

The logo for lebalap features the brand name in a bold, sans-serif font. 'lebal' is white and 'lap' is cyan. To the right of the text is a stylized graphic of a fan or turbine with multiple blades, alternating in color between white and cyan.

lebalap

racing performance

**Where motorsport engineering
and data science join**

DATA SCIENCE IN MOTORSPORT

Data science is defined as the field of study that seeks to identify patterns to obtain results and solutions. Have you ever wondered what it would be like to apply this to car racing?

Nowadays everything revolves around data, but few know how to really take advantage of it, especially in motorsport. And it is that patterns can be found in the effects of the weather, the characteristics of the asphalt and even in the turn style. How does each variable affect the driver and the car? What is the best way to modify the setup to adapt it to those conditions? How should we modify the race strategy to the unforeseen that arise? Everything happens to identify patterns, interpret the results and apply the solutions.

Do not be confused or discouraged, because this does not require hundreds of variables or millionaire investments in hundreds of sensors. The possibilities scale exponentially with the amount of information, but with a minimum data acquisition base, time series techniques, statistical adjustments and advanced visualizations can be applied through dashboards that will undoubtedly make the tasks of engineers more effective, more efficient and will make the difference.

From the lowest karting categories to the sophisticated Formula 1, including touring cars, GTs, electric cars and without leaving simracing out. **The time has come for motorsport to be at the forefront of data analysis and visualization.**



THE POWER OF AUTOMATION AND CUSTOMIZATION IN DECISION MAKING

Motor racing is a constant fight against the clock. Both in lap times and in decision making.

Until now you may have found it useful to use default softwares and spreadsheets with dozens of interconnected sheets, but with Lebalap you will discover a new world of possibilities. **No matter in which area you have doubts or difficulties, you will have detailed and personalized reports with each of the aspects you need to make correct decisions based on real information at a glance.** In addition, you can specifically request what you need or listen to recommendations.

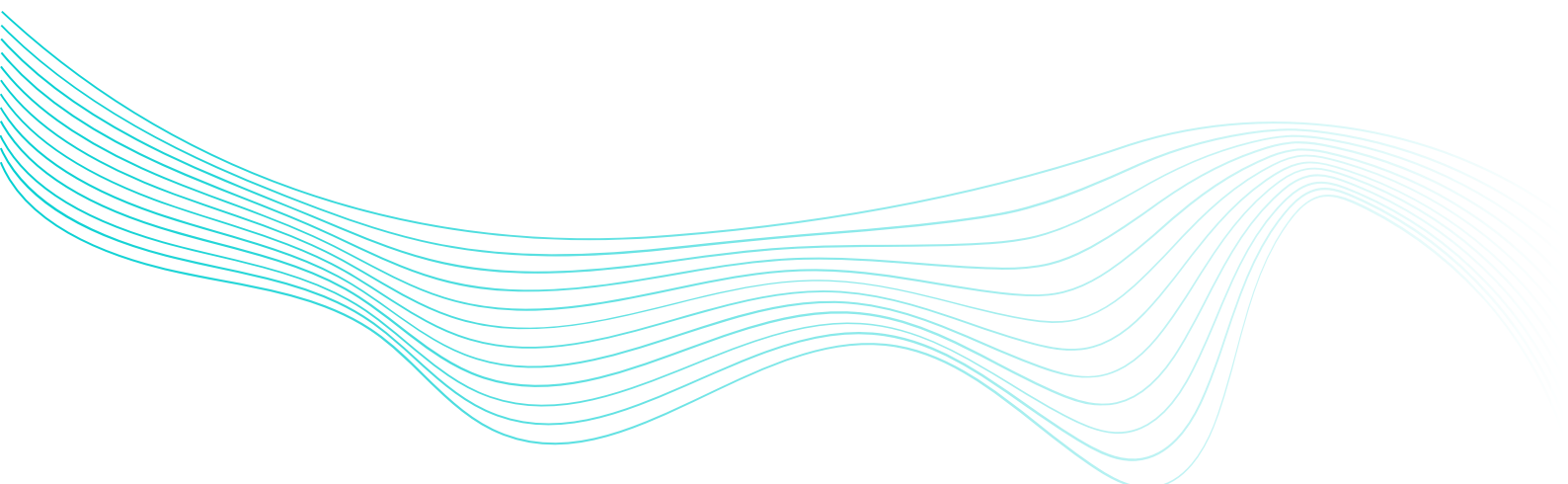
To make everything even better, the reports, dashboards, graphs, tables and analyzes will be automatable so that they can be generated every time they are needed, without having to go through a new software development process.

SAY GOODBYE TO INFORMATION LOSS OR INCOMPATIBILITIES

Automated and personalized reports do not mean having to give up the classic graphics to analyze the behavior of the driver with the pedals, the steering wheel and gear changes, or the suspensions, tires, brakes, spoilers and any other part of the car. On the contrary: **you can integrate it all in the same tool.**

If you use a program to analyze the driver, another to establish race strategies, another to corroborate the driver's feedback and adjust the setup, etc., you will be losing information and you will not be able to find the relationship between these factors or how to use it to your advantage. In the same way that, if you establish a race strategy through infinite sheets of a spreadsheet, you will not be able to import it into different software.

Forget that archaic way of working with data, **simplify the system and get more valuable information.**



THE CONVENIENCE OF WORKING REMOTELY

Having Lebalap services is very different from having someone on staff for three reasons:

- You are free of tax expenses associated with employees
- You can finish having services without added costs
- The speed of response and results is much higher

In other words, it works completely autonomously and remotely, which means that **you will have the analysis services when you need it** and that it is so versatile that it will adapt to your needs and resources at all times.

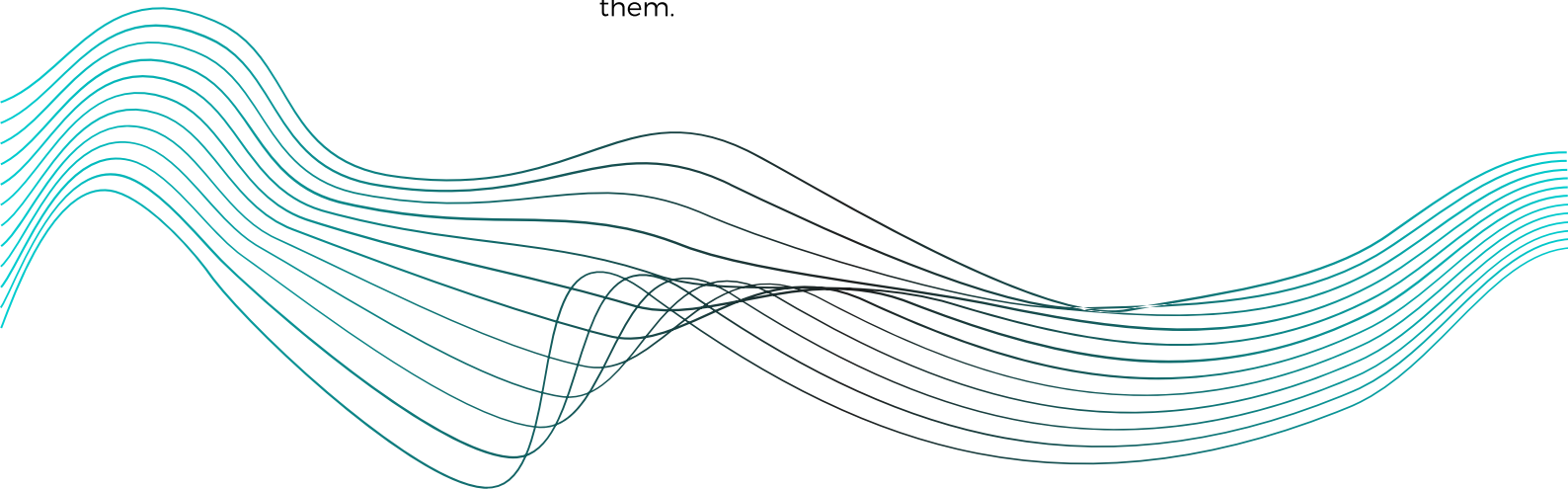
More comfort, better results, faster and lower cost.

YOU PUT THE LIMITS

This world of data science applied to motorsport is largely unknown, raising questions about the practical possibilities of a system based on this.

From whether it would be possible to represent the performance and evolution of the brakes in a single panel to analyze if the cooling ducts can be sped more, to whether it compensates winning a race knowing that for that result a time handicap will be applied for the next one for the nature of the championship.

It's that simple: **if you come up with a question that starts with "Would it be possible...?", The answer is yes.** The data is used to make descriptive and predictive analyzes, let's use them.



SYNERGY BETWEEN ENGINEERING AND DATA ANALYSIS, THE ONLY WAY

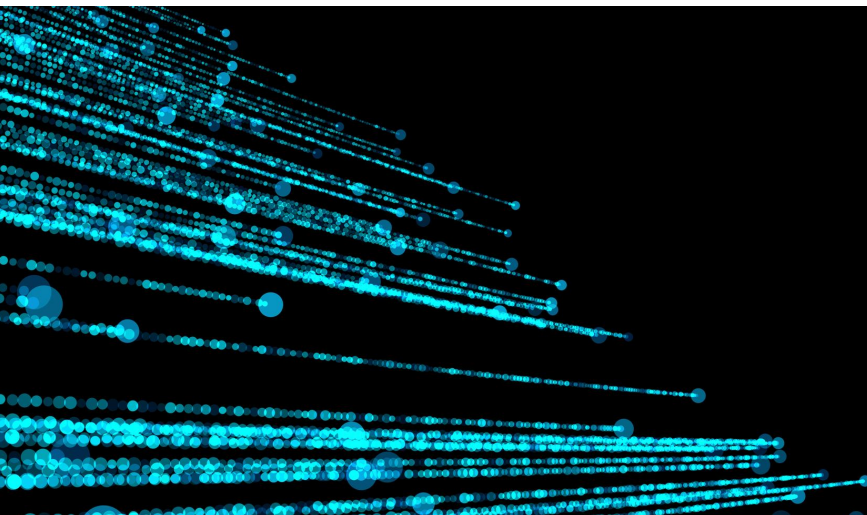
Today we see data analysis in any aspect of the industry and everyday life. However, the complexity of motorsport engineering requires true specialists in both fields: engineering and data.

It is easy to understand that a broad specialization in software development, data visualization techniques and advanced statistics is needed to be able to apply data science looking for those patterns that will facilitate decision-making. So much so, that international companies seek this type of profile due to the low number of professionals.

On the other hand, dedicated motorsport engineers have had to spend years understanding how each part of the car works, the physical principles that govern dynamics, driving techniques, and then finish specializing in one of the small areas of motorsport.

The only way to get that synergy for both branches to work on a single goal is with a combined specialization. Without data science, advanced analysis and visualization -the most common problem in motorsport- this will not be possible, while without knowledge of motorsport engineering, data scientists will not be able to approach these studies because they lack knowledge of how it affects the stiffness of the shock absorbers when cornering, why a driver applies the trail-braking technique or what depends on tire wear, among a thousand other things.

The time has come to take the leap, to level up, to have everything at your fingertips. And Lebalap Racing Performance is the way to do it.





*"This is not just a data analysis agency for motorsport,
this is your opportunity to be at the technological
forefront to make a difference"*