking for strategic sales partners, large customers and potential investors.



Problem solved

Today, charging infrastructure is not scalable. The hardware is too expensive, installation too complicated and retrofitting or upgrading infrastructure is as expensive as building new infrastructure. As a result, infrastructure providers, such as companies or utilities, avoid investing because they e.g. do not know future demand for charging infrastructure.

Competition

ChargeX competes with a „turnkey“ solution, whereas our competition leaves the complex infrastructure set-up with the customer and electricians in the field. As a result, we also reduce the total cost of the infrastructure by 50 %, which allows our customers to set up double the charge points with the same investment.

Market

Aqueduct specializes in use cases where many cars must be charged over a longer period with limited grid power. This includes all the private charging in underground car parks and at large open spaces at the employer. Fleet charging in depots and P&R lots are also included. The european market for large-scale AC-charging will grow to 1.9 bn EUR until 2025.

Business Model

ChargeX is specialized on large-scale destination charging. The go-to-market business model was based on hardware sales to selected lead customers and potential sales partners. These form the cornerstone of the evolution of our business model - the charging forum. ChargeX will sell additional digital services to monetize every charger in the field and also enable partners to sell Aqueducts and the services.

www.dashbike.de

Dashfactory GmbH

Innovation for smart city and safe cycling – Digitalizing cycling traffic and infrastructure planning with Dashbike and urban data platform Dashtrack

Mission

Dashfactory offers a product and a platform to digitize bicycle traffic and make it safer. The Dashbike already has a large community thanks to we are able to achieve the required strong and wide distribution. This validated and large amount of cycling data provides valuable insights for cities to effectively improve the infrastructure together.

Dashbike and Dashtrack improve the safety of cyclists immediately and contribute to a data-based improvement of the infrastructure together with cities. Thus enables up to 29% less traffic fatalities, 92% less CO₂, 12x more parking & traffic space.

Highlights

Dashfactory has built a strong and diverse team of 13 people and has achieved a market-ready product, a market-ready iOS- & Android-App and a market-ready urban data platform, everything inhouse by Dashfactory.

DASHBIKE

Technology Field:

Sensors and training data

Looking for

- Funding
- Pilots with cities
- European promotion
- Connection with EIT UM partners

Problem solved

The already strongly increasing numbers of cyclists lead to a massive overload of the existing infrastructure, which is reflected in rising accident figures. The cities and urban living spaces also suffer from a lack of parking space and traffic congestion, suffocating under the burden of traffic jams, noise, poor air quality and quality of life.

Competition

There is no comparable product. There are only small, local and statistical projects to collect cycling data, but they always fail due to the lack of dissemination and use. Moreover, they do not measure to the same extent as Dashbike. Dashcams such as Cycliq are not legal in Germany, a car dashcam cannot be used on a bicycle.

Market

The B2C & B2B cycling mass market with our consumer product Dashbike to get valid data in the required quality and quantity.

Additional the B2G and B2B market with our data platform Dashtrack to record all relevant traffic data of cyclists including processing and analysis and to implement in the local urban data platforms of the cities. TAM: €29.1bn.



Business Model

Dashfactory generates revenue by selling its innovative Dashbike products. In addition, via a monthly fee for the data of the Urban Data Platform Dashtrack of B2G and B2B and optional consulting services. The rapid scalability and adaptability of the platform solution enables extremely fast growth with cost-effective and individual monthly data packages.

www.elonroad.com

Elonroad AB

Unplug yourself and connect to a better world

Mission

The solution is a conductive charging infrastructure designed for all electric vehicles (EVs), e.g., cars, taxis, buses and trucks, that operate in urban and highway conditions. EVs that connect to Elonroad obtain direct power drive energy; and charge their batteries to continue driving when disconnected from the electric road system (ERS). Our ERS is equipped with IoT sensors and software that captures and analyses transportation data to generate intelligent feedback that interacts in real-time with moving and stationary vehicles.

Highlights

Building 1 km of Electrical Road in Lund.

ELONROAD[®]

Technology Field:

Autonomous vehicles and systems

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners



Problem solved

One charging solution for all EV's means convenience and lower costs. By upgrading existing road sections and parking spots we enable effortless EV charging and energy efficient transportation. Elonroad will be the enabler of electrification of vehicles just like fiber has been for digitalization.

Competition

- 1) Overhead line systems, e.g., Siemens eHighway (DE), use conductive wires to transfer energy to a vehicle via a pantograph mounted on roof. Best for long-haul trucks
- 2) Conductive rail, Alstom ERS (SE) charges moving vehicles via 2 road-embedded rails. These 40-m segments pose an electrocution risk to other road users.
- 3) Inductive charging, e.g., Bombardier (FR) (trucks) and Electreon (IL)

Market

We start to apply automatic stationary charging combined with closed loop projects.

We strengthen our "business bridge head" in the primary target segment in Sweden and we initiate entering next country, Norway. But we have global ambitious!



Business Model

We generate our revenues both short- and medium-term by applying a simple straight forward charging-as-a-service subscription model.

The model enables low entry barrier, fast establishment and scaling of an Elonroad branded infrastructure and a predictable revenue stream.

www.go-evio.com

EVIO - Electrical Mobility

Advanced electric vehicle charging services in the palm of your hand



Mission

A smart and agnostic platform able to provide added value services to all the players in the electric vehicle charging ecosystem. With a business model that incentivizes sustainable charging, sharing and monetization. We promote the use of renewable energy and efficiency in the use of resources. A connection between the Mobility and Energy worlds. We also make available a complementary network of charging stations by using third-party resources installed in private places and by making them available to the public or to a limited group of users. An online virtual public network.

Technology Field:

Electric Vehicle Charging

Looking for

Strategic Investors. Clients: Energy Utilities; Parking and Retail Companies; Hotels Groups; Charging Station Manufacturers; Large Companies with fleets; OEMs; other B2B2C and B2B clients.

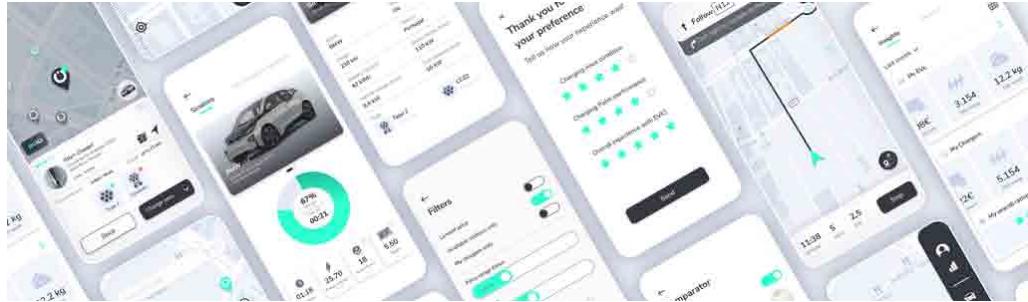
Highlights

Elected as Best Urban Mobility Startup of the year by Portugal Mobi Summit 2020.

Running several pilot projects and started in November two B2B and one B2B2C commercial projects.



Key Team Members Carlos Almeida | Carlos Oliveira | João Barros | Pedro Gaspar



Problem solved

Available EV charging services are limited and basic, mainly in private places there is a lack of solutions to address the user needs such as aggregated consumption, sharing, monetization and advanced options that help the user to be more sustainable. Existing Utilities have a huge number of clients, however don't have in their portfolio added value services for mobility. Users also need to rapidly have access to a wider network of charging.

Competition

Existing players are simply focused on: selling charging stations; operating; being brokers interlinking existing operators; providing apps for finding public charging stations on a map. This is not enough and doesn't solve the user needs. EVIO incorporates the existing approaches in an integrated and agnostic way and even provides on top value added solutions that don't exist in the market.

Market

International market. Just in Europe, the EVIO's addressable market represent 38,3 billion euros in 2030 as projected by IEA. 70 % of charging will happen at home or office, and 30 % will happen in the street, thus making private places also of great importance. EVIO has aggregated solutions to both public and private places.

Business Model

The EVIO platform is a multi-sided platform, offering services to several sides of business. EVIO lays first on B2B2C, second on B2B/B2G and lastly on B2C. The B2B2C revenue is based on licenses. The B2B is monthly subscription and some additional pay-as-you-go. The B2C is mainly pay-as-you-go on top of free services.

Contact Carlos Almeida | **Email** carlos.almeida@go-evio.com | **Phone** +35 19 18 02 11 17

www.fluctuo.com

fluctuo

Mobility Intelligence



Mission

fluctuo is an independent 3rd party data specialist focused on shared-mobility services (bikes, scooters, mopeds, cars). We combine innovative data collection methods, sophisticated algorithms and a team of mobility experts to produce the most exhaustive & accurate data possible. We aggregate the data of 200+ shared mobility services (bikes, scooters, mopeds and cars) operators in 700 cities and makes this data available via a real-time API. fluctuo also offer a business intelligence tool to precisely understand the supply and usage of shared mobility services in more than 85 European cities.

Technology Field:

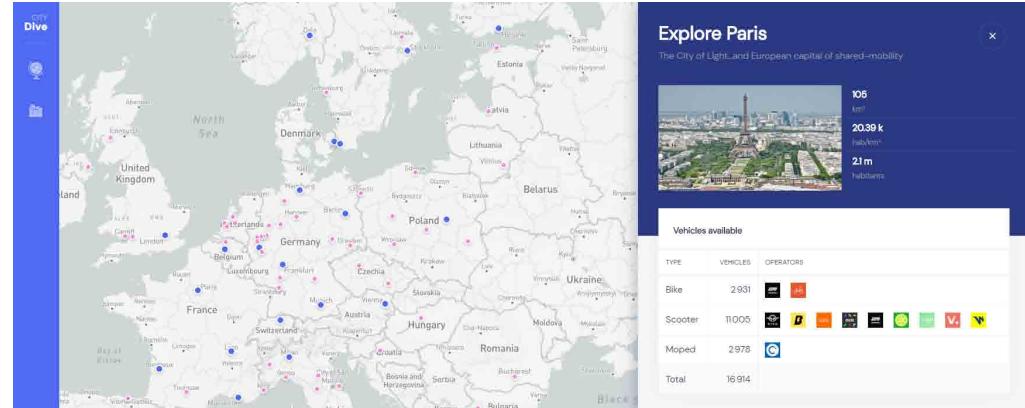
Mobility services

Looking for

- Pilots with cities
- Pilots with industry players

Highlights

fluctuo has established itself as Europe's leading aggregator of data on shared mobility services. We work with many clients such as SNCF, Deutsche Bahn, RATP, Renault, Toyota, Cap Gemini, BCG, FreeNow, Lime, Voi, Tier, Bolt, Bird, Dot and much more.



Problem solved

fluctuo help public and private entities to make data-driven decisions on mobility services & infrastructures. We bring a One-Stop-Shop API for mobile apps to integrate 200+ shared mobility operators. Our city-centric dashboard offers powerful data insights across 85+ European cities and a unique competitive KPIs benchmark for all shared mobility operators.

Competition

Moovit, Blue Systems, Vianova, Ride Report, Remix, Populus

Market

According to Verified Market Research, The Mobility as a Service (MaaS) Market size was valued at USD 49.67 Billion in 2019 and is projected to reach USD 271.66 Billion by 2027, growing at a CAGR of 23.7% from 2020 to 2027.

Business Model

fluctuo is a SaaS market intelligence start-up in the field of shared mobility that charge a monthly subscription to access its City Dive Business Intelligence online tool. We have a second revenue stream based on the use (volume of queries) of our Data Flow API which shows the live location of available shared mobility vehicles in 700 cities.

www.form08.com

Form08 Tracking

We monitor your roads and rails in real time so you can better plan maintainance and save money by early imperfection recognition.

Mission

Our goal is to help Cities and Transport companies to evaluate the health of transport infrastructure and to maintain its quality. We use existing vehicles (trams, buses, garbage trucks) equipped with our telematic units connected to our Data Analytic Platform to find imperfections on the go, while they are in motion. Early detection of potential threat is crucial for safe trips and maintainance.



Technology Field:

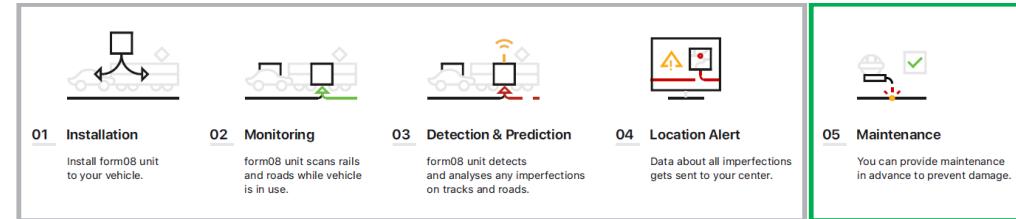
Smart city / Transportation - Infrastructure Monitoring

Looking for

Customers (cities, companies responsible for transport infrastructure maintainance)

Highlights

We are running pilot in two cities, one of them is Prague (with Public Transport company - trams). We have successfully detected various problems with high precision on tracks and we are working to deepen our collaboration.



We monitor infrastructure quality ...
in **REALTIME**.



Problem solved

Condition of infrastructure (roads and rails) - its quality image according to data from our telematic units connected to our platform analysing current and comparing historical data. Alerting imperfections and degradations in time is the key.

Competition

Laser technology is the most accurate, but it is on demand only, special vehicle and expensive to hire. Video image analysis in motion works up to specific speeds, is not enough to detect smaller cracks. Our sensoric (in our case gyroscope and accelerometer) solution is affordable, can work on existing vehicles, and gathers data every time the vehicle is in motion. Therefore we see our solution as the best in terms of reliability and costs when continuous detection is needed.

Market

Cities and transport companies responsible for infrastructure (roads, rails). Usually above 10k citizens +.

Business Model

As a service based model - monthly/ yearly fee for units, connection and Data Analytic platform with alerting mechanism.

www.fs-e.pl

FSE

FSE creates innovative solutions for light electric delivery vehicles.



Mission

FSE develops technologies conducive to the environment to reduce the emission of air pollutants in urban agglomerations.

Technology Field:

Electric Commercial Vehicle

Looking for

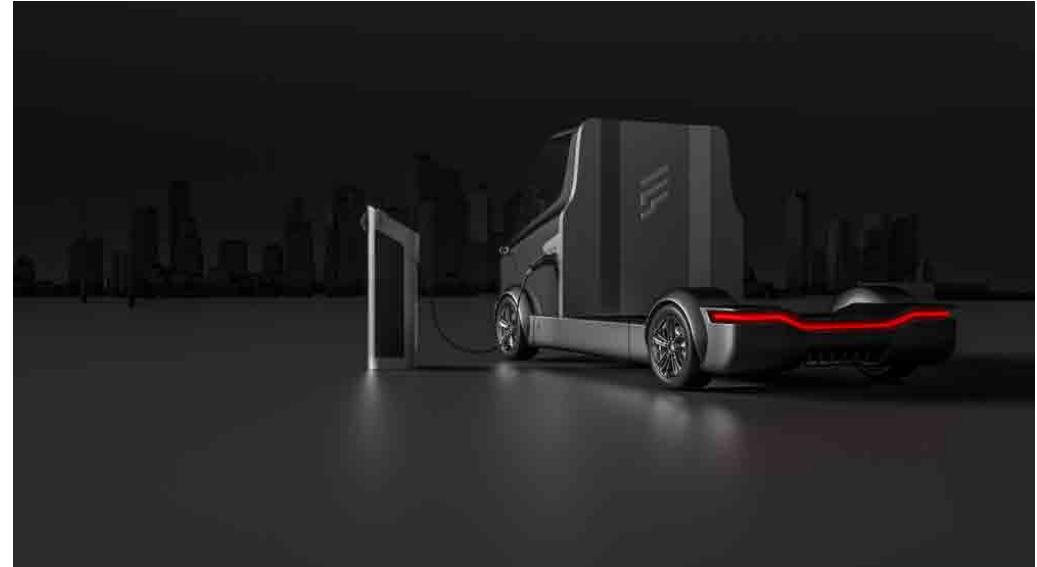
- Partnerships & Patronage
- Credibility
- Networking
- Door opening possibilities

Highlights

FSE has developed three different sized electric Light Commercial Vehicle Prototypes. We dominate technology and are ready to go to market.



Key Team Members Rafał Olejnik (Director of Business Development)



Problem solved

Reduce the emission in urban agglomerations.

Competition

New comers in e-mobility business.

Market

- Municipal authorities
- Local governments
- Municipal enterprises

Business Model

B2B

Contact Justyna Dwornik | **Email** jdwornik@fs-e.pl | **Phone** +48 3 38 13 04 25

www.gleam-bikes.com

GLEAM eBikes

We create a new category of electric bikes to suit the changing demands in traffic.

Mission

To reduce 100.000 tonnes of CO₂ until 2025 and to grow to a 150 million Euro revenue company we are building a light electric vehicle solution for easy and flexible transportation. We make a difference by combining the very best features from mountain bikes to cargo bikes.



Technology Field:

Light Electric Vehicles

Looking for

VC or Strategic Partner in Sales, Manufacturing, Software

Highlights

Our engineering team developed motorcycles for BMW. Our marketing expert scaled Red Bull to 125 countries.



Key Team Members Mario Eibl



Problem solved

We are the solution for people in need for a multi-usage & green vehicle to transport goods fast from A to B in cities without emissions.

Competition

Urban Arrow, Riese&Müller, Onomotion, Radkutsche, Bullitt

Market

The worldwide eBike market will grow to a 50 billion EUR market in 2025.

Business Model

We sell eBikes to B2B and B2C market through bike retailers at a price starting from 6.000 Euro.

Contact Mario Eibl | **Email** mario.eibl@gleam-bikes.com | **Phone** +43 65 02 90 82 74

www.homyhub.com

HOMYHUB

HOMYHUB, Unlocking the full potential of garages.



Mission

HOMYHUB's mission is to unlock the full potential of garages. This is achieved by turning the Smartphone into a Smart Garage Remote and creating a marketplace for New Generation Services. Enabling the users to get mobility services such as: Unattended deliveries, Sharing Economy or Connected Cars.

Technology Field:

Last mile delivery and green logistics

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

The possibilities are endless, and HOMYHUB makes them a reality. Companies like Correos, Carrefour or Volkswagen already trust us and use to build their smart services.



Key Team Members Enzo Zamora | Alvaro Román | Carlos Quijano | Rita Marantos



Problem solved

As a first step, for users dealing with Remote controls and garage keys, we have developed a solution that turns the mobile into an Intelligent Garage Control. Allowing to open, know who enters and leaves, and manage personalized and immediate access through virtual controls from wherever and whenever.

Competition

The market for remote access to the garage is a very fragmented market without a clear leader, there are small atomized companies such as Gogogate, ParKingDoor or MyQ, from which we clearly differentiate ourselves thanks to our technical functionalities and collaborations.

Market

TAM +125 M of residential automated garages (EU and USA).

SAM + 9M in Spain (of which 4M are single-family and 5M are multi-family).

Business Model

Our business model is based on:

- 1) Hardware sales: Sale of devices.
- 2) Software (subscriptions and recurring revenue): Virtual Controls Annuity (user revenue) and API (business revenue). Directed to the integration to our Marketplace and the creation of new genera-

Contact Rita Marantos | **Email** rita@homyhub.com | **Phone** +34 633 92 91 06

www.hopu.eu

HOPU

A data-driven solution for urban design supporting decision-making taking into account human-perception, climate change, and air quality impact.

Mission

HOPU brings urban innovation through key techs as AI, IoT and Data-Quality. We engage citizens and decision makers, to guarantee that data is understandable by everybody, intuitive and usable. HOPU supports urban development and digital transformation through data-powered tools with dashboards and IoT devices to monitor impact, sustainability and environment. We mix data, technology and people to enable a powerful urban innovation tool. Creating Smart Cities, where people feel the difference.



Technology Field:

Air & environment, Monitoring & compliance

Looking for

Partners to open new markets (new regions); complementary services and solution provides for Smart Cities / Climate Change mitigation.

Highlights

2 million EUR revenue in 2020; 35 cities deployed with HOPU's solutions; Invested by EIT Urban Mobility; Le Monde Urban Innovation Award in 2020

Problem solved

Supporting urban planners in their decision-making process to avoid penalties, accelerate investment for climate change mitigation and avoid losing grants due to lack of evidence-based indicators/results. Nowadays, cities need to monitor the impact.

Competition

Our competitors for urban tools are Qlik (USA), IKUSI (Spain), and for air quality are Bettair, Kunak, Libelium (Spain) and AQMesh (UK). Some of their weaknesses are low data quality and limited value proposition for urban design, as a difference, HOPU offers certified data quality (IEEE P2510), and a set of AI-based algorithms to enable added-value services for urban design. Our major threat is the preference of public authorities to purchase from local companies; Therefore, the need to expand and partner with companies in different regions, to reach local representation.

Market

The air-quality sensing market presents a USD 6.78 billion size, extended with the intervention management (USD 98.17 billion) focused on added-value services that supports the urban design and actionable plans (Smart Cities Frost & Sullivan, 2019). SDGs for sustainable cities are enabling investments as Sustainable Europe Investment Plan, Just Transition Fund, World Bank and IDB. For that reason, this is an emerging market, where our TAM is over 36 million Euro by 2020 (200 cities; 180,000 EUR/city).



Business Model

Our business model is focused on recurrent revenues as part of the added-value services provided by our SaaS for data analytics of environmental data, maintenance of air quality and environmental IoT environment sensors and consulting services to customize and integrating dashboards and data sources. Finally, one-off costs are required at the beginning of the project for covering sensors costs (Smart Spot environment monitor), although a subscription/rental model is also offered for the sensors.

www.itrafficco.com

IT-C

We created a traffic light controlling software that allows the lights to operate based on live traffic



Technology Field:

Smart City

Looking for

Customers, experts in traffic engineering and software development

Mission

Our mission is to create cleaner, safer cities, where nobody should wait in the traffic lights unnecessarily, and can live a less stressful and more productive life.

Highlights

We got into the Climate Launchpad International Final in 2018 in Glasgow, finished the Climate KIC Accelerator and won an accumulated €17 500 grant. We also exhibited at the Smart City Expo World Congress in Barcelona



Problem solved

Creation of traffic jams, overcrowded cities

Competition

The competition uses an upgraded version of the old system, that has been used for decades now. Our USP is that our software decides real time, on live traffic conditions, and can work with many kind of different traffic monitoring devices. We also provide an integration for pedestrians and emergency vehicles into the decision making process

Market

We target city municipalities, and traffic companies

Business Model

For municipalities, we will have a contract for a longer period of time, a minimum of 3 years, and we will charge them based on the amount of intersection our software is working at. For traffic companies, we will provide our software to them in return for a revenue share from selling our joint solution to cities.

www.knotcity.com

KNOT

One station to charge them all:
docking and charging infrastructure
for micromobility

Mission

Since 2016 KNOT supplies its universal docking stations around the world and operates shared scooter and bike networks with proprietary docking infrastructure. Leader on the market, with more than 200 stations deployed in 6 countries.

KNOT is not just another scooter sharing company and not just a docking station producer. We are changing the way micro-mobility integrates into the city landscape to make the transportation revolution possible



Technology Field:

Mobility services

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

- Universal docking station for scooters and bikes
- Industrial production on a large scale
- Deployments in over 6 countries
- 20 persons team, mostly engineers



Problem solved

We address most of the problems related to operations of free-floating scooter and bike services:

- Prevent the uncontrolled sidewalk occupancy
- Reduce the vandalism impact
- Reduce operational costs (no more swaps, no more juicers)
- Increase network availability (all scooters and bikes are constantly charged)

Competition

Kuhmute (US), Duckt (Turkey), Swiftmile (US)

Market

Extraordinary expansion of free floating scooter providers and critical limitations of this kind of system

brought to a huge demand for station based, cost-efficient and sustainable micro mobility solutions all over the world. KNOT supplies already in 6 countries and keeps growing.

Business Model

KNOT elaborates universal docking charging stations for shared micro-mobility projects - electric scooters and bikes. Our stations are universal and can charge any type of shared vehicle. We combine two business models: (1) providing universal docking infrastructure for operators or (2) operating dock-based scooter sharing networks.

www.laplandar.com

Laplandar

Laplandar builds heavy duty e-cargo
bikes for business.

Mission

Laplandar hopes to enable as many businesses as possible to shift from fossil fuels and automobiles to e-cargo bikes. We believe e-cargo bikes play an important role in quieter, cleaner, and safer cities for all.

Technology Field:

Green Mobility and Logistics

Looking for

We are looking for clients in the logistics, commercial leasing, micromobility, construction, and other sectors who can use a heavy duty e-cargo bike for business.

Highlights

We landed our first customer within the first month of sales efforts selling 10 Laplandars. We recently secured the Innobooster grant from Danish Innovation Fund. We are thrilled to be a part of the EIT Urban Mobility Accelerator.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

www.lastmile.team

Last Mile Team

Digital solutions for urban logistics and last mile distribution at large scale.

Mission

Enable cities and companies to design, implement and manage sustainable business models that achieve impactful results balancing all stakeholders' interests, customers convenience and competitive dynamics while minimizing disruption and improving the Triple Bottom Line.



Technology Field:

Smart Logistics

Looking for

City and Industry clients to pilot at large scale. Investors active in the last-mile distribution road transport space. WW TAM is over 2.9 billion EUR (Urban Logistics Opportunities - Last-Mile Innovation, Frost & Sullivan 2018)

Highlights

Invested 400.000 Euro to date from FFF. Our solutions are IP registered, validated as a Line-of-Business application for Corporates and Enterprises by Microsoft and Honeywell, implemented in H2020 consortiums. Consistently in the top 5 most innovative startups in our domain.



Problem solved

In January 2020 the number of vehicles for urban freight and parcel delivery, its associated emissions and congestion were forecasted to increase over 30 % by 2030. After the health crisis consensus is that could increase over 40 %.

Competition

Intense, there are no dominant players. We are one of the very few solutions that can tackle urban logistics and last mile distribution negative externalities at large scale that is validated by both industry and the research community.

Market

Cities and densely populated areas with more than 50.000 inhabitants, that concentrate over 70 % of the population in EU and the US. Customers are its Public Administrations and the companies that deliver products or provide services in them.

Business Model

We offer four Software-as-a-Service products with the flexibility to easily scale up or down, as they share the same front and back-end. And one Optimization Engine Back-End-As-a-Service license for larger customers.

www.meep.app

Meep

Solutions for more connected and inclusive cities

Mission

Meep is a MaaS solution that combines mobility integration solution plus mobility dashboard to combine all available transportation in a single app with multimodal routes, payments through the app, customized offers based on user behaviour, meaningful user personalization. MeePath, our analytics AI Solutions, provides insights about the mobility ecosystem to operators and public authorities and through our agency-branded solution Meep is able to adapt and scale their business.



Technology Field:

Mobility services

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

Meep provides MaaS solutions that integrate all available modes of transport into a single platform that encourage a modal shift towards a more sustainable, connected and inclusive in cities.



Key Team Members Guillermo Campoamor | Borja Fernández-Acero | Iñigo Herzog | Ana Oyaguez | Ángel Araujo

Problem solved

Mobility has become one of the main challenges of the 21st century. City transport can be inefficient, congested and above all, disconnected. This lack of integration leaves transportation ill equipped to accommodate the needs of rapidly growing city populations. Also, users cannot reserve or purchase trips through a single platform.

Competition

Trafi, Whim and Moovit are the main MaaS platforms with similar activities than Meep. Unlike its competitors, Meep provides operators with a deep integration with a QR code validation system, has full access to the entire user journey and focuses its offer on customized routes according to user preferences.

Market

The current total market for personal mobility is \$1.5T with a potential growth of 20% by 2030. Mobility-as-a-Service is expected to replace 2.3 billion private car journeys annually by 2023. The growth drivers are the micromobility explosion, the greater demand for more sustainable cities and the development of the infrastructure of the Smart City

Business Model

Meep is a MaaS solution which integrates all the transport available – public and private – into a single platform. Users can search for, book, and pay for intermodal and intelligent routes in a single transaction.



Contact Guillermo Campoamor | **Email** campoamor@meep.me | **Phone** +34 688 92 45 34

<https://met3r.com>

MET3R - MeterSolutions

We develop ZenGrid for grid managers and utilities, a robust, standards compliant transactive energy layer that unites residential Demand-Response programs with advanced smart charging.

Mission

Our mission is to create the missing link between future transport and mobility systems by deeply embedding EV batteries into the management of smart power systems.

Technology Field:

Energy / Smart Charging

Looking for

We actively seek pilot partnerships with corporate clients (utilities, grid managers, virtual power plants), municipalities and fleet operators (smart charging of electric car and bus fleets)



Winner of Edison 2019 (MVM Group accelerator), Grant from EIT Climate KIC



Problem solved

Smart Charging

Competition

Our close competitors are startups positioning themselves between smart charging and traditional consumer-facing demand-response programs. The cohort includes Dutch startup Jedlix, previous Free Electrons winner EV.Energy, or US based Fleetkarma's nascent DR service.

Market

Utilities, Emobility Service Providers, Fleet Managers. Our geographical focus is CEE, Western Europe and Nordic countries.

Business Model

B2B

Highlights

Winner of Edison 2019 (MVM Group accelerator), Grant from EIT Climate KIC

www.mileus.com

Mileus

Mileus guarantees that you can get home from work comfortably – with a combination of public transport and a taxi dropping you off right at your door.



Mission

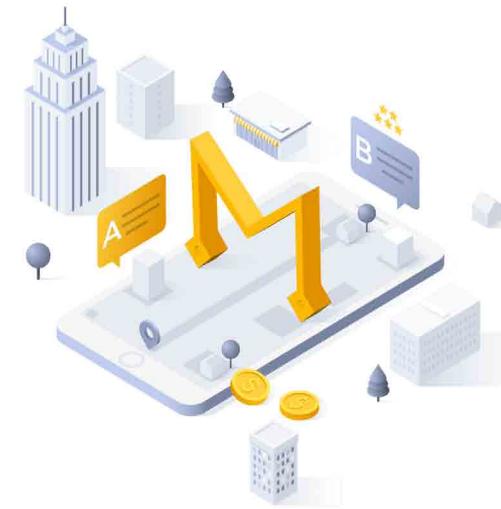
Our mission is to make our cities more liveable. For us at Mileus, that means to motivate residents to leave their private cars at home by increasing the comfort of commuting by public transport and, thus, to reduce congestion and pollution. All the while enabling ride-hailing & taxi operators to grow sustainably, without the usual negative impacts on cities.

Technology Field:

Smart City

Looking for

Customers; Experts in business development in the urban mobility industry; Investor(s)



Problem solved

Large cities are overwhelmed with congestion and pollution also caused by private car traffic. Our technology automatically interconnects public transport with taxi services for comfortable commuting replacing private cars.

Competition

Mobility SaaS platforms, e.g. Trafi, and journey planners, e.g. Google Maps. Global ride-hailing operators, e.g. Uber, can develop similar technology although this will rather act as a catalyst to market entry due to other players wanting to keep up.

Market

We target the ride-hailing and taxi market in Europe, which was 45.5bn Euro in revenue last year, accounting for 3bn rides. Out of these ride-hailing and taxi operators, we directly target the non-global ones.

Business Model

We're B2B2C – we provide technology that ride-hailing and taxi operators integrate into their existing apps to provide the intermodal transportation service to their users. Our monetisation is per search API call (a user search for the service).

Highlights

We're running 2 pilot projects and are in the EIT Urban Mobility Accelerator. Ranked among Top 10 Government Tech Startups 2020 by Gov CIO Outlook, we also won Audience Award @ EIT InnoEnergy PowerUp! CZ & Best Project @ Paradni Napad by PowerHub.



www.nemi.mobi

Nemi

Flexibilizing public transport to make it more efficient, sustainable and inclusive

Mission

Nemi makes public transport in lower density areas feasible by providing a software solution that enables flexible bus services. The aim of Nemi is to improve existing public transport lines with very little demand which are very difficult to sustain and can't provide a convenient service, and reach where regular public transport cannot.

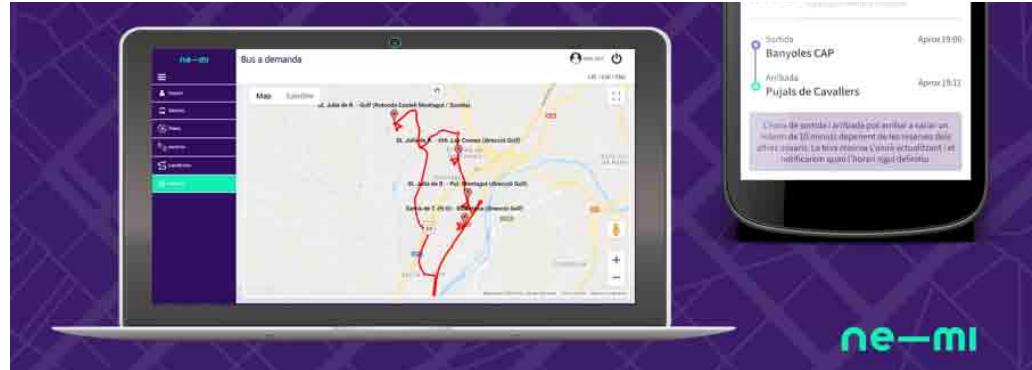


Technology Field:

Demand-Responsive Transit (DRT)

Looking for

Customers and partnerships with cities and regions



nemi

Highlights

We developed our product capturing the requirements of a metropolitan authority responsible for mobility planning (Metropolitan Area of Barcelona, AMB); we moved on to the final stage of the HiReach project and launched a pilot service in Italy.



Key Team Members Sergi Paniagua Lara | Stephan Leppeler

Problem solved

Since the start of the pandemic, the demand for public transport has sunk. It is crucial to regain people's trust in such service as a safe means of transport. Demand-responsive transit can do that by controlling the occupation levels and avoiding crowds.

Competition

There are many companies which picked from the demand-responsive model popularized by Uber and Lyft and created services which group passengers with similar origin and destination. The key difference is that their model seeks individual convenience rather than the most efficient way of transporting a pool of people. Thus, their capacity to aggregate demand and the overall efficiency of their trips are very limited.

Market

We aim to work with regional and local public administrations – such as metropolitan authorities, transport authorities, associations of public entities and municipalities – and transport operators, whether they operate public or private services.

Business Model

Our revenue model consists of a set-up fee that we charge for designing and implementing the service in our platform and for integrating our platform's components in the vehicle/s which will operate the service; and a monthly fee that we charge for the use of our platform, its maintenance and our technical support.

Contact Sergi Paniagua Lara | **Email** sergi.paniagua@nemi.mobi | **Phone** +34 655 41 75 14

www.nivel.no**Nivel**

Digital regulations for better cities

Mission

We are giving the city administration the control of their city, to balance the needs of micromobility users, other citizens and road users, businesses etc. With a standardised tool, the operators can easily connect to the city with little administration, laying the grounds for fair competition and more innovative services.

Technology Field:

Mobility services

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

**Highlights**

We have three paying customers, 6000+ vehicles from five operators integrated into our services, two investment funds onboard, wide press coverage in Norway - and many cities that are yet to take the advantage of digital regulations.

Problem solved

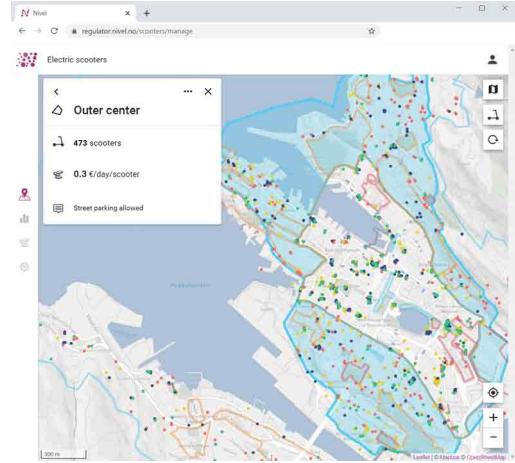
Micromobility services are overcrowding streets. While the services are a good attribution to existing transport options, the city needs to balance a limited resource, the public space. With digital regulations - including microtransactions as incentives - cities can get tidier and safer streets, while getting a better mobility service and increasing income

Competition

The cities themselves are to a certain extent a competitor, some cities develop digital solutions themselves. We have some competitors, mostly focusing on analytics and statistics. Companies like Vianova, Rideport, Populus, Remix, Coord are all in the same field - and will probably all be competitors. However, we are fairly alone using microtransactions as a regulatory engine for reaching specific objectives.

Market

Cities, including regional governments and public transport agencies are our main customers. In a city like Bergen, with more than 200k inhabitants, we will get an income of EUR 50 to 100k. There are 350 cities the size of Bergen and larger in Europe. In addition comes cash flow from operators and future sectorial expansion.

**Business Model**

Nivel delivers digital regulation tools that enable the city to control the usage of the public space. With 2-way data exchange between cities and the micro-mobility operators, street rental for vehicles floating is being calculated. This serves as a substantial income both for the cities and for Nivel.

www.nuwiel.com

NÜWIEL GmbH

eTrailer is the first electric trailer for bikes with patented technology that enabling smart synchronized movement.

Mission

NÜWIEL is a Hamburg based company that provides a sustainable and reliable solution for transporting goods in urban areas.



Technology Field:

e-mobility

Looking for

Customers and production partners

Highlights

First sales with key accounts such IKEA, UPS and Bpost.

We have received a H2020 EIC-Accelerator Grant to finance the product development.



Problem solved

We solve the challenge of the efficient and sustainable last-mile delivery by offering a new-generation electric solution, eTrailer, to carry heavy and bulky goods in a safe and flexible manner.

Competition

Existing electric trailers (e.g. K-Ryole, Carla Cargo) cannot be fully synchronized with turning, braking or acceleration patterns of a bicycle and are thus known to be unsafe and uncomfortable to use. Put simply, when a bicycle is connected to a trailer it becomes an articulated vehicle and subject to the principles of towing. Adverse road conditions or improper braking can cause the bike to skid, which results in the trailer pushing the bike from behind and potentially fatal consequences for the driver and other road users.

Market

With over 178 million parcels delivered every day worldwide and considering that 15-25% of all commercial urban deliveries could be done by bike, our TAM = € 668-1,100 billion and is expected to significantly increase in size by 2030.

Business Model

B2B Direct sales of fleets and recurrent revenue for after-sales services, e.g. maintenance, software updates and spares.

O T T O
B > H N

Mission

The pods can be lowered to the ground everywhere along the tracks, eliminating the need for building and maintaining expensive stations. Our patented passive switches reduce downtimes and maintenance costs significantly.

You can order your trip on-demand with the ottobahn app. Networks can easily be expanded, within and between cities to make inter-city connections possible. This enables true door2door travel without intermediate stops, changing means of transport or searching for a parking spot. Inter-pod communication in combination with AI-supported routing ensures an optimal traffic flow.

Highlights

Future Mobility, Personal Rapid Transport (PRT), door2door travel, Mobility-as-a-Service, 100% electric and renewable energy driven, people and freight transportation



Technology Field:

Mobility services

Looking for

- Pilots with cities
- European promotion
- Connection with EIT UM partners



Problem solved

The mobility sector has steadily rising emissions, mainly driven by combustion engines. Public transport is more sustainable, but lacks the convenience of a car ride that gets you directly to your destination. Parked cars on the other hand take up valuable space in cities that could be freed for public use. The ottobahn system solves all these problems.

Competition

PRT above today's traffic: Urban ropeways, ModuTram (Autotrén), Skytran, Vectus PRT, BeemCar, Vuba, UpBus, Transit X, Sun Glider, JPods, Futran Group, Supraways.

On ground level: Transportsystem Bögl (TSB), NEXT Future Mobility, Hyperloop, Glydways.

Market

The ottobahn system is suitable for all cities that want to cost-effectively expand their public transport capacity. The service is for people and goods, cargo and freight transportation can also be handled. In further steps, intercity connections will be established.

Business Model

We are engineering an emission-free and autonomous transportation system above today's traffic. Electrically driven pods with up to 4 seats run on proven railway technology in 5 to 10 meters height. The pods drive on-demand without intermediate stops to your destination. Ottobahn combines the comfort of a car with the sustainability of public transport.

www.ottopia.tech

Ottopia Technologies

Enabling the worldwide transition to safe and effective autonomy through teleoperation.

Mission

We allow humans to remotely monitor and control autonomous vehicles both as remote safety drivers and to manage a fleet and solve its edge cases.

Technology Field:

Teleoperation/Autonomy

Looking for

New partners in the ecosystem to enable a more well-rounded offering to end customers.

The logo for Ottopia Technologies, featuring the word "ottopia" in a bold, orange, lowercase sans-serif font.

Highlights

We have managed to teleoperate a vehicle on public roads at speeds as high as 40 km/h and are able to maintain connection in tunnels even when phone calls are dropped.



Key Team Members Amit Rosenzweig



Problem solved

There are and probably always will be edge cases that autonomous vehicles do not know how to handle. The current solution is to have a safety driver in each vehicle and that defeats the entire purpose of autonomy. By enabling continuous video communication, a remote operator can solve the problem in minutes and allow the vehicle to continue on its way.

Competition

Teleoperation vendors can be differentiated by two things: KPIs and features. The features we focus on, beyond network connection and video compression are safety systems, cybersecurity, and universal adaptability.

Market

Our universal teleoperation platform is relevant for any autonomous ground vehicle. This includes cars on public roads, yard trucks in a logistics facility or a combine tractor on a farm.

Business Model

Our B2B solution is offered on a subscription basis per vehicle per year. Usage is not relevant.

Contact Jesse Shalev | **Email** jesses@ottopia.tech | **Phone** +97 25 48 08 22 12

www.parkio.eu

Parkio – Servicios Informaticos LDA

eParkio - Seamles Parking



Mission

We have prepared an IIoT platform focused on static traffic. Our product contains a booking platform, EV charging options, payment platform, residential and public parking management platform, an integration platform for integrating third-party solutions and IoT devices management.

We want to become largest parking space operator.

Technology Field:

Mobility services

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion

Problem solved

The municipalities face different problems of static traffic. This problem is mostly connected with micropayments, visitor parking, residential parking, abonents parking, traffic jams, parking space deficiency, and much more. In the same time, drivers commute to work daily with huge inefficiency and directly cause traffic jams, parking congestions, smog, CO₂, and so on.

Competition

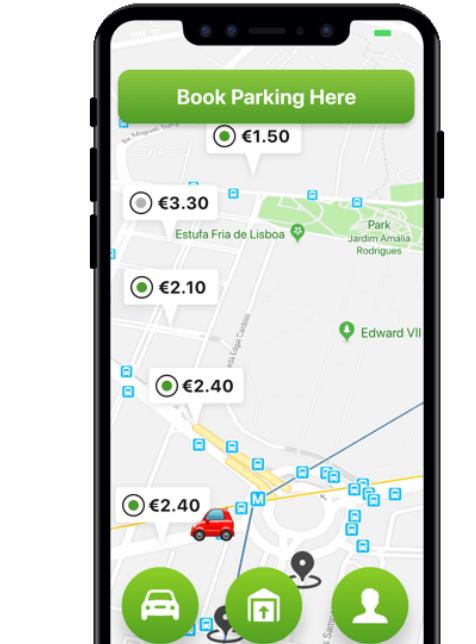
Parking passport, ParkNow, Easypark and others mostly indirectly.

Market

There are more than 60 000 000 public parking spaces. A total of 33,760,146 regulated parking spaces in EPA municipalities with populations of over 20,000 public parking spaces in Europe. At the same time, a lot of municipalities report a deficiency in their availability.

Business Model

Data can be utilized in Active mobility and Future mobility. Platform in the same time gives the opportunity to increase availability, utilization, and change of purpose of public spaces. Integration with EV charging points and different third-party solutions brings stakeholders increased efficiency.



Highlights

We generate revenue around EUR 15,000 a month.



www.prepravto.cz

Prepravto

Smart city deliveries

přepravto

Mission

Prepravto focuses on smart urban transport of goods reloading half-empty trucks along their regular city shipping routes to avoid empty runs.

Technology Field:

Last mile delivery and green logistics

Looking for

- Funding
- European promotion
- Connection with EIT UM partners

Highlights



Key Team Members Eva

Vyskočilová | Martin Černý | Viktorie Fričová | Josef Vyskočil

Contact Josef Vyskočil | **Email** prepravto.cz@gmail.com



Problem solved

Economical Problems - empty vehicles,
Social Problems - Lack of qualified staff,
Environmental Problems – greenhouse gases

Competition

TIMOCOM, RAAL, Quiccargo, Shipvio, Czech post,
Curiers company

Market

Czech republic, EU

Business Model

B2B2C

www.smarttrass.com/qlx

QLX

Realtime planning, validation
and involvement.



Mission

We make state of the art gaming technology available to real planning projects of infrastructure to improve the planning quality, significantly speed up the planning process and take the experience of people's involvement to a new level.

Technology Field:

Mobility & Infrastructure

Looking for

- International Expert Partnerships
- Leads and Sales opportunities



Highlights

Frame Contract with German Railways (Delivering Software and Consulting).



Problem solved

Infrastructure projects suffer from very long planning periods (up to 20 years) with high effort, many iteration cycles, poor basis for decision-making, and sparse public participation. The reason for this is the use of outdated technologies.

Competition

Autodesk and similar software providers.

Market

We target Planning authorities, Infrastructure operators, Utility companies and Engineering consultants.

Business Model

B2B

www.ridebee.de

RideBee

The default platform for your daily commute.



Mission

Becoming the default mobility platform to enable an enjoyable commute for everyone.

Technology Field:

Mobility

Looking for

Networking towards corporates, mentors and investors as well as municipal decision makers.

Highlights

2019 Axel Springer Porsche GmbH & Co. KG investment



Problem solved

Especially in terms of COVID-19 trusted mobility solutions for a safe journey to work are essential. Carpooling therefore acts as the safest alternative to crowded public transport.

Competition

GoFlux (www.goflux.de) is a carpooling platform from Cologne, which maps carpools on short distances. The central differentiating factor is the commission-based business model, which results in a high bounce rate among end users after initial partner finding.

Flinc (www.flinc.org) was originally a dynamic, open carpooling platform, which was launched in Darmstadt but could not establish critical mass due to the B2C model. In 2017, Daimler took over the company and began using it for internal purposes at the Sindelfingen site.

TwoGo (www.twogo.com) originally emerged from an internal project of SAP and was sold to companies as a pure matching platform, but was also operated on a B2C basis. Last year the Schwarz Group took over TwoGo and is currently not particularly active on the market.

Market

For about 70% of western commuters, driving to work by car is their preferred means of transport. A 30 km long one-way trip adds up to over 4000 Euro vehicle costs and 42 8-hour working days with mostly unused travel time per year.

Business Model

The business model is the paid platform used as SaaS. We sell to companies for a monthly SaaS fee, so their company location is made accessible to the users on the RideBee platform. The employees (users) use RideBee free of charge (i.e. without commission or subscription) and only share the travel costs fairly. The solution is designed for larger business locations, industrial parks and municipalities. We offer the platform as SaaS for currently several thousand Euros a month. The business model is location based and offers great upselling potential, especially for entities with multiple locations.

www.shotl.com

Shotl Transportation SL

Provide a valuable option in areas where public transportation is often insufficient and highly subsidised.



Mission

Shotl mission is to develop a platform that makes collective transportation as flexible and convenient as the private car.

Technology Field:

Last mile delivery and green logistics

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

A genuine solution: it offers a first mile and last mile optimised solution, dynamic routing and demand responsiveness, leveraging Machine Learning techniques, and mobility for seniors, teenagers and/or disabled people.



Problem solved

Shotl helps cities and corporations make better use of their bus systems by replacing low-ridership routes with on-demand bus in order to lead a progressive transition from a car-based culture towards a driverless integrated mobility.

Competition

There is a handful of demand responsive mobility solutions. Our main competitors are companies like Via Transportation, Inc., Door2Door, Padam, Moovel, Transloc, IOKI and Kyyti, among others.

Market

25 operations in 10 countries worldwide. The market of mobility on-demand has an expected CAGR of 10% during the period 2017-2024, (€ 83,730 M - € 163,165 M). Current sales cycle is of 10 months.

Business Model

The Shotl platform is licensed to corporations and governments, therefore is a B2B Software as a Service license package. Shotl charges a set-up fee at the beginning of a deployment, plus a monthly fee per vehicle.

www.mayordomo.io

Smart Point

Zero-emission quick-delivery IoT network for goods and services



Mission

Our mission is to optimize urban deliveries to make our cities more liveable. Smart Point City is the world's most advanced, cost efficient and environmentally friendly solution for urban deliveries. We go from "as many vehicles as packages stopping at every home" to "a single electric vehicle doing a circular-route and quick-deliveries to our Smart Points. We move any package or local product anywhere in the city. We do 3 delivery routes a day, passing by all Smart Points where recipients can simply reserve a compartment via their smartphone to receive their package in their chosen timeframe.

Technology Field:

Last mile delivery and green logistics

Looking for

- Pilots with cities
- Pilots with industry players



Highlights

- Service 100.000s citizen
- Reduce vans in streets by 10-20% (month 6)
- 95% customer satisfaction 100% delivery success
- Represent Spain at G20 innovation league
- Reduce CO₂ emissions by 98% VS. traditional means
- 79% users became recurring ones



Problem solved

Urban Distribution of Goods is one of the main challenges for cities as it is responsible for over 20% of urban traffic congestion and 25% of urban pollutant gas emissions. Smart Point City solves this by its quick-delivery tech and efficient network which is able to deliver 600 packages/hour, reducing CO₂ emissions by 98% compared to traditional methods.

Competition

Seur, Correos, GLS, Amazon – traditional infrastructural-heavy couriers entering space with lockers but only to reduce their operating margins, not open-source or local commerce focused.

Gig-economy, Glovo, moto couriers – one rider – one package means much higher delivery cost. Focused on food and immediacy, difficult to deliver high-volume cost-effectively.

Market

Our market is all cities larger than 50.000 habitants that are faced with the challenge of reducing CO₂ emissions and traffic congestion caused by goods deliveries and that are looking for solutions to promote their local economy.

Business Model

Smart Point City is the first zero emission public network for the movement of goods in cities. We connect streetside package reception points located in key districts, to a large centralized Hub, via an efficient electric delivery route system that reduces CO₂ emissions and city traffic. Cost savings generated allow us to deliver any package for just 1 €.

www.technovator.co

TechNovator

#Wireless charging ports for drones
 #wireless charging route for e-scooters
 #delivery by drone #wireless charging ports
 #energy price monitoring

Mission

TechNovator has invented unique method of energy transfer that allows us to charge drones, e-scooters, other high-powerful devices simultaneously at 0,5 meter distance with efficiency - 95% without cables.

Technology Field:

Autonomous vehicles and systems

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Business Model

B2B

Highlights

- Seal of Excellence (Horizon 2020 2d phase)
- Polish Intelligent Development Award 2020
- www.cofund.org.pl/wiadomosci/3-lata-polish-ukrainian-startup-bridge
- www.hesoultimes.com/ST/?url=/ST/db/read.php%3fidx=13714



TechNovator

**Problem solved**

Currently drones have an average time to fly around 30 min. Then they are required to be recharge or re-charge the battery. They always require constant human support. For example, a drone needs to monitor solar stations or power lines. Currently that process looks like drone fly, operator using car with petrol or gas needs to follow that drone and re-charge battery when it dies. Even the process to re-charge batteries creates a business downtime around 30 min. Currently that process rather costly and requires constant human support.

Competition

www.skysense.co, www.wibotic.com, www.getcorp.com, www.wipo-wirelesspower.com, www.humavox.com, www.heishatech.com

Some of those companies already have a solution, some of them in process of development. But all of them have significant disadvantages.

Market

We are going to bring our innovative wireless charging technology to the 3 market segments: 1) transportation; 2) consumer electronics; 3) active human implants. We will be able to create wireless charging ports for the drones and cover with that solution several industries: smart city needs, traffic control for police, delivery, energy, agrarian, etc.

www.travelai.info/myways

TravelAi

With TravelAi you can effortlessly collect consumer trip-chain data between private, public, motorised and human powered transit choices.

Mission

Who we are: TravelAi is an ESA BIC incubated UK startup, generating proprietary data, using an in-house tech+IP stack, Transport-specific AI, and with a UK-FI-PT based team that's successfully led over 3.6 million Euro of projects since 2016. With 34 patent citations including from Microsoft, BMW and Google. What we do: Offer B2B SaaS solution to capture citizen/passenger private and public transit habits, aka Digital Automatic Travel Demand Survey. Clients include: train and bus operators, automotive Tier1 suppliers to public transit authority and municipalities. Use cases: movement trajectories, automatic travel demand surveys, active travel campaigns, citizen-input on traffic regulation orders, carbon foot-printing and pathogen spread tracing.

Highlights

TravelAi is an ESA BIC incubated UK startup, generating proprietary data, using an in-house tech+IP stack, Transport-specific AI, and with a UK-FI-PT based team that's successfully led over 3.6 million Euro of projects since 2016.



Technology Field:

Data generation, AI, Mobile/Smartphones, Sensors, IoT

Looking for

We are looking for partners to launch with, conduct PoC or compliment any existing projects and challenges in Mobility-as-a-Service, active travel, mass trip surveying, transport infrastructure planning and household surveying.

Problem solved

The lack of joined up data that reflects the multi-mode mobility/transportation buying habits of consumers/citizens, including when they walk or bike, use public or private transit is the huge knowledge/opportunity gap.

Take a scooter company who will rarely know more than when the user got on their scooter, start/end and route.

Or how will Mobility-as-a-Service (MaaS) providers ever know what services to put into service bundles?

Competition

Other than Google and Apple, there is just a handful of multi-country multi-modal software solutions:

www.sentiance.com

- Belgium based, they do generalised context sensing and do not specialise in transport

www.anagog.com

- Israel based, they have secured investment from Daimler and Porsche

www.axonvibe.com

- Swiss based, they are more like Sentiance, except with a rail industry specialism.



Market

In 2017 the Connected-Places-Catapult estimated by 2025 the global Total-Addressable-Market (TAM) for mobility customer data at ~£ 32 billion. They also identified the Serviceable-Obtainable-Market (SOM) for TravelAi at £ 6 billion. TravelAi is 1 of just 4 companies offering highly scalable multi-modal and multi-continent customer mobility data capture solutions using smartphones.

Business Model

We offer a B2B SaaS solution to capture citizen/passenger private and public transit habits.

We can also license our MyWays Digital Automatic Travel Demand Survey app.

Or clients can embed our IP direct into their customer facing apps to instantly enjoy our trip detection technology.

www.unmannedsystems.bg

Unmanned Systems Bulgaria

Unlocking the sky to opportunities.

Mission

Unmanned System Bulgaria offers bridging service to all airspace users, drone operators included, with the Aviation authorities to ease flight approval and authorization process.



Technology Field:

Future/Advanced Air Mobility

Looking for

- Funding
- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

- EIT Jumpstarter 2020 (Urban Mobility) Impact Prize
- Part of European Network of U-space Demonstrators
- Galileo Master Prize Bulgaria 2017;



Problem solved

Every day 30 000 known drone flights take off over Europe. In 2030 EUROCONTROL and the SESAR JU initiative forecasted 20 000 over a city the size of Sofia every hour. The current Air Traffic Management (ATM) systems are insufficiently capable of scaling up regarding all these new users and delivering services in a cost-effective way. Those systems are rarely interactive with drone users, if at all, leaving them to operate in segregated airspace.

Competition

ANRA Technologies, Unifly, Altitude Angel, PANSA UTM, BULATSA

Market

Professional drone operators – farmers, industry and construction workers, first responders and professional photographers being among them.

Aviation and drone professionals.
Security / Enforcement / Safeguard personnel.
Authorities and municipalities who need airspace picture of all kinds.

Also, last mile drone delivery companies who want to offer same hour delivery and future air taxi operators.

Business Model

B2B2C

www.urbanradar.io

Urban Radar

Mobility data analytics to beat
congestion and improve air quality



Mission

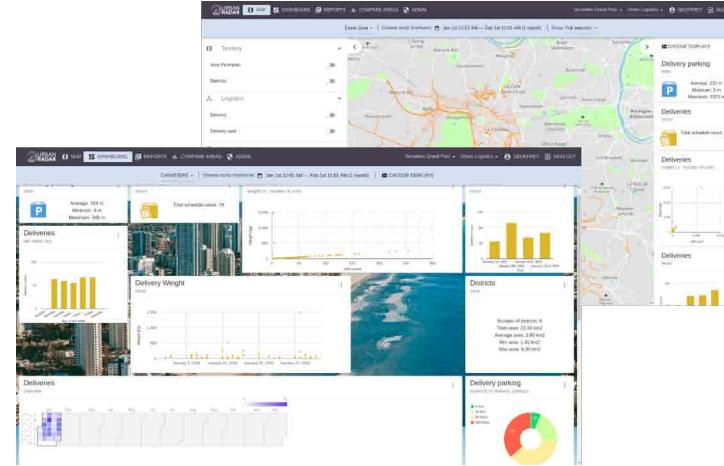
The mission of Urban Radar is to empower cities by enabling mobility data analytics.

Technology Field:

Smart City

Looking for

customers (cities and planners) and partnerships with smart city consulting firms



Highlights

Our first customer was the city of Versailles. Winner of the EIT UM Scale up program and experimentation with Barcelona of our urban logistics product. We have established partnerships with leading institutions, industry players and consulting firms.



Key Team Members Philippe Rapin | Geoffrey Bir

Contact Philippe Rapin | **Email** philippe@urbanradar.io

Problem solved

A strong increase in parcel deliveries due to the pandemic leads to more street use conflict and traffic congestion and exposing people to contamination and worsening air quality.

Competition

There are similar approaches in transport planning firms but they don't have advanced technology. There are similar approaches in some tech companies but they don't have smart city expertise. We have both.

Market

We target Transportation planning firms and all local authorities over 50 000 pop in Europe

Business Model

We take a share of the savings our technology brings to transportation planners and cities.

www.vesputi.com

Vesputi

We are building tools to enable the development of the MaaS ecosystem



Mission

The mission of Vesputi is to enable connected mobility solutions for more sustainable urban areas.

Technology Field:

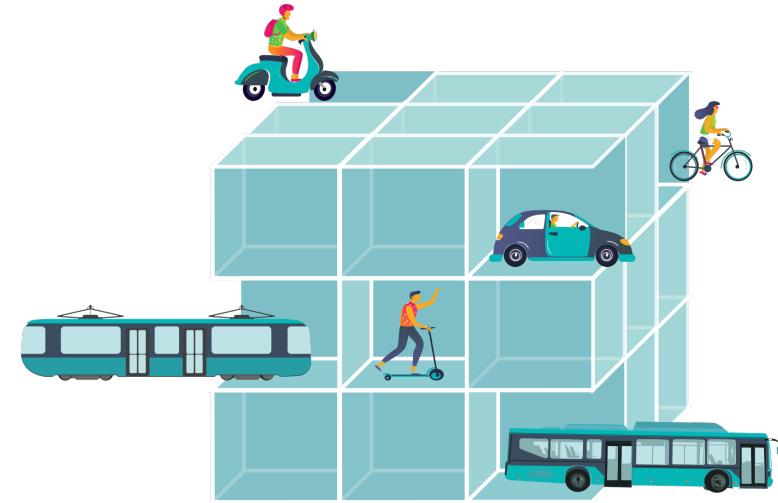
Smart City

Looking for

partnerships with cities and public transit operators, experts in the mobility space, pilot partners from the MaaS sector

Highlights

We have been accelerated by Spinlab and are supported by different EU initiatives.



Problem solved

A major challenge when building MaaS solutions is the access to data. We are building tools to easily access mobility information - standardized, quality controlled and in real time.

Competition

We are building a platform that is fully focused on MaaS solutions, developer friendly, and driven by open innovation.

Market

We are targeting cities, transit operators, and mobility providers.

Business Model

Pay-as-you-go or transaction fees

www.vianova.io

Vianova

The data platform for cities and operators to build the future of mobility.



Mission

Vianova's mission is to help cities and mobility operators better collaborate and communicate, in order to foster more liveable and breathable streets. Vianova provides cities with a web-based dashboard and API suite, offering powerful analytics tools to better understand mobility services and their impacts. Thanks to our technology, cities can also better plan curb allocation and regulations.

Technology Field:

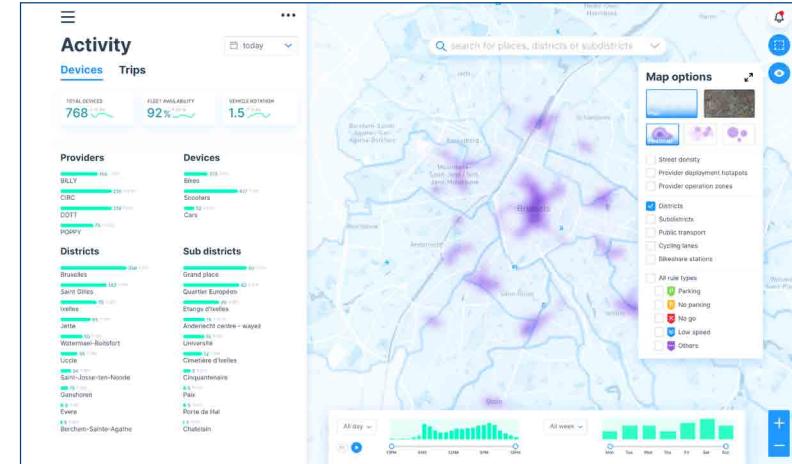
Mobility services

Looking for

- Pilots with cities
- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

Vianova processes 100 millions geo-data points per day with a strong commitment towards GDPR compliance. The platform is already live in 20 major European cities and integrates 50 mobility operators.



Problem solved

Cities are overwhelmed with an exponential rise of new transport solutions, such as shared e-scooters, delivery vans or soon autonomous vehicles. Our technology helps cities adapt their traffic regulations and urban planning to this new era.

Competition

Our main competitors are Remix, Populus, Ride Report, Blue Systems, Populus, Coord, Curbflow, or consultancies not well versed in technology. Our biggest advantage in comparison to them is our geo-fencing technology and its policy API, allowing cities to create, publish and audit regulations on roads and curbsides.

Market

70 % of the world population is projected to live in urban areas by 2050 (vs 55 % today). The market for Transportation Systems is projected to grow by 100 billions worldwide and 33 billions Euro in Europe by 2025, driven by a compounded growth of 16 %.

Business Model

Our business model relies on a SaaS offering to cities and/or operators with an annual license based on the volume of vehicles supervised. Operators can also subscribe to a Compliance API billed per 1,000 calls, and other businesses to aggregated mobility insights.

www.volvero.com

Volvero

Volvero is an app for sharing vehicles that connects owners with people who need one, saving time and money.

Mission

Volvero is an app for sharing vehicles that connects owners with people who need one, saving time and money. Through AI and advanced technologies, we improve quality and security with crystal-clear full insurance coverage. Volvero is easier, safer and more reliable than any other app.



Technology Field:

Marketplace, Blockchain, App, AI, Online platform

Looking for

\$1.25 mm (60% committed).

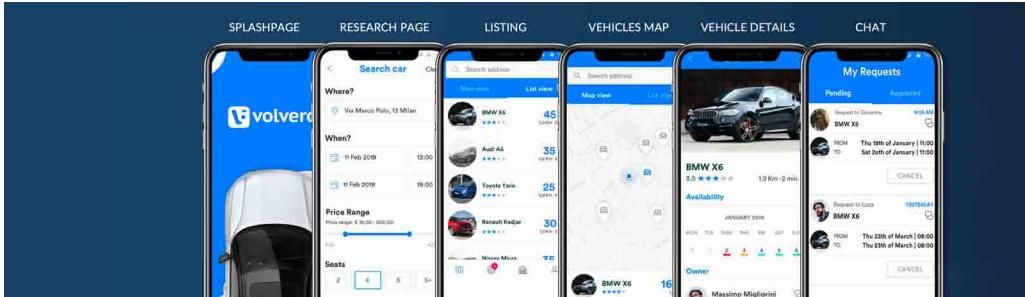
Looking for partnership with institutions for piloting the service.

Business Model

B2C

Highlights

- Member of Y-Combinator
- Start-up Chile
- The EIT Climate Kic



Problem solved

For 96% of the time vehicles remain parked while millions of people struggle every day to find a workable and affordable solution for their mobility needs. At the same time, mobility solutions have to be redesigned as there are no optimal ones: car rentals offer a complicated user experience, car-sharing is of limited usability and public transport is not reliable.

Competition

Our main global competitors are Turo and Getaround, while there are other small local competitors in the US and EU.

The problem they all are facing is that they are struggling to understand how the market is different across the several locations where they are delivering the service. This lack of grasp prevents them to satisfy users' need, both from an owner's and driver's perspective. The consequence of such issue

is that they are not able to develop a satisfactory user experience, starting from offering the right insurance policy to every single type of user till to the management of problem-related to the sharing vehicle's service itself. Their business is still full of asymmetric information among users, and they are not therefore able to scale up successfully.

Market

Our target users are people from the age of 20 to 55 who live in urban areas and own a vehicle that can be shared or would like to rent one for mobility.

Our typical users from the demand side, (car renters) are aged 20 to 45, with a particular focus on the cohort of 25 to 35: students, expats, young professionals and families with just one car, tourists.

Our typical users, supply-side, (car owners) are private owners aged 30 to 55: car dealers, corporates with an available fleet of vehicles, independent car rentals and families with more than 2 cars.

www.vonzu.es/en/

VONZU Tech

VONZU improves the last mile logistics ecosystem, by integrating retailers and logistics operators into a single cloud-based platform.

Mission

Our SaaS enables the orchestration of the last mile logistics ecosystem, by integrating retailers and logistics operators into a single cloud-based platform to digitize and automate all last mile operations. It offers a personalized solution that helps to organize and optimize routes and allocate them to the right drivers. It enables real-time traceability for all the actors involved, including retailers and final customers, who receive information about their delivery and real-time location of their parcel.



Technology Field:

Last mile delivery and green logistics

Looking for

- Pilots with industry players
- European promotion
- Connection with EIT UM partners

Highlights

We are not a simple SaaS solution! We offer a robust and standard basis of SaaS but we also offer logistics intelligence to make processes more automated and sustainable. We help our customers by developing new ways of delivery.



Problem solved

VONZU seeks to address the lack of digitalization in the logistics sector. Our SaaS enables the orchestration of the last mile deliveries, by integrating retailers (control tower functionality) and logistic operators in 1 place. The software is completely customizable and adaptable to any client.

Competition

Bringg, Urbantz, Getswift, Onfleet and Beettrack

Market

The market for last mile deliveries has risen more than ever with ecommerce, with 10B parcels distributed worldwide in 2018 and the CEP (Courier, Express and Parcel) market is worth 60B€, with 642k potential clients in Europe. Our target customers are distribution firms from any sector that need to control their own or external distribution partners.

Business Model

As a SaaS company, our income strategy is based on monthly subscriptions. We have several monthly packages for our clients, depending on the amount of deliveries they distribute per month and the type of plan that they choose. Apart from that we offer some extra features like white labeling and personalized technological developments.



Co-funded by the
European Union

PROGRAMME PARTNERS:



Ein Zentrum der TU Braunschweig

