***“A Critical Evaluation of the Big Data Approach to Car Fuel's Data Analytics”***

To help the car research company with the launch of its new research project that wants to analyze the fuel savings between different car manufacturers, a public data set was used to achieve this goal, based on fuel savings for the 2015 models and, in this way, to answer the different questions raised through the analysis that was carried out in the Tableau tool, showing the results in a visual way through graphics.

The Big Data approach is growing exponentially among the different areas of our current society to facilitate the visualization of business opportunities and improve products and services. Currently, the volume of digital data generated is greater than the capacity of the companies they have for analysis, the advantages that Big Data offers for them are:

* Speed in the take decision: Information is fundamental as the basis for correct decision making, and much more when we can dynamically handle all the information that Big Data provides us. We can take intelligent and fast decisions that help to favor business and different entities, since these have been based on a strong fund. It is possible to perform an analysis of an opportunity in a fluid way before putting a product or service on the market.
* Strategic Marketing Plans: Through the data provided by Big Data, it is possible to analyze and predict the behavior that a user will have on the network, to know what customers think about a brand or a product, and what their real needs are about the acquisition of products or services. You can analyze parameters related to the specific profile of each user, their preferences, their trends or their link to the brand, so that we can develop targeted marketing campaigns with a high level of customization.
* Improvement in efficiency and costs: The correct handling of Big Data can quickly boost the speed at which a product or service evolves, because we have a multitude of data with the information that the market gives us. In this way the terms for the development of a product or service are shortened over time, as well as the costs associated with the process derived from its development.
* Linking clients: Every day, capturing new customers is more complicated, and in turn, this acquisition of new users is more expensive than loyalty to those already. It is essential to correctly use the data available to give the clients what they want in a personalized way. Therefore, knowing through the data the level of customer satisfaction, their needs, etc., is one of the base points for having loyal customers.
* Environment variables: An important point to take into account the use of Big Data is the aggregation of environmental data that affect the main process. These variables are not clearly aimed at the analysis of a client or their direct behavior due to their online actions, but they respond to the ecosystem that can affect a customer at the time of the purchase decision. Enter in the analysis formula data from external sources such as weather, seasons, or the area in which the user lives makes the applied calculation gain efficiency points, better directing the products and services not only to specific communities but to specific seasons.
* Feedback: One of the most relevant applications in the use of Big Data is the possibility of analyzing the results of the actions carried out in real time, which allows seeing which aspects have been more successful or quickly correcting possible deviations in the designed strategies. The constant analysis of the feedback of the actions carried out with a dynamic and fast technology allows avoiding unnecessary additional costs when continuing with the marketing strategies.

One of the objectives of the use of Big Data technologies is to transform the data into useful knowledge for the company, and for this the Big Data needs tools that help analyze, process and store all the information collected. A lot of the best tools used in Big Data are open source, which demonstrates the success of this development model, in addition to the payment alternatives.

For the research, we used the perfect Tableau analysis tool for a company, it is easy to use and very powerful, and it converts data from multiple sources into valuable information for decision making. Its features and features make it a powerful and versatile tool. Its main objectives and that helped in the solution of this investigation are:

* Quick analysis: the powerful engine of tableau allows working with large volumes of data at high speed.
* Intelligent panels: it allows combining different views of the data in a control panel to better understand the information.
* Security: the powerful permit system guarantees security and access to company data.
* Multiple representations: tableau allows representing the information in the most appropriate way, having multiple graphics that facilitate its interpretation.

Given all this, Tableau offers multiple advantages to its users for the correct handling of the data and the use of the information that can be obtained:

* All your data in a control panel: tableau is a powerful dashboard and analysis tool, easy to use and with the latest technology, allows you to connect to your data and convert it into information. You can discover, analyze and identify trends in seconds, publish dashboards and share them within the company to make the right decisions, quickly accessing at any time with online and offline connection to company data, and with a complete system of security and permissions.
* Shared knowledge: tableau is an ideal solution for companies and organizations, with the tool the tables are designed and easily published to the different managers, facilitating access to the information they need at the right time. With tableau you can create an infinite number of tables, of greater or lesser complexity and that allow you to discover and analyze information with very visual graphics.
* Immediate access: multi-warehouse support for the control of different warehouses at all levels with the possibility of making stock movements among them with warehouse orders. It has a history of movements of any article showing by type any movement of stock that has been made in the article (inventory, purchase, regularization of stock, losses, sales, entry by production, etc.). It also has the information of the stock by location and inventory information available at any date.
* A very powerful tool: with tableau, any user can analyze the information very easily, interact, filter and delve into the data in a few clicks, from a computer or tablet. Tableau responds to the information needs where needed. The tableau engine allows working with multiple data sources at high speed, also offering an easy and intuitive designer of control panels. in addition to analyzing and connecting with data in real time or store them to access and filter without being connected.

Few people doubt that we are in the era of Big Data, being one of the most competitive elements and that more added values provides companies when defining their strategies. Therefore, the storage, processing and correct use of data have become one of the main allies of companies. To remain disconnected from this reality supposes a too high cost for the companies in their growth objective, in addition to a loss of strategic positioning.

The omnipresence of new technologies today has exponentially increased the amount of data produced in the last 20 years, so that nowadays it has gone from Megabytes and Gigabytes to talking about Petabytes of available information: companies manage a much more quantity and variety of data, which makes it necessary to use Big Data technologies for an optimal use of said data to give them value, in order to help customers in making decisions.

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