SPARROW: Next Generation Urban Data collection & Analysis Ecosystem





Maxim Interbrick

Co-Founder &

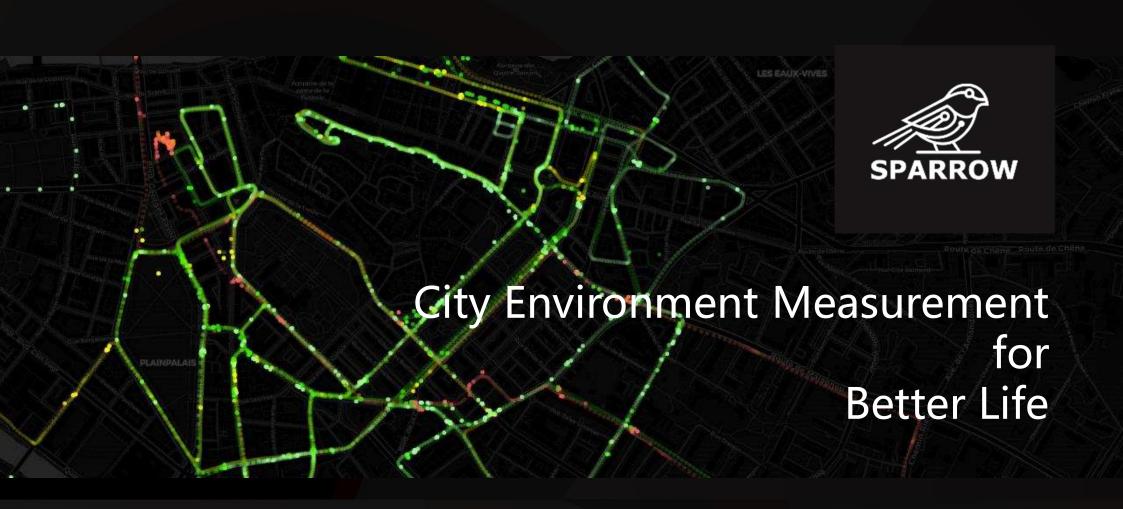
COO of Sparrow Analytics SA

SPARROW: Next Generation Urban Data collection & Analysis Ecosystem



You can manage only what you can measure

75



Copyright 2021 © All rights Reserved.



URBANIZATION CREATES MASSIVE PROBLEMS

6 Billion people live in cities aggravating health, climate, mobility, and economic problems which degrade human health and life quality



7 Million

no. of deaths / year due to air pollution caused by urbanization



70%

of world's greenhouse gas emissions are from urban areas



90%

of world population resides where air quality levels exceed the levels suggested by the WHO



The Guardian



WE ALL ARE FACING COMMON INVISIBLE ENEMIES

If you don't measure it, you cannot manage it and fix it!



Existing systems are unable to measure all necessary factors leading to sporadic and insufficient data



Existing systems are costly to invest and maintain



Absence of ready-to-use data processing systems and environmental specialists and data scientists





MODERN URBAN PROBLEMS REQUIRE DATA FOR SOLUTION!

With the help of the right data, we be able to deliver a true smart city.



City administration can take proper action and design legislation to protect the people



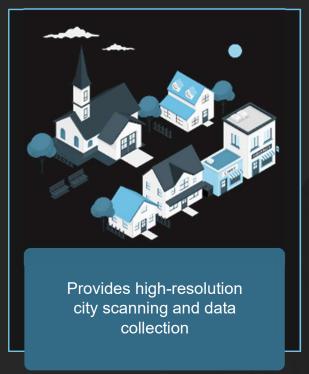
Producers of electric vehicles, air filters, pharmaceuticals, energy companies, etc. can better design and market their products and services





WHAT IF THERE IS A SYSTEM THAT...







SAY HELLO TO SPARROW

The most advanced and high-resolution urban environment scanning system



Sensor Network

Sensors deployed on vehicles continuously measure various factors and embed GPS position, thus creating a highresolution maps of pollutants



Our proprietary data blending and analysis system can provide data and insights about a variety of urban parameters.

Data Collection





We provide the most comprehensive way to measure city parameters without a huge investment monitoring equipment.



City Monitoring

The system measures and monitors crucial parameters and visualizes for easy understanding.

Cost-Effective, Real-time, Complete, and Accurate

We help make life better in urban cities



MAGIC IS IN THE DATA





A platform for an easy access to built-in and 3rd party applications and data models on the cloud



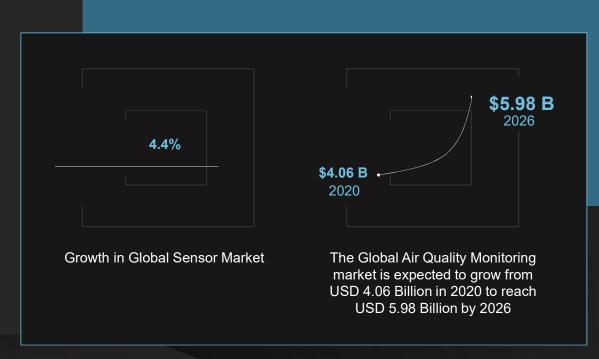


THE MARKET OPPORTUNITY FOR MEASUREMENT SENSORS AND DATA IS ASTOUNDING!



Some factors contributing toward the growth of the market are:

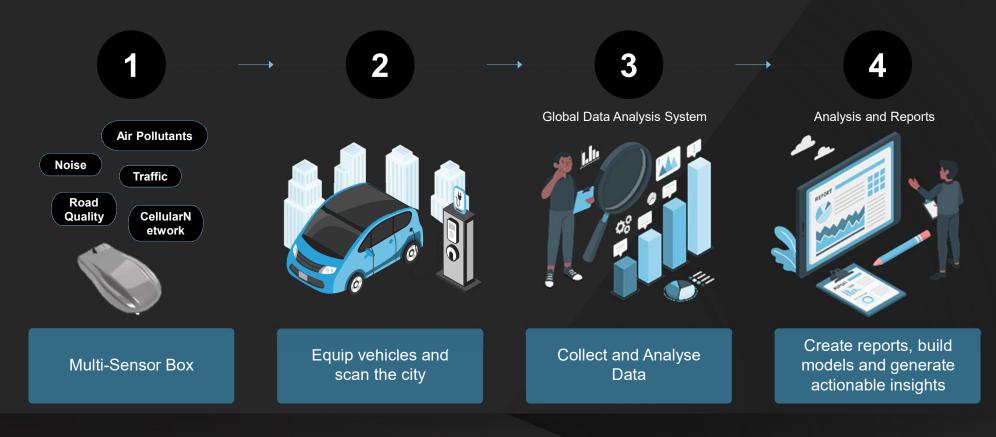
Government norms and regulations (e.g. the Clean Air Act and Sustainable Development Scenario by the UN) for monitoring pollution are likely to drive demand for efficient air monitoring



Converight 2021 @ All rights Poserver



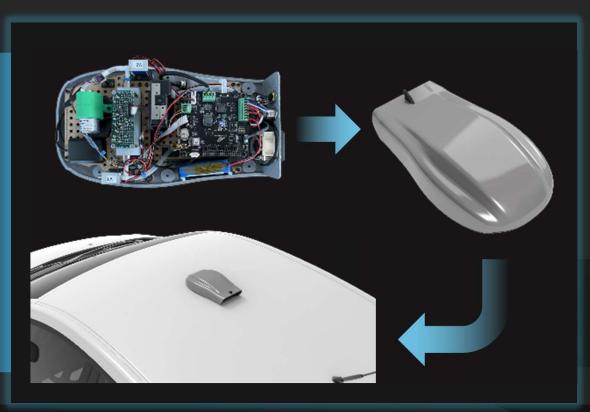
HOW IT WORKS?





TECHNOLOGY

We have created the best in class mobile multi sensor with unlimited potential



- Air Pollution
- Toxic gas detection
- Noise Pollution
- Road Quality Mapping
- Traffic Patters
- Temperature and Humidity









BUSINESS MODEL

We monetize the following services



Monitoring Systems

- Renting Sensors:\$100 per unit, per month
- Access to platform:\$50 per unit, per month



Data Services

- Data APIs
- Cloud application
- Clean air maps for navigation



Custom Reporting

- Pollution reports for the electric vehicle, air filter, and air purifier sellers
- Air and noise report for real estate investors

We intend to market the project through ITU (UN) and smart city networks and calibrate with state stations to overcome regulatory barriers

SPARROW



Elshad Hajiyev Co-Founder & CEO

Experienced business developer, product designer and corporate manager



Maxim InterbrickCo-Founder & COO

THE TEAM

Business execution with entrepreneurial spirit and excellent communication skills



Eli Bernstein CDO

Data engineer and system designer with engineering background



Dima Gochstein CBDO

Software engineer with business development experience and broad network



Vakhtang Gegechkori CTO

Full stack developer with 20 years of experience and brilliant problem solving skills



Prof. Prashant Kumar *Advisor*

Decades of experience and hundreds of publications on climate and air pollution



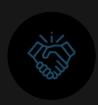
TRACTION



Developed the most advanced sensor box in the market



Developed cloud data collection environment in AWS



Partnered with suppliers, universities, and cities



ITU (UN) Associate Member for building standards for urban measurement



Planning pilots in Geneva, London, Antwerp and Tel Aviv



TARGET DEMOGRAPHICS

Potential areas where data can be used to evaluate, trade, design and market products and services

Government (41%)

- Air Quality Dept.
- o Transport Dept.
- Ministry of Environment
- Pollution Compliance Bodies
- Certification Bodies

Energy and Healthcare (23.1%)

- Carbon credit trading
- Medicine development
- Health Insurance
- Hospitals
- Air quality tracking for asthma patients

Commercial and Residential (27.6%)

- Data Aggregators (Google Maps etc.)
- Hospitality (AirBNB and similar)
- Real-Estate Industry
- Utility Management
- Construction

Others (15.28%)

- Security services
- Utility Management
- Municipality Bond traders



WHY IS SPARROW DIFFERENT?

We have created the best in class mobile multi-sensor that can measure parameters like Air Pollution, Noise Pollution, Traffic Pattern, Toxic gas detection, Road Quality Mapping, Temperature and Humidity, and others



Turn-Key Solution for cities



High-Res Measurements and BIG data



No need for the specialist due to Al data analysis



No need for building infrastructure



Eliminates the need for initial investment



Cost-effective



SPARROW WILL HELP SAVE MILLIONS!

E.g. Breath London

Cost:

Sensors: \$780,000 investment

o Depreciation: \$156,000 per year

o Platform: \$1,500,000 investment

o Maintenance: \$120,000 per year

Specialist Team: \$600,000 per year

Sparrow

Cost:

Annual fees: \$180,000 per year

That's it!



Children and elderly people with asthma can choose the location to live and walk

Cyclists can choose routes through streets with less pollution

Parents can choose a safe walking route with children

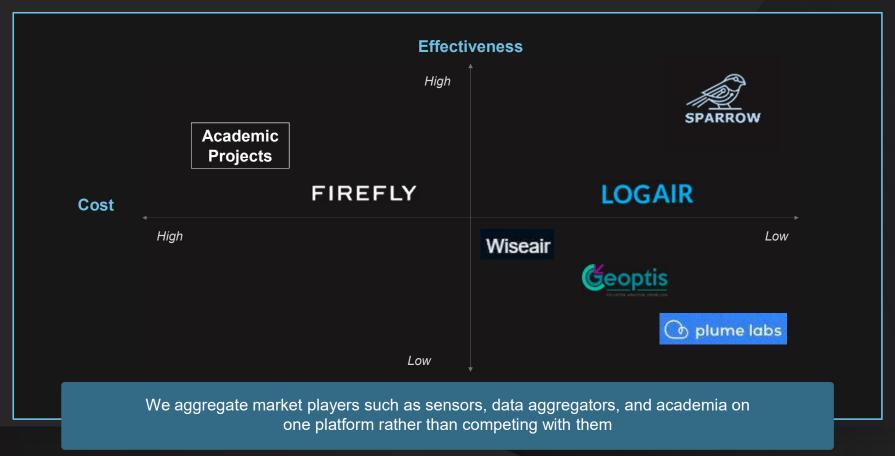
Navigation companies can optimize routes to minimize air and noise pollution

Hospitals and offices can install proper air filtering systems

Banks and real estate companies can properly evaluate apartments and buildings



COMPETITIVE ANALYSIS





Become a part of our journey as we disrupt the market for a good cause!

Contact for more info:



Elshad Hajiyev

<u>eh@sparrow.city</u>



Maxim Intebrick

<u>mi@sparrow.city</u>