

Jun 14, 2016 | Tuesday

Data Visualisation will drive Enterprise Big Data Analytics Usage

Every organisation is betting on big data analytics and its usage. Here's a tech insider's take on why it is the key to future, particularly for enterprises.



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As an avid music lover, one of my procrastinating methods is spending time on Google's Music Timeline. Not only does it give me a progression and sustenance in popularity of various music genres since 1950s, but it also feeds me the information of particular albums that sold the most number of copies in that specific genre. But my love for the graphic doesn't end there. It also gives me immense pleasure to see that people are rediscovering their love for Jazz since 2000s while alternative/indie music is started its path towards a steady decline. If this data was spread across disparate spreadsheets or articles I wouldn't have made this inference.

Such interactive data visualisation maps are quite commonplace. They allow readers to interpret data based on the variables that affect them. This mode of information dissemination is quite powerful as it allows you to change your perspective, form opinions and make decisions.

Today enterprises are investing in big data analytics solutions to aggregate and analyse data. But rather than the volume of data, enterprises are spending more time in identifying previously untapped data points. This would mean disparate data sets that are spread across multiple silos.

Gartner estimates that by 2019, 75% of analytics solutions will incorporate 10 or more exogenous data sources from second-party partners or third-party providers. The indication is that the information being analysed would be more complex than ever. Organisations would strive to add more variables and data sources in the race to achieve more refined indicators that would streamline decision making.

Data visualisation technologies would need to keep pace with broader scope and tool set. The industry has already seen some disruptive technologies in the form of Tableau and Qlikview. There are also few upcoming open source tools like Datawrapper, Chart.js, D3 (Data-Driven Documents), Dygraphs and more. But the space still needs more maturity and still aren't up to creating major shuffles.

Another implication is the need for newer processes and skills that allows you in creating better data models. A decade ago, the concept of storytelling through data didn't exist. Hence, there is an emerging demand for resources with skillsets to create a powerful story. Capabilities including animations, speech bubbles, auto-suggest would be weaved into the visualisation to create compelling propositions. By choosing for expensive data management tools organisations are underestimating the importance of people skills and the imperative to drive them.

Finally, the quality of data has always been a suspect among enterprises. Ensuring data quality assurance is necessary in order to achieve the maximum output of the available data set.

Enterprises deploying visualisation with their big data implementations need clarity not only in terms of the challenges highlighted above, but also on the comprehensive plan that serves multiple objectives. This would allow you in understanding the true limitations of the data sets and taking measures to minimise risk.

Considering the scope of the solution is limited, enterprises need to ensure that they leverage functional and departmental experts to improve areas where they would attain maximum yield.

Connected Devices are expected to disrupt and change the way we think and operate. Visualisation practices too would evolve to accommodate and deliver insights that would make our lives simpler. It was in 1855 when Florence Nightingale worked with leading statisticians to create the first rose diagram that correlated the information of soldier death's in hospitals with poor sanitary conditions. Apparently the diagram was shown to Queen Victoria and Prince Albert which helped them to understand the importance of preventive health and the establishment of the first training school for nurses (in 1860). Over the years the battle against preventive healthcare in hospitals was won not just in England but across the world. We have come a long way since the first Rose Diagram but we also have a long way to go (probably plotted as an unending timeline on X axis).

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