

A person's hands are on a steering wheel, driving a car. The image is overlaid with a teal tint and a network of white dots connected by lines, suggesting data connectivity. The car's dashboard and air vents are visible in the lower right.

MOTION-S

TURNING MOBILITY DATA INTO ACTIONABLE INSIGHTS

Data analytics to empower: serving our customers by collecting, augmenting, profiling and assessing mobility data

WHO WE ARE

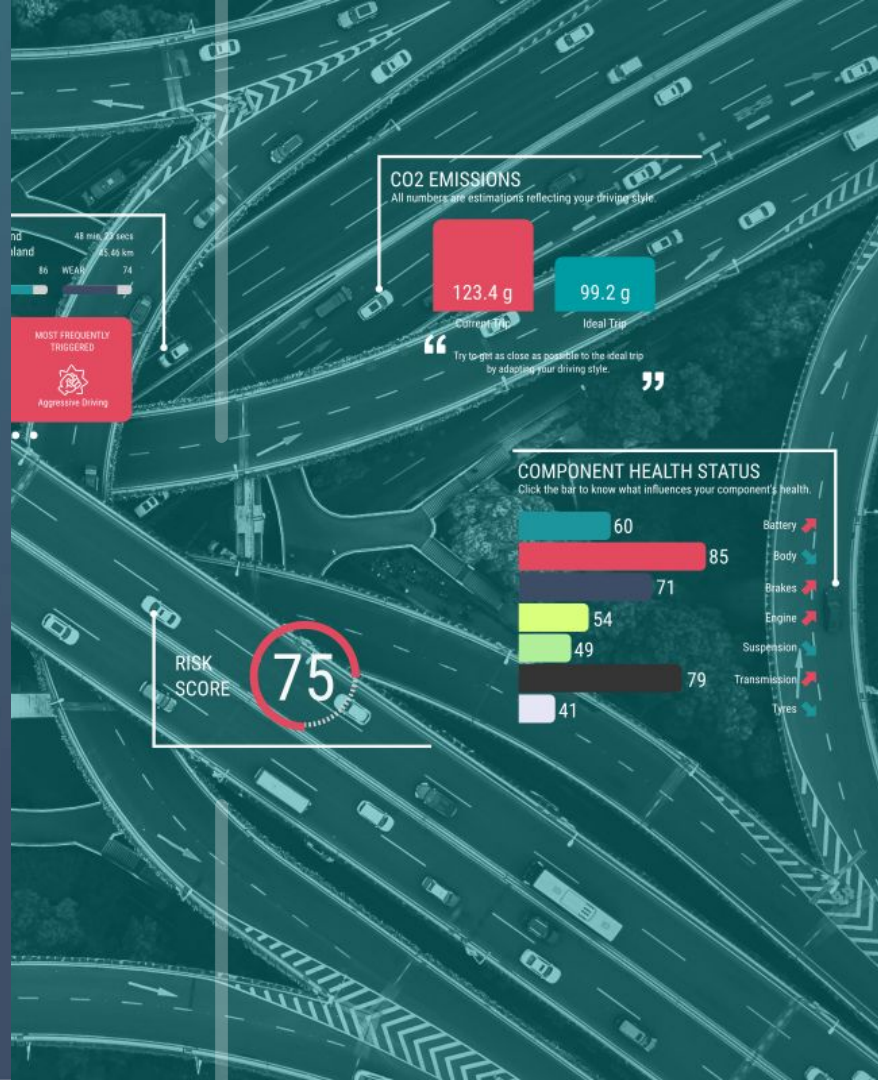
Motion-S is a data analytics company that solves problems in the mobility sector by leveraging data.

Our tools allow our customers to gather, analyze, and transform data into actionable factors ready to be consumed.

A POWERFUL PLATFORM

The Motion-S mobility analytics platform transforms raw location data from smartphones, simple trackers, databases or vehicle data into **actionable insights** – providing deep understanding of individual mobility patterns.

Predictive analytics in terms of **risk**, **car health** and **eco-efficiency** allow fleet managers, insurers, OEMs, smart mobility operators, public authorities and transportation providers, to optimize their offer and to improve their value propositions for their customers.



1



Telematics Data

Latitude, longitude and a timestamp as a basic data input, either collected via our SDK integrated in a mobile app or any other tracking device, or transmitted to our API, is sufficient to return advanced mobility analytics.



Data Augmentation

The trip data is augmented, meaning each and every individual location during the trip is geo-data contextualized.

2

3



Mobility Profiling

We focus on finding patterns on your customers mobility, deriving their day-to-day living context, and detect unusual behavior.



Innovative data-driven products

We support you in designing, launching and selling innovative products based on these days' most crucial asset: data.

4

The background is a dark teal color with several bright, curved light trails that sweep across the upper half of the image. In the lower right, there are faint, light-colored geometric shapes, including a vertical line and rounded rectangular outlines.

DATA-DRIVEN SOLUTIONS BOOSTING YOUR INDUSTRY

Empowering you to create unique and innovative products.



DRIVING-STYLE BASED
PERSONALIZED QUOTING



CUSTOMER LOYALTY &
REWARDS PROGRAMS



DATA-DRIVEN
INSURANCE DESIGN



UPSELL / CROSS-SELL
SUPPORT



CLAIM ANALYTICS &
FRAUD DETECTION

ACCURATE RISK PROFILING, IMPROVED CUSTOMER
RETENTION & DATA-DRIVEN TARIFFS ENHANCEMENT

INSURANCE TELEMATICS

More accurate pricing schemes, objective driver profiling, client clustering, better claim management, and improved cost claim ratios – insurances worldwide rely on our competencies. We help insurers to set up new **dynamic actuarial models** allowing them to design and launch attractive products.

With our telematics platform, insurance companies can profit from many opportunities: staying ahead of the competition, increasing retention rates, **cross- and upselling** other life and non-life insurance products, knowing more about mobility needs and **lifestyle behavior**, and having a constant **positive communication channel** with its customers.

OPTIMIZING FLEET USAGE AND COMPOSITION THE SMART WAY.

FLEETS TELEMATICS

Detecting the influence of driving style on overall fleet costs and lowering them through actionable data insights is what we provide to fleet managers. Our platform presents our clients with tools to predict car wear and **predictive maintenance**, decreasing down-times of fleet vehicles, ultimately lowering operations costs.

Eco-efficiency profiling and eco-driving coaching pave the path for more sustainable, environmental-friendly, and efficient fleets management. With fleet vehicles being renewed regularly, fleet operators and managers need to have deep insights into their overall **fleets' mobility patterns**. This information is crucial to optimize the fleet's composition of regular combustion, hybrid or electric vehicles.



SAFETY
COACHING



ECO-EFFICIENCY
PROFILING



EV TRANSITION
ASSESSMENT



CAR WEAR
MONITORING



INSURANCE
PARTNERS



TRAFFIC
OPTIMIZATION



INFRASTRUCTURE
ANALYTICS



TRANSPORTATION
OPTIMIZATION



SUSTAINABILITY
& QoL



LIFESTYLE
ANALYTICS

OPTIMIZING URBAN & REGIONAL MOBILITY

MOBILITY ANALYTICS

Cities and regions question how to improve transportation and reduce the impact on individual mobility, especially for **commuting** from suburban or rural areas to city centers. Precise **mobility patterns analytics** deliver a factual basis for planning, optimizing, and adapting public transportation and offering new mobility services. Our team of skilled data scientists and system engineers support you in mobility data analytics and mobility simulation to improve your city's infrastructure. With EV vehicle sales numbers on the rise, charging infrastructure needs to be put in place.

With our **infrastructure analytics**, cities and governments have all the tools to plan and optimize the necessary charging infrastructure, P+R, bus lines, or even additional bicycle lanes, to name only some examples.



TRANSITION TO EV
(SALES BOOSTER)



AUTOMOTIVE
CONSUMER TRENDS



DATA-DRIVEN
LEAD GENERATION



ENGINEERING /
PRODUCT
IMPROVEMENT

PAVING THE WAY WITH DATA-DRIVEN ANALYTICS

AUTOMOTIVE PRE-SALES

Our advanced technology helps the automotive industry and OEMs leverage data to **optimize their pre-sales tools**, such as EV transition potential assessment. With more and more data available from connected vehicles, we assist vehicle manufacturers in designing and launching their **data-driven insurance products**, relying on our proven risk assessment and actuarial expertise.

With authorized workshops competing with independent ones in a price-sensitive business environment, our predictive maintenance solutions combined with **customized sales tools improve customer retention**.

CREATING INSIGHTS FROM MOBILITY DATA

The tools making up a powerful platform
to create value from location data

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"weather": {  
  "skyInfo": "Partly cloudy",  
  "visibility": "10",  
  "iconName": "partly_cloudy",  
  "temperature": "17",  
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  "windSpeed": "12",  
  "timestamp": 1598976085843  
}
```

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"illegalDirection": false,  
"iri": 7.4,  
"isBridge": "Y",  
"isRoundabout": "N",  
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"laneCategory": "2",  
"speedLimit": 90,  
"possibleSpeed": 84,
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contributory_factor_name :  
poor_or_defective_road_surface  
From_date: 2020-07-21 09:14:15+0200  
To_date: 2020-07-21 09:14:16+0200  
Intensity: 0.25  
Latitude: 48.657351  
longitude: 8.929156  
Road_type: rural
```

SDK & WHITELABEL MOBILE APPS

DATA COLLECTION

The Motion-S mobility analytics platform transforms raw location data from smartphones, simple trackers, databases, or vehicle data into actionable insights – providing a deep understanding of individual mobility patterns.

We are turning each mobile phone to a sensor - collecting high accuracy location data.




```
{
  "id": "297ea89e602b58fe01602b5dbb740004",
  "dateCreatedTimestamp": 1512556051318,
  "metaData": "{ 'somekey': 'somevalue' }",
  "startTimestamp": 1512454642000,
  "endTimestamp": 1512554642000,
  "device": {
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    "dateCreated": "2017-12-06T10:23:15Z",
    "detailsRequested": true,
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    "lastUpdated": "2017-12-06T10:23:15Z",
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    "metaData": null,
    "model": null,
    "name": null,
    "origin": "customerA-fleetB-1"
  },
  "customerTripId": "cd49e9b1-ee03-4425-aa53-8fcc56e6xyz",
  "origin": "customerA-fleetB-1",
  "consumed": false
}
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FEEDING & RETRIEVING DATA FROM ANY
SOURCE INTO THE PLATFORM

API SUITE

Motion-S offers a complete API suite to submit trip data to the platform in a total **device-agnostic manner** and retrieve different analysis levels in a per trip, driver, vehicle, and fleet level.

Our platform can process mobility and trip data from moving vehicles and provide **meaningful profiles on risk exposure, energy consumption, vehicle wear, and mobility patterns** to serve your business applications in a matter of seconds.

ADDING CONTEXT

DATA AUGMENTATION

To get meaningful insights about mobility data, we are putting data into its particular **spatial-temporal context**. This contextualization happens in our Data Augmentation phase: first, getting the **precise map-based route** of a raw trip sent to the platform; second, extracting all possible **information layers** for each segment of the trip route; and third, consolidating the results in a per-trip based, conforming the **augmented trip**. During data augmentation, more than 100 different information elements are added to each location and road segment of the trip.





SAFETY

75

ECO

85

WEAR

23

MODELS TO ASSESS DRIVING BEHAVIOR

PROFILING

We deliver granulated trip, driver, and fleet-based analytics to support our customers in designing and deploying data-driven products. In that sense, our analytics are aggregated into profiles that provide explanatory elements on how the driving behavior and context impact three different mobility-related aspects: risk assessment, eco-efficiency, and vehicle wear.

Our team of research-focused data scientists designed these profiles based on many years of experience in mobility data analytics.

WHO WE HAVE BEEN WORKING WITH

CUSTOMER REFERENCES

Insurances



Fleets



Mobility Analytics




LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Mobilité
et des Travaux publics

Automotive & OEM



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