**Types of data saved in the warehouse Tesla**

**About the Data Tesla Provides**

When we gather data, we believe it is critical that you understand what we're collecting and how it will be utilized. Information such as Tesla Account details, customer support activity, service history, and vehicle data may be shared to you as part of your request. At regular intervals, Tesla vehicles capture operational and diagnostic data, which they may transmit over-the-air to our systems. Our engineers and service staff may use this information to remotely analyze vehicle health, diagnose problems, and perhaps remedy them before they become a problem.

Your car signals are listed at the top of the file, along with your VIN, and timestamps for signal changes are supplied in the left-most columns, respectively. Your car information is delivered in an industry-standard format that is simple to access and read.

<https://www.tesla.com/support/privacy#data-provided>

**Big data & data analysis**

Problem of data analysis:

* Every week, the automobile provides approximately 2-5TB of data (vital indicators, how the cars are used, etc.)
* Many indications will be collected and kept as data.
* The problem is that Tesla will be overburdened with data.
* Tesla was a forerunner in gathering and processing big data and applying it to improve its business. However, it now wants to leverage big data in the same way that Google, Amazon, and Facebook do – to streamline and personalize the customer experience.

Big data solution:

* Tesla is the poster child for equipping cars with sensors and transmitting the data back to the mothership for analysis, with the data being collected utilizing an Apache Hadoop® cluster.
* The information is utilized to improve R&D, vehicle performance, vehicle maintenance, and customer satisfaction, as well as the development and improvement of future goods.
* The electric manufacturer, which makes the world's most connected automobile, the Tesla S, now collects data from its vehicles solely for research and development purposes. With its over-the-air software upgrades, IT, engineers, and manufacturing lines can address difficulties and send back patches.
* But as its big data increases, it will use the cluster to learn more about its customers, influencing business decisions.

Other big data & data analytics tools used:

* SAS Eminer: Descriptive and predictive modeling give us information that helps us make better decisions.
* Tableau is a data visualization program.
* SPASS: You can confidently forecast what will happen next with SPSS predictive analytics software, allowing you to make better decisions, solve problems, and enhance outcomes.
* R: Tesla Motors has recently begun developing R packages (YES! They're using R as well, just like us in the Laboratory Session :)
* Python has also been modified for analytic purposes.
* Zoho Reports is a web-based reporting tool.

<https://wirawanrizkika.wordpress.com/2016/09/12/big-data-data-analysis-tesla-study-case/>