DATACONOMY

BI & ANALYTICS

THE FOUR ESSENTIAL V'S FOR A BIG DATA ANALYTICS PLATFORM

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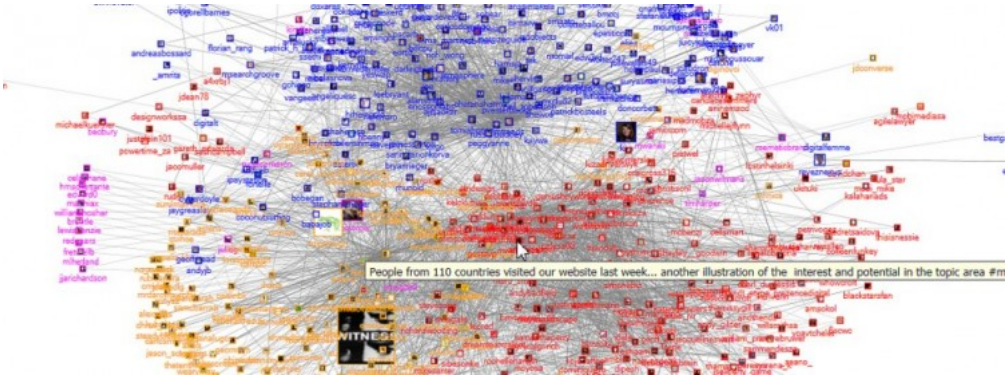

Whether data is structured or unstructured, it's only as valuable as the business outcomes it makes possible. However, the data itself isn't the only factor responsible for those outcomes. How you measure that data, from a business point of view, helps you tie the value of the data to its potential and supports decisions that lead to positive business results. To get there, you need a big data analytics platform.

Once you have a platform that can measure along the four V's—volume, velocity, variety, and veracity—you can then extend the outcomes of the data to impact customer acquisition, onboarding, retention, upsell, cross-sell and other revenue generating indicators. You can also look at this information as a competitive strategy that brings corresponding improvements in operational efficiency and helps you leverage data across the enterprise for other initiatives.

Over the last decade or so, companies have invested a lot of money in building data warehouses and business intelligence systems to secure data's critical role in improving decision making capabilities. I call this the "definitive value of data." It addresses the importance associated with every single data item that goes into these systems and every single report you generate out of the data that is, for the most part, structured data.

On the other hand, big data with its volume, velocity, variety and veracity provides the "perceived value of data". Looking at the four V's, there is too much information and most of it is loosely defined. Therefore, experts believe that great potential lies within this data, but has not yet been explored. Exploring big data is all about establishing correlations between things you don't know that may lead to new possibilities, unlike BI systems where you know what information you want and design systems to deliver those specific types of information.

For example, by building a stable, cost-efficient and highly responsive cloud-based data warehousing and analytics solution, a leading pharmaceutical and consumer goods company achieved several unexpected benefits that highlighted the perceived value of data. The solution not only improved management of the company's day-to-day operations across sales, planning and promotions, but also enabled next-generation data mining, including big data processing and analytics capabilities that informed better decision-making. As a result, the company used insights gained from big data analytics to develop new strategic promotions, take advantage of unexpected market shifts and stay ahead of nimbler competitors.

This depth of analytics can benefit companies in any industry. Global manufacturers are producing ever increasing quantities of data that need to be sorted and analyzed for business insight and reporting requirements. A failure to manage this data effectively can hamper effective decision-making, reduce efficiency and lead to compliance issues. With a big data analytics platform, manufacturers can achieve robust and rapid reporting that ensures successful compliance audits. And by carefully considering volume, velocity, variety and veracity, big data provides the insights business decision makers need to keep pace with shifting consumer trends.

In the digital world, this means understanding the customer is of paramount importance. Given this assumption, let's apply some measurement criteria to the

- **Volume-based value:** The more comprehensive your integrated view of the customer and the more historical data you have on them, the more insight you can extract from it. In turn, you are making better decisions when it comes to acquiring, retaining, growing and managing those customer relationships.
- **Velocity-based value:** The more rapidly you can process information into your data and analytics platform, the more flexibility you get to find answers to your questions via queries, reports, dashboards, etc. A rapid data ingestion and rapid analysis capability provides you with the timely and correct decision achieve your customer relationship management objectives.
- **Variety-based value:** The more varied customer data you have – from the CRM system, social media, call-center logs, etc. – the more multifaceted view you develop about your customers, thus enabling you to develop customer journey maps and personalization to engage more with customers.
- **Veracity-based value:** Amassing a lot of data does not mean the data becomes clean and accurate. Data on customers must remain consolidated, cleansed, consistent, and current to make the right decisions.

So, how do you attach dollar value to any of this? Sometimes, the right piece of information generated from small data at the right time can make all the difference. For example, a big data and analytics solution for the world's largest citizen identification program captured 150 TB of data. Since the solution's deployment, more than 3500 fraud instances among 1.5 million enrollments were found—a valuable insight that may have gone undiscovered without big data analytics capabilities.

In another example, a large ISP used a web analytics solution to identify top performing channels and improve customer engagement and retention opportunities. The solution processed unstructured data with reduced information latency. Armed with real-time analytics, the ISP gained insights that resulted in increased revenue and greater customer retention. That kind of money goes right to the bottom line. And more businesses are beginning to take notice.

Not long ago, the vast majority of big data use cases were about lower total cost of ownership (TCO), but as the technology continues to mature, there are more use cases targeted at top line revenue growth or new market creation opportunities. For these organizations, big data initiatives may start with the CIO and CTO to establish a "Big Data as a Platform" concept, but have quickly been leveraged throughout the enterprise to deliver business values.

Whether big data analytics are supporting IT or the business, the path to gaining greater value from big data starts by deciding what problems you are trying to solve. If the biggest challenges are within IT, then the use cases will be largely driven around themes such as operational efficiency and increased performance.

However, if there are business problem that need to be solved, then the themes will take a different perspective, such as customer journey mapping. Either way, by applying volume-, velocity-, variety- and veracity-based values to big data measurement, companies are now transforming big data analytics from a cost center to a profit center.

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