

## Book Review

### **Big Data: A Revolution That Will Transform How We Live, Work and Think**

**Authors** : Viktor Mayer and Kenneth Cukier

**Publisher** : John Murray, U K

#### **Summary of the Book**

In the first chapter, "Now" the authors explain the concept of "Big data". Big Data refers to capability to collect large amount of information, analyze it in real time, and draw thoughtfully astonishing conclusions. The authors present case studies of how Farecast, Google and Amazon are doing this, to impart better understanding of the concepts.

The second chapter "More" the authors trace the history of attempts to collect data in real time. As this was impossible 300 years ago, the authors explain how sample data was used to make interpretations of Causality of an event. This in turn led to the development of Statistics at a rapid pace and randomness of data was more important than the quality of data. Sampling data had limitations as it was collected for a specific objective and could not be used to make further interpretations based on available data.

Today, it is possible to collect extremely large amounts of data in real time and we are not dependent on having a small sample. Data is available from multiple sources and devices, and we are talking of "Internet of things", where devices can communicate with one another and capture data instantly. The amount of data captured is so large that we can actually look at the possibility of  $n=all$ . There are no sampling errors, as even a small error in data would provide misleading interpretations.

The third chapter "Messy" authors examine the quality of humongous data available. The emotions conveyed by tweets, on Face book are difficult to capture using relational

database. But the authors argue that "Messiness" is okay if extremely large amounts of data can be captured. As this is more accurate than "Small Data" as analysis of big data gives us accurate predictions. To strengthen their case they present the case of development of Spell checker at Microsoft.

The fourth chapter "Correlation" the authors briefly trace the history of development of correlation and provide numerous example of Wal-Mart, Amazon and healthcare. In future, they hope big data will help us understand correlations of various occurrences and will replace the current stress on "Causality" which had occupied the pedestal in present times.

The Fifth chapter "datafication" the authors trace the process of "Datafication" which started centuries before digitization. They provide how datafication is happening current on social media using "the internet of things and how we have entered an era of datafication.

The sixth chapter "Value" highlights value creation by Big Data and cites numerous examples of Amazon, Google and Recaptcha. They also recount the value of reusable data and how open source data has changed our lives for getting information of flight delays etc. They further state that value of big data analytics is priceless and compare the market valuation of Face book with traditional companies like GM and Dell.

The last few chapters highlight the dangers of big data analytics. As data can be reused, sold to different sources, it's impossible for users

to give informed consent. In the near future big data analysis can bring about a situation, the authors suggest, "In which judgments of culpability are based on predictions of future behavior."

### **Positives**

The authors have done an impressive piece of work in tracing the emergence of Big Data. The book is thoroughly informative. The book is based on comprehensive research by the authors and this has made this book really insightful. The book presents a vast range of examples of data analytics. The book provides an excellent overview of the value and risks of data analytics.

### **Negatives**

The writing style of the book does not keep

the reader glued to the book. The book's claim that quantitative analysis can replace qualitative assessment needs to be re-evaluated. A missed prediction does not cause much damage if it is about book recommendations on Amazon. But a similar error in policy making through big data is potentially more serious. The book sometimes looks like a lean collection of business stories.

### **Reviewed by**

#### **K. R. Ravi**

He is Assistant Professor in the Department of MBA, PESIT, Bangalore.

He can be reached at [krravi@pes.edu](mailto:krravi@pes.edu)