

BIG DATA

Big data describes the process of applying computing power — from the latest in machine learning and artificial intelligence, to massive and highly complex sets of information

The 4 Vs of Big Data

VOLUME

The vast amounts of data generated every second

- On Facebook alone we send:
 - 10 billion messages per day
 - Click "like" 4.5 billion times
 - Upload 350 million new pictures every day
- Google processes 24 petabytes of data every day. One petabyte can hold 500 billion pages of printed text

VARIETY

The different types of data we now use

- 30 billion pieces of content are shared on Facebook monthly
- 2.9 million emails sent every second
- 230 million Tweets are posted each day on Twitter
- 20 hours of video is uploaded to YouTube every minute



92% of the world's data was created in just the past two years



1,350,000,000 Google results when "big data" is searched



Big data global mentions grew 1211.34% from 2011 to 2012



112,000,000 blog posts discussing big data



50+ infographics about big data



120+ Twitter accounts for big data



70,000 Wikipedia "big data" hits a month



Two million PDFs from search results for "big data" white paper



In 2011 there was an average of 258 gigabytes of data per person... in 2020 there will be 5,200 gigabytes per person

VELOCITY

The speed at which new data is generated and the speed at which data moves around

- The New York Stock Exchange captures 1 terabyte of data each trading session
- By 2016 it is projected there will be 18.9 billion network connections — 2.5 connections per person on earth

VERACITY

The messiness or trustworthiness of data

- By 2018, there will be demand for nearly 500,000 data scientists in the U.S., leaving a shortage of almost 200,000 positions
- Poor data quality costs the U.S. economy \$3.1 trillion a year
- 1 in 3 business leaders don't trust the data provided to make decisions

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