



Data Monetization for Fleet Operators and Telematics Companies

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Big Data and Data Monetization

Big data is not nearly a new topic. The term has been here since early 1990s. However, it was the recent developments, such as smartphones, cloud computing, and mobile data, that made it available virtually to anyone with a computer and internet access.

Since the beginning the idea of monetizing and analysing big data has been quite interesting for a broad range of companies and even industries.

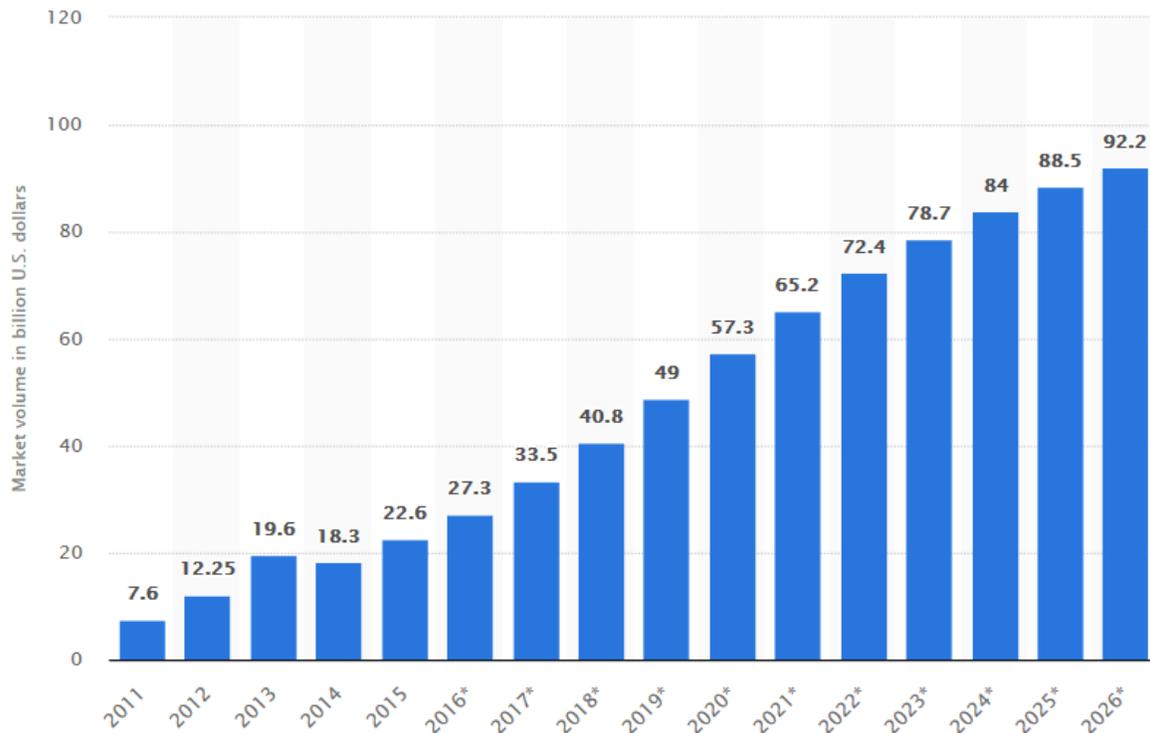
Currently we see big data being used in advertising, traffic management, insurance, and almost any industry you can think of.

This whitepaper specializes on datasets that can be created by fleet operators and telematics companies and their monetization and use within their products. The aim is just to provide a basic overview and inspire you.

Datasets and Their Use

To simplify things a little bit we can divide data monetization into 3 categories (two direct sources of revenue and one indirect):

- Raw Data Monetization
- Data Products Sales
- Cost Optimization



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Forecast of Big Data market size, based on revenue, from 2011 to 2026

Raw Data Monetization

Licensing raw data collected from various devices is the easiest way of monetization. There are numerous companies from different industries that are interested to license raw data.

The most used and straight forward dataset is **location** or **probe data**. It can be used to create traffic information, footfall indexes of points of interest, or even predict financial performance of companies.

Creating such dataset is rather easy. Target device (smart phone, OBD dongle, CAN bus, etc.) creates a single location point in a desired frequency and either sends it to a server or evaluates for further use.

- High-frequency collection (~1-second intervals) data is mostly valuable for telematics insurance (driver behaviour evaluation), traffic, mapping, and parking companies;
- Mid-frequency collection (~5-second intervals) is similar to the above, but cannot be used by insurance telematics in full;
- Low-frequency collection (~1-minute intervals) is the least valuable as it does not create data in desired density. However, combined with higher-frequency data from other sources it can still prove valuable and does not affect the performance of the client as much (battery drain and mobile data traffic).

Apart from fixed frequency collection, the trigger can be contextual. Here are some examples:

- Parking event
- Store visit
- Connection to a device detected (e.g. a car through Bluetooth)

Another group of raw data are networks and connections. **Cell tower information** is available from smartphones and can be used by OSS / BSS companies to create quality and coverage maps even in real-time.

Bluetooth, beacon, and **WiFi connections** are invaluable for adtech companies that produce user profiles based on visited places. Location intelligence companies can further use this information to evaluate the visit trends of specific places and demography of the visitors.

The activity of fleet operators and telematics companies can also produce other valuable information, that is more specific and thus can be a good monetization opportunity.

Mapping companies are always looking for ways how to improve their map data. As mentioned above, location data can be used to detect new road geometries with attributes and restrictions. But improving **POIs** and **addresses** is not that straight-forward. If you have such dataset and update it regularly, you can license it easily.

Each fleet runs on fuel and often uses fuel cards. Data collected from those—**fuel prices**—are of much interest to a lot of companies as well.

Other interesting datasets can be **transactions**, which represent some economic activity, and could be potentially interesting to hedge funds and other companies, or even **socio-demographic data**.

Data Products

If you already create one or more interesting datasets (or know where to get one) and have some specific know how, you could use them to create data products. Don't forget, that there is already a bunch of companies, which could help you get a jump start your data business, so you don't have to do everything yourself.

As with the data itself, the amount of data products you can create from it is limitless. In this whitepaper I will cover the following:

- Traffic Information
- Parking
- Smart Cities
- Location Intelligence

Producing **traffic information** from location data is already being done by a lot of companies on the market. As mentioned above, the easier way to go is to license your dataset to them or exchange it for their products. But if this information is a vital component of your business, you could go for your own traffic data.

For **real-time traffic** you'll require relatively high-frequency data with a very low latency (below ~1 or 2 minutes from client to your server).

Historical traffic does not have this latency dependency. However, you'll require a solid amount of location data to produce high-quality information that covers every hour of the day, every day of the week, as well as exceptions, such as bank holidays, etc.

By applying deep learning algorithms to these two you can even create **predictive traffic**. In most cases you'll however need other datasets as well (e.g. accurate weather data).

Another popular use of high-frequency or contextual location data is **parking information**. Based on individual parking events and manually acquired data (number of parking lots, parking policies, etc.) it is possible to calculate the availability of parking in a specific location – both **off-** and **on-street**. Using raw location data for this purpose is more complicated, so having context added to it is very useful. If a vehicle or a smartphone was *driving* and later it started *walking*, there's a high probability that a parking event happened somewhere in between. Of course, this is a very simplified version of the whole algorithm that evaluates the parking patterns.

If you haven't lived off the grid for the past few years, there's a good chance you already heard about **smart cities**. Although it's on the top of its hype now, there are no clear boundaries set. Services included can thus range from infrastructure optimization to working with communities. I will obviously focus more on the transport part of smart cities, as there are very clear overlaps with activities of fleet operators and telematics companies.

First that comes to mind is the abovementioned **infrastructure optimization**, most importantly the road network. By analysing the traffic patterns within a city it is possible to define bottlenecks and—in cooperation with the local authorities—eliminate them.

Combining this information with real-time or predictive traffic information it could be possible to even eliminate traffic jams to some extent. **Redistributing traffic** would in this case be done by a backend solution that would evaluate the situation in real-time and provide drivers with similar routes with slightly different results, which would utilize the road network optimally.

Another point of view would be to convince citizens to use alternative means of transport, such as public transport. **Origin-destination matrices** are often used to optimize the network, because they provide clear information on the movement of people within a specific area.

Last one to cover is the **location intelligence**. Similar to the above, it combines several different datasets and data products.

Retail-chain optimization can be done by analysing movement patterns of your potential customers. If you're able to define a clear target group, using user profiles and location data you can pinpoint potential locations, where a store could be opened.

Analysing **catchment areas** can be quite useful for this purpose as well. When you attribute visits of your store to specific users, you can determine where did they come from. Sum of all of these will be the catchment area of the particular store. For a bigger retail chain that needs to cover a city or a metropolitan area, it can be quite valuable to see which parts are not already covered by the existing chain.

Cost Optimization

Alternative—indirect—method of monetizing your datasets can simply be to lower your costs. For most of the larger fleets that are three simple methods how to do so:

- Predictive Maintenance
- Customized Insurance
- Routing Optimization

Knowing when one of your assets will break down and planning for necessary maintenance in advance is a cost saver I don't have to explain a lot. Using the sensors of a vehicle and looking for specific patterns can detect potential malfunctions before they actually happen. Because of that, **predictive maintenance** is becoming very popular and can save you a lot of direct and opportunity costs.

The bigger the fleet, the more you pay for the insurance in total. Analysing **driver behaviour** and educating your drivers by giving them instant feedback can not only save you money for repairs in case of an accident, but can also get you a better insurance quote.

Last, but not least, **optimizing routes** for your drivers can instantly save you up to 30% of your costs—whether it's for fuel, driver's salary, or opportunity costs. Start by implementing existing services for route optimization (like [Sygic Maps](#)). But to improve it even further you can use location data and routes collected by your own fleet.

Examples of Companies

Traffic & Mapping

- [Google](#)
- [TomTom](#)
- [HERE](#)

OSS / BSS

- [Webradar](#)
- [Teoco](#)
- [Infovista](#)

AdTech & Location Intelligence

- [PlacelQ](#)
- [GroundTruth](#)
- [Anagog](#)

Insurance Telematics

- [IMS](#)
- [OCTO](#)
- [Metromile](#)
- [Cuvva](#)

Hedge Funds

- [Thasos Group](#)
- [Hutchin Hill Capital](#)

Fuel

- [OPIS](#)
- [GasBuddy](#)

Smart Cities

- [IBM](#)
- [Oracle](#)
- [Siemens](#)
- [Sidewalk Labs](#)

Parking

- [Parkopedia](#)
- [INRIX](#)

Conclusion

There are perhaps two most important aspects when you think about data monetization that you should consider before starting:

1. You're most likely not the first to do it, no matter how innovative and unique you think your dataset or product is. Big data analysis is one of the biggest hypes right now with capital flowing into this industry in millions on a daily basis. Do the research and ask around.
2. Beware of privacy and regulations. As with any significant game changer, regulations in data collection are getting more and more strict. Depending on the region and devices from which you collect, you will need to be compliant with such policies like EU's [GDPR](#) or Google's or Apple's privacy policy standards.

If you need help starting or growing your data monetization efforts, feel free to contact me at pmagic@sygic.com. We're active in pretty much every field mentioned in this whitepaper (as well as many others) and are happy to help you grow your business.