The Next Frontier for Innovation, Competition and Productivity


IN 60 SECONDS...
1 NEW DEFINITION IS ADDED ON urban
1,600+ READS ON Scribd.
13,000+ HOURS MUSIC STREAMING ON PANDORA
12,000+ NEW ADS POSTED ON craigslist
370,000+ MINUTES VOICE CALLS ON skype
98,000+ TWEETS
20,000+ NEW POSTS ON tumblr.
THE LARGEST SOCIAL READING PUBLISHING COMPANY
New Craigslist Ads
320+ NEW twitter ACCOUNTS
13,000+ iPhone APPLICATIONS DOWNLOADED
100+ NEW Linked in ACCOUNTS
1 associatedcontent NEW ARTICLE IS PUBLISHED
THE WORLD'S LARGEST COMMUNITY CREATED CONTENT!!
QUESTIONS ASKED ON THE INTERNET...
100+ Answers.com
40+ YAHOO! ANSWERS
6,600+ NEW PICTURES ARE UPLOADED ON flickr
600+ NEW VIDEOS
50+ WordPress DOWNLOADS
25+ HOURS TOTAL DURATION
70+ DOMAINS REGISTERED
695,000+ facebook STATUS UPDATES
125+ PLUGIN DOWNLOADS
60+ NEW BLOGS
168 MILLION EMAILS ARE SENT
694,445 SEARCH QUERIES
1,700+ Firefox DOWNLOADS
79,364 WALL POSTS
1,500+ BLOG POSTS
510,040 COMMENTS
Google
Google Search
GO-Globe.com

What is BIG DATA ?

- ‘Big Data’ is similar to ‘small data’, but bigger
- …but having data bigger it requires different approaches:
  - Techniques, tools and architecture
- …with an aim to solve new problems
  - …or old problems in a better way

Type of Data

- Activity Data
- Conversation Data
- Photo and Video Image Data
- Sensor Data
- The Internet of Things Data

4 V's of Big Data

Volume

- Data quantity

Velocity

- Data Speed

Variety

- Data Types

Veracity

- Messiness

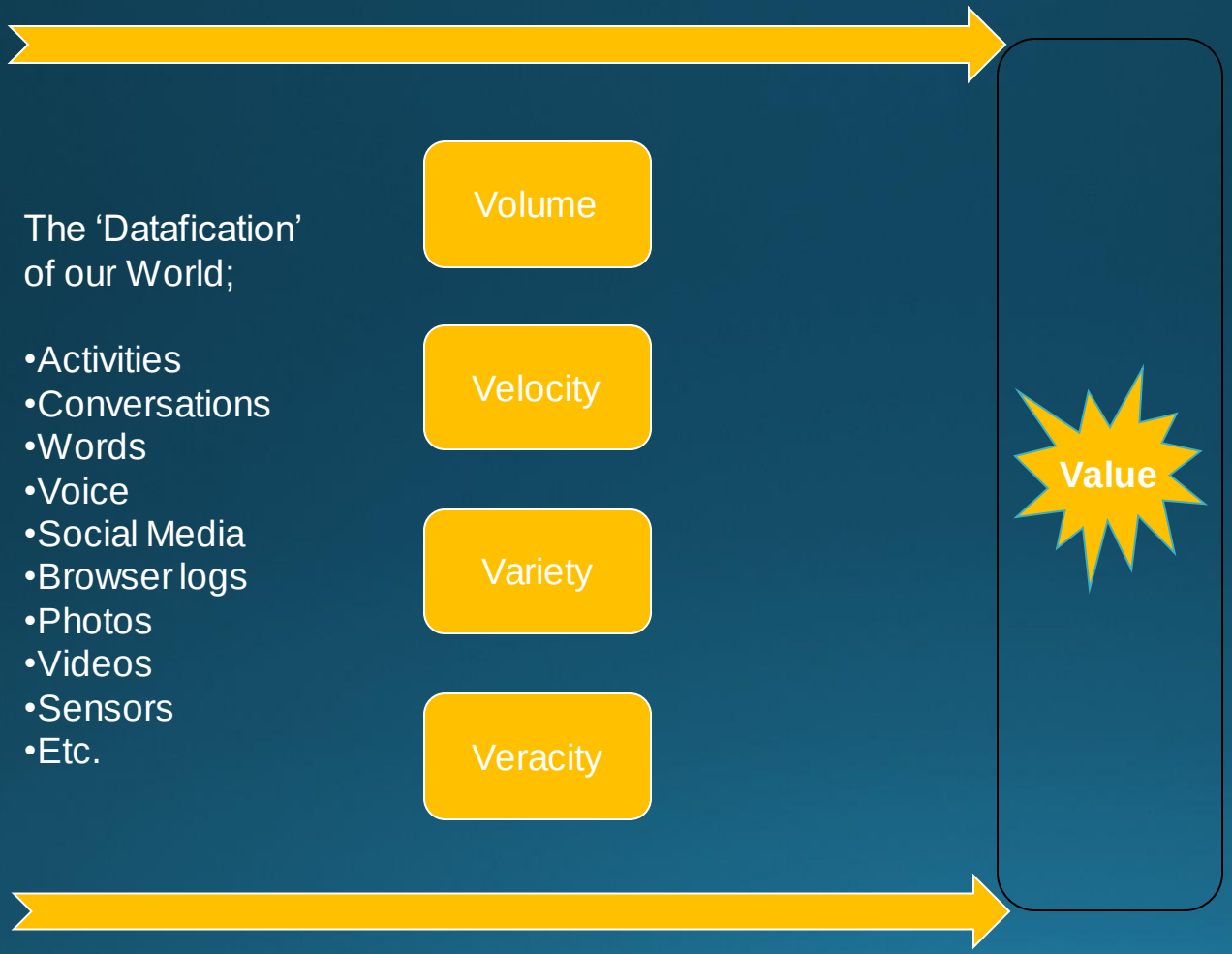
Why Big Data

- Key enablers of appearance and growth of Big Data are
  - Increase of storage capacities
  - Increase of processing power
  - Availability of data
  - Every day we create 2.5 quintillion bytes of data; 90% of the data in the world today has been created in the last two years alone

Turning Big Data into Value:

The data fication of our world gives us unprecedented amounts of data in terms of Volume, Velocity, Variety and Veracity. The latest technology such as cloud computing and distributed systems together with the latest software and analysis approaches allow us to leverage all types of data to gain insights and add value.

Turning Big Data into Value:



How is Big Data actually used? Example 1

Better understand and target customers:

To better understand and target customers, companies expand their traditional data sets with social media data, browser, text analytics or sensor data to get a more complete picture of their customers. The big objective, in many cases, is to create predictive models. Using big data, Telecom companies can now better predict customer churn; retailers can predict what products will sell, and car insurance companies understand how well their customers actually drive.

How is Big Data actually used? Example 2

Understand and Optimize Business Processes:

Big data is also increasingly used to optimize business processes. Retailers are able to optimize their stock based on predictive models generated from social media data, web search trends and weather forecasts. Another example is supply chain or delivery route optimization using data from geographic positioning and radio frequency identification sensors.

How is Big Data actually used? Example 3

Improving Health:

The computing power of big data analytics enables us to find new cures and better understand and predict disease patterns. We can use all the data from smart watches and wearable devices to better understand links between lifestyles and diseases. Big data analytics also allow us to monitor and predict epidemics and disease outbreaks, simply by listening to what people are saying, i.e. “Feeling rubbish today - in bed with a cold” or searching for on the Internet, i.e. “cures for flu”.

How is Big Data actually used? Example 4

Improving Security and Law Enforcement:

Security services use big data analytics to foil terrorist plots and detect cyber attacks. Police forces use big data tools to catch criminals and even predict criminal activity and credit card companies use big data analytics it to detect fraudulent transactions.

How is Big Data actually used? Example 5

Improving Sports Performance:

Most elite sports have now embraced big data analytics. Many use video analytics to track the performance of every player in a football or baseball game, sensor technology is built into sports equipment such as basket balls or golf clubs, and many elite sports teams track athletes outside of the sporting environment – using smart technology to track nutrition and sleep, as well as social media conversations to monitor emotional wellbeing.

How is Big Data actually used? Example 6

Improving and Optimizing Cities and Countries:

Big data is used to improve many aspects of our cities and countries. For example, it allows cities to optimize traffic flows based on real time traffic information as well as social media and weather data. A number of cities are currently using big data analytics with the aim of turning themselves into Smart Cities, where the transport infrastructure and utility processes are all joined up. Where a bus would wait for a delayed train and where traffic signals predict traffic volumes and operate to minimize jams.

Applications for Big Data Analytics

Smarter Healthcare

Multi-channel sales

Finance

Log Analysis

Homeland Security

Traffic Control

Telecom

Search Quality

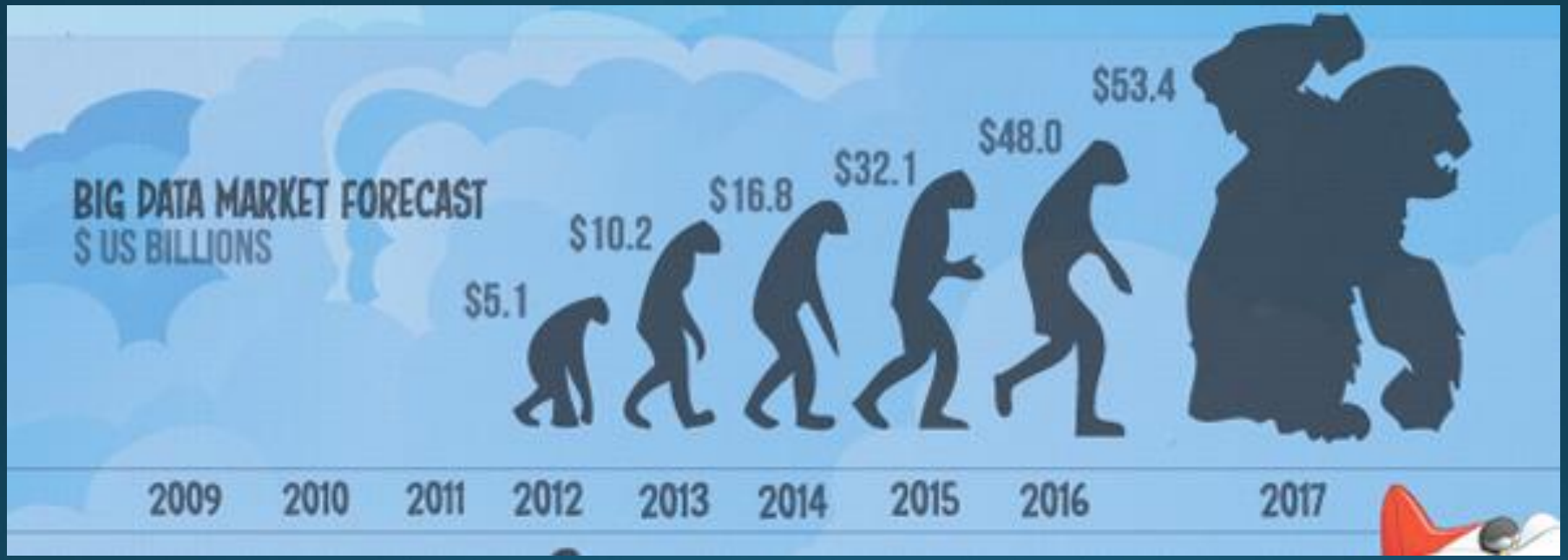
Manufacturing

Trading Analytics

Fraud and Risk

Retail: Churn, NBO

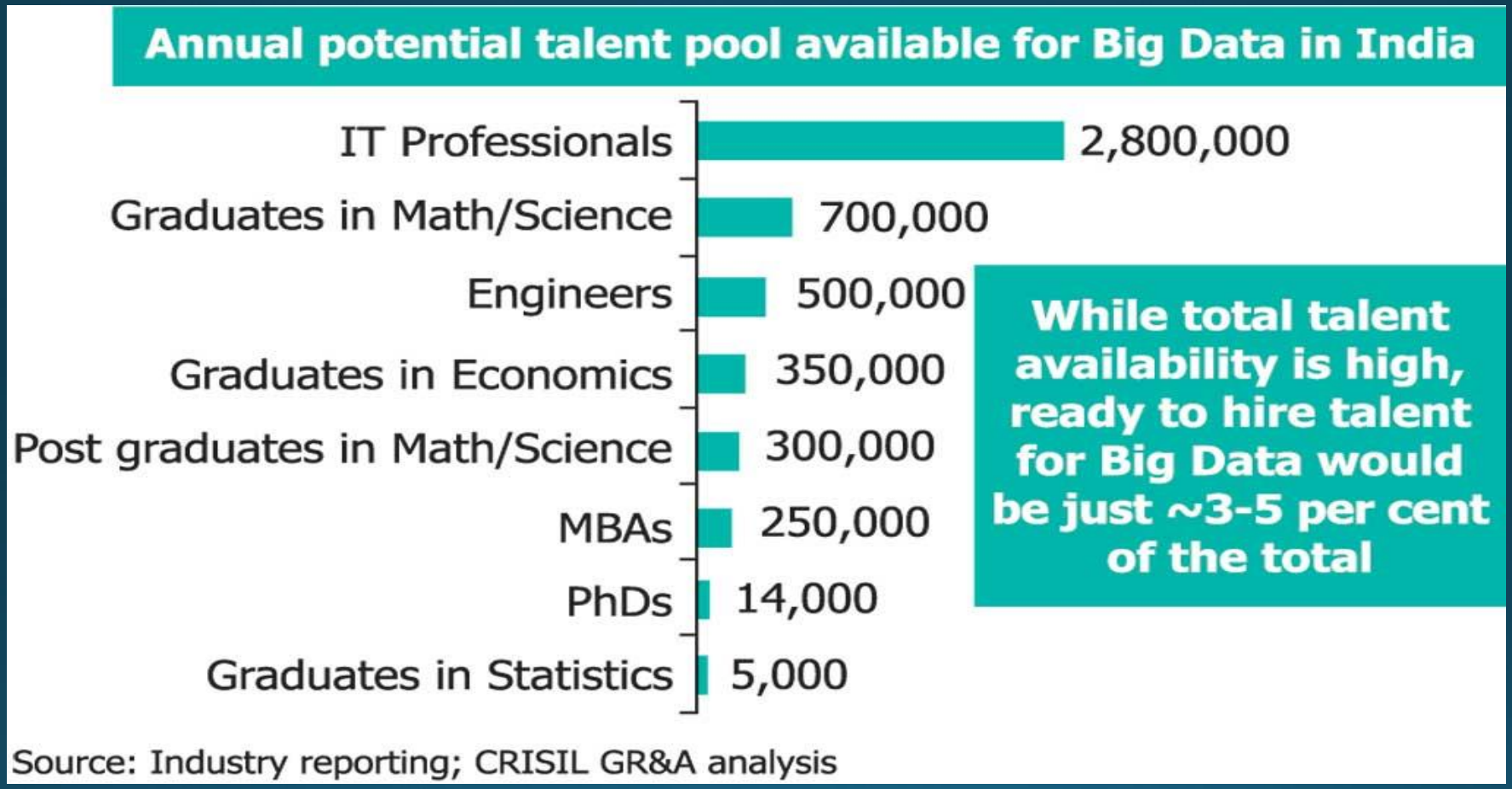
Market Size



By 2015 4.4 million IT jobs in Big Data ; 1.9 million is in US itself

Source: Wikibon Taming Big Data

Potential Talent Pool -Big Data



India will require a minimum of 1 lakh data scientists in the next couple of years in addition to data analysts and data managers to support the Big Data space.

Mu Sigma

crayon

absolutdata
Intelligent Analytics

latentview
Actionable Insights • Accurate Decisions

flipkart.com

Infosys

Collabera
Value. Accelerated.

promptcloud

Cognizant

IMPETUS

Future of Big Data

- $15 billion on software firms only specializing in data management and analytics. This industry on its own is worth more than $100 billion and growing at almost 10% a year which is roughly twice as fast as the software business as a whole.
- In February 2012, the open source analyst firm Wikibon released the first market forecast for Big Data , listing $5.1B revenue in 2012 with growth to $53.4B in 2017
- The McKinsey Global Institute estimates that data volume is growing 40% per year, and will grow 44x between 2009 and 2020.

Thank you ☺

Big Data Landscape