eusoft

more than a lims

Eusoft.Lab LIMS: from Application Centric to Data Centric

Eusoft.Lab LIMS: from Application Centric to Data Centric

Dear readers, in this study we will see how, in the world of LIMS and laboratory informatics, we are moving from a vision focused on application functionalities (Application Centric) to a more strategic vision, oriented to the use and analysis of data (Data Centric).

Both those who buy and those who produce a LIMS pay great attention to its functional aspect because the LIMS is a tool that supports the management of the process flows of the testing and quality control laboratories. Therefore, the more articulated the processes of the laboratories, the more accurate and specific the functionalities of the LIMS must be.

The first question that arises is this:

is it wrong to focus on the functional aspect of LIMS?

The answer is "NO!" because the correct management of the processes and therefore the good functioning of the laboratory, depends on the effectiveness of the application functionalities of the LIMS .

However, the functional aspect should not be the only subject of evaluation by users of a LIMS.

In a more advanced and strategic vision, the ability of the LIMS to manage and use the data produced by it and contained in it must also be evaluated.

What data is collected in a LIMS?

There are several data that are collected in a LIMS (Samples, personnel, methods and tests, reports and so on) and the more a LIMS is used, the more data it contains increases.

So how can we use this data?

The management of this large amount of data allows to open totally new scenarios in the use of a LIMS.

Without prejudice to the ability of a LIMS to be technologically and functionally efficient, the data contained in it can provide users with an overview of the laboratory and its performance, but also the possibility of analysing particular aspects that would be difficult to assess without the use of the data.
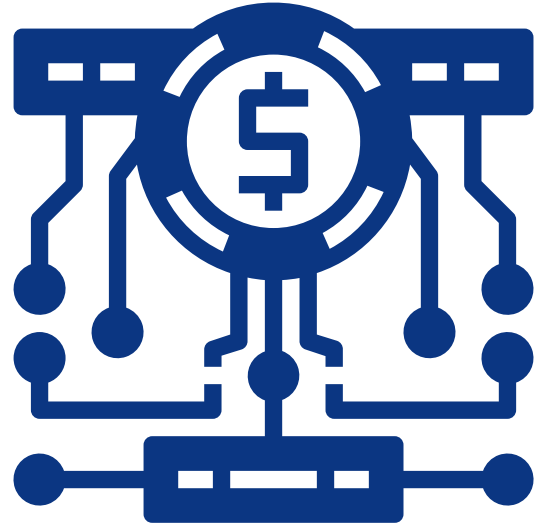
The data, therefore, represent a source of invaluable value for those who use a LIMS as they constitute a strategic asset to support the decision-making process in an organization.

How to manage data storage costs?

The goal must be to make sure that the strategic benefits and support to the decision-making process are higher than the costs of data storage, to transform precisely a cost that the laboratory must support in any case in an opportunity.

Therefore the Data Centricity concurs to move the attention to the use of the data with the aim to generate a **great value to support of the decisional processes**, to advantage of all the stakeholders of the laboratory, is internal that external**.**

Ultimately, the main keytouch points of the Data centric approach in the use of a LIMS are the following:

-Process improvement through the use of data;

-Objectification of the decision-making process;

- Reducing the risk of wrong decisions.

The approaches that can be adopted in the use of the data are essentially two:

Data Driven and Data centric.

What is the difference between the two approaches?

The Data Driven approach is the most widespread and is also the most traditional one as it consists in the collection of data and in their final analysis.

The Data Centric approach instead gives the possibility to collect data and analyze them "near-time".

It is clear that the difference between the two approaches is substantial because, in the first case, we talk about a **static approach** while in the second case, in addition to the data collection, You can organize your data so that you have full control over it, paving the way for **predictive analytics.**

From this brief study it is possible, therefore, to conclude by saying that the importance of the data pushes us to be aware that their use, it is increasingly necessary to be able to put the laboratory in a position to make the most of its potential and to predict the various future scenarios in which it will have to move.

Eusoft.Lab, with its Business Intelligence module, allows laboratories the use of data to give the opportunity to operate with the widest view of their performance and to carry out predictive analysis according to the reference data set.

If you are curious to know more about Eusoft.Lab click here.