

Big Data & Analytics

BIG DATA - WHAT IS IT?

Some people thought it was 'just a fad' and would go away. - Creates business opportunities - do it or fall behind.

BIG DATA - DEFINITION - There is little consensus on "how big the data has to be to qualify as 'big data'".

BIG DATA - WHAT ARE THEY?

The 'internet of everything', the connections, and connected devices. People generate massive amounts of structured as well as unstructured data, creating a data influx or 'sea' of data.

Data is being generated at the speed of thought and will grow exponentially - we cannot simply discount or ignore it.

THE 5 VS OF BIG DATA

- **Volume** - scale of data available for analysis
- **Variety** - different types available for analysis e.g., *unstructured data, social media, images, videos etc.*
- **Velocity** - rate of data generation and processing
- **Veracity** - trustworthiness of data in terms of accuracy
- **Value** - big data is of no use unless turned into something of value.

BBC News (2015) - *Doctors in London have stored more than one and a half thousand beating human hearts in digital form on a computer. - aim to discover new treatments by comparing detailed info on the hearts and patients' genes. Latest project which makes use of advances in storing large amounts of information.*

Wall, M. (2014) - *US Centres for Disease Control and Prevention collect mobile phone activity data from mobile operators - many helpline calls to helplines are now coming from. - A sharp increase in calls to a helpline from one particular area would suggest an outbreak and alert authorities to direct more resources there.*

RECENT NEWS

The Guardian (2018) - *Vodafone is partnered with the government of Ghana to share the movements of its customers to help track and contain the spread of epidemics such as Ebola. Vodafone said it would provide real-time tracking data from its millions of customers in Ghana - provide a "heat map" of where people are and how far they are moving. A data privacy expert warned that although using large-scale, anonymised information may appear to protect individuals from identification, Vodafone will still have to be very careful not to breach people's rights.*

BIG DATA - BUSINESS OPPORTUNITIES

Whatis.com - Big data analytics is the process of examining large data sets - to uncover hidden patterns, unknown correlations, market trends, customer preferences and other useful business information.

- Findings can lead to more effective marketing, new revenue opportunities, better customer service, improved operational efficiency, competitive advantages over rival organizations and more...

Kent, P. (2012) - Decisions mould company strategy - which markets to enter or what products to develop. Today, as the world globalises and the pace of change quickens, managers must make high-pressure decisions faster. Savvy managers turn to analysing data - on their customers, operations, risk and more - for guidance. *E.G., traditional databases as well as unstructured text from call-centre logs, social media and more* - into their decision-making to achieve competitive insight. - The value placed on data by firms has grown rapidly. Among all the benefits of analytics, respondents most frequently cited faster decision-making.