Top 7 Trends in Big Data for 2015

+ a b | e a u ®

7

The wave of innovation in all industries touching data is far from over. At Tableau we're always interested in innovative technologies and how they're providing value to customers. Once a year we step back to take stock of the big changes in the world of data. These are the trends that stand out to us for 2015.

+ableau®

See and understand your data like never before.
All content is produced and sponsored by Tableau Software

Big Data gets cloudy.

The cloud is everywhere, and we will continue to see adoption at extreme volumes. And big data is driving a lot of clouds growth: Revenues for the top 50 public cloud providers shot up 47% in Q4 of 2013 to $6.2B according to Technology Business Research. Amazon Redshift and Google Big Query are growing dramatically. Database players like Teradata are also jumping in the game.

Further reading: Explore Big Data Analytics with Amazon Redshift

1
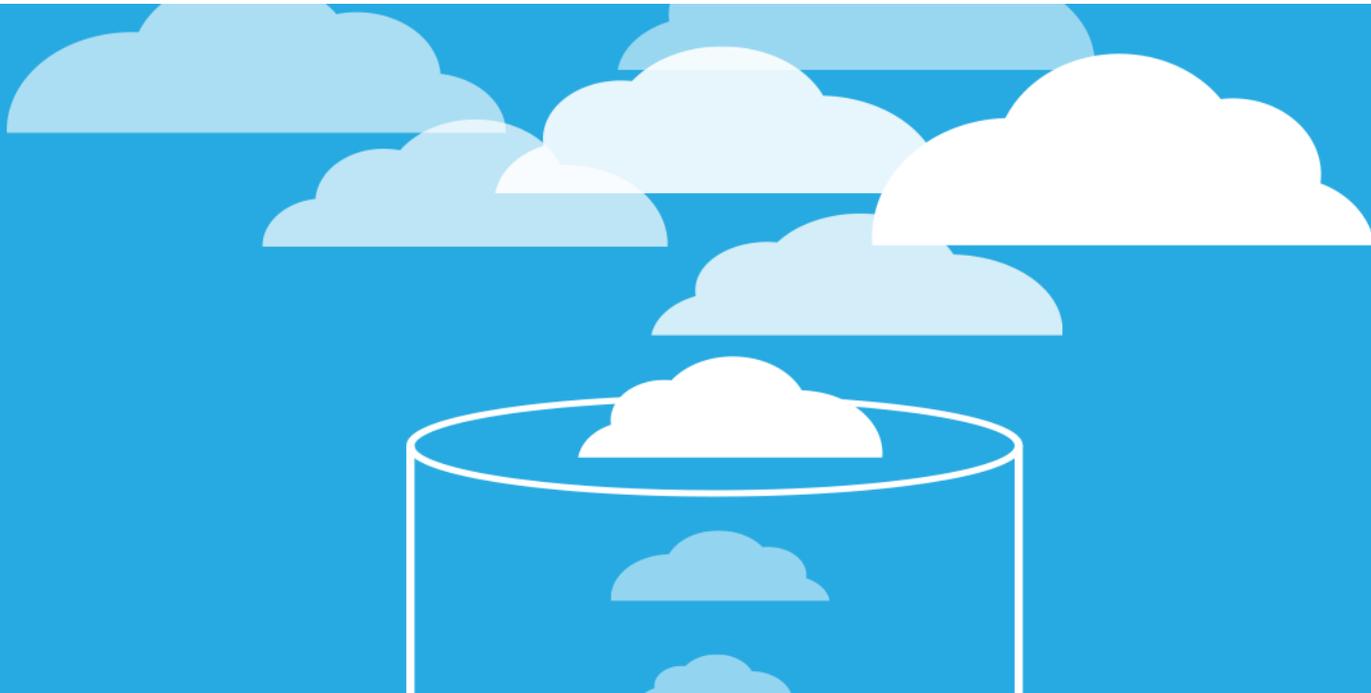
ETL gets personal.

It has been suggested that 80% of an analyst's time is spent on data prep, while only 20% is spent looking for insights. Enter the personal data cleansing tools focused on the analyst. Tools like Trifacta, Alteryx, Paxata and Informatica Rev are making data preparation easier to use with less technology and infrastructure required to support it.

Stanford: Wrangler: Interactive Visual Specification of Data Transformation Scripts

2

SQL or NoSQL, that is the question.

Some may think that the jury is still deliberating, but NoSQL is making a mark in the industry. NoSQL was founded to provide scale, flexibility, and the ability to leverage large sets of data faster.   Companies like MarkLogic, Casandra, Couchbase, and MongoDB are bringing new innovation to the SQL database market and are doing quite well with large production implementations in surprising places.

See a debate from two experts:
What's better for your big data application, SQL or NoSQL?

Hadoop: Part of the new normal in data storage.

Whether you are of the belief that Hadoop will take over current database architecture, or there will be a mix of Hadoop and other styles of databases, one thing is clear, Hadoop is now a part of the big data architecture in many companies. The legacy data storage vendors have incorporated Hadoop into their architecture in one way or another.   Some classical database providers have embraced the market leading Hadoop players like Teradata, SAP, and HP. Others, like IBM, have built their own flavor of Hadoop. Spark and Impala continue to mature, putting more pressure on the traditional stack. In any case, Hadoop looks like it is here to stay and is synonymous with big data architectures.

More thoughts: The end of the classical MPP databases era

4
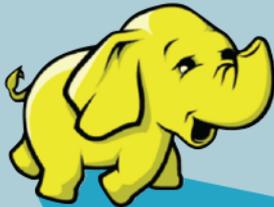
You will start trying to fish in the data lake.

The concept of a big data lake, a large body of data that exists in a natural or unrefined state, is in early stages. This idea answers some fundamental questions around how to effectively store, manage and use the massive amounts of incoming data. The cutting edge companies Google and Facebook have developed useful ways to leverage the data lake, but should be considered early adopters. As it is, the data lake is still in a nascent concept, and we should expect to see advances in managing and securing the big data lake this year. And as Gartner points out, the data lake requires a new kind of management to be effective.

Gartner Says Beware of the Data Lake Fallacy

5

The big data ecosystem will start to change form.

When new ways of doing things come about, it creates a new ecosystem around it. The same holds true for big data.   We have new ways to store data, clean data, add content to data, bring in social media, analyze machine data, do deep analysis on data and, of course, visualize data. Over the next year we will see some surprising changes in the current ecosystem.   Specifically, we will see MPP (Massively Parallel Processing) databases play a different and less prominent role.

The end of the classical MPP databases era

6

IOT (Internet of Things) will continue to grow, driving new data solutions.

Your Ford Fusion sends 250GB of data back to Ford, who in turn lets you know that something is wrong with your car. Sounds like fantasy, but hardware and semi-conductor companies are betting on it. Companies like Ford, GE, and Rolls Royce jet engines are just a few examples of companies investing in IoT. In 2015, we will see a greater use from manufacturers. Some technology companies like Cisco will create solutions around the concept to help manage the massive amounts of data.

Additional reading: McKinsey Quarterly: The Internet of Things
Ford Embracing Analytics and Big Data to Inform Eco-Conscious Decisions, Stay Green

7
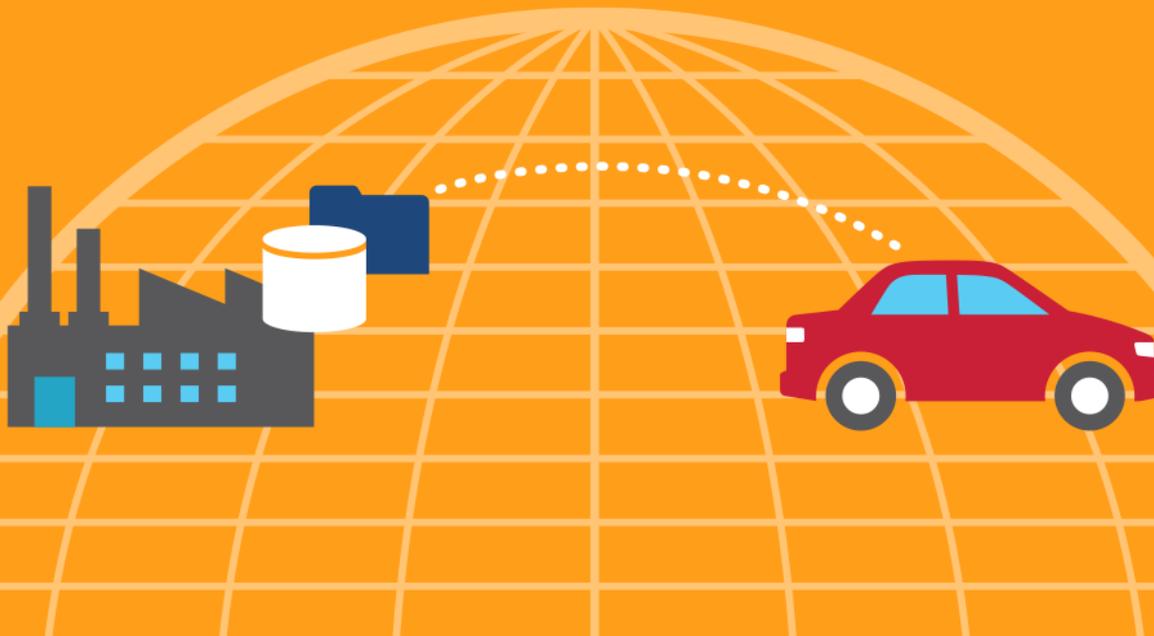
2015

In 2015 companies will continue to see the evolution of this environment. Organizations have already started down the path of embracing big data to improve revenues, control costs, and find new visions that drive business.

To learn more read "**7 Tips to Succeed with Big Data**". This whitepaper offers insightful thoughts on using big data in your organization.

Tableau Software (NYSE: DATA) helps people see and understand data. Providing rapid-fire business Intelligence with a consistent experience from the PC to the iPad. Tableau solutions generate fast, visual, self-service data dashboards with no programming skills required.

About Tableau Software

http://www.tableausoftware.com/business-intelligence