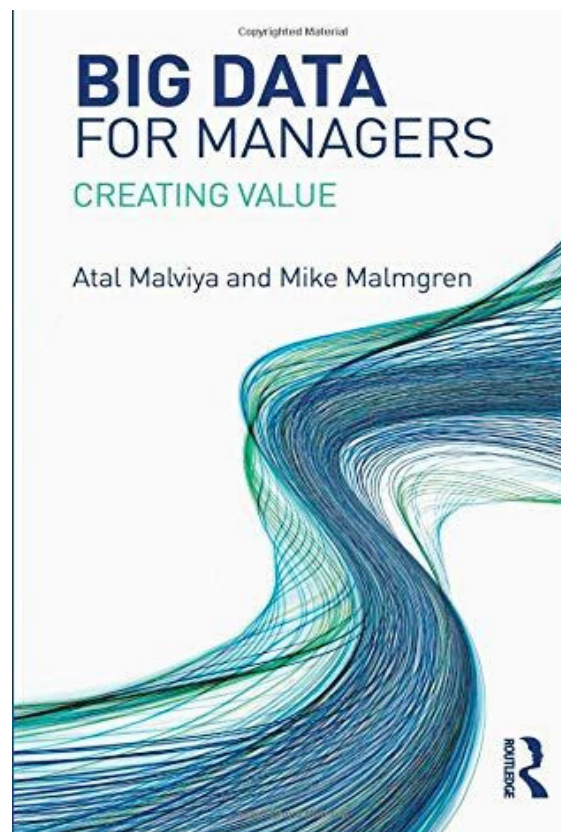# Big Data Analytics in Digital Knowledge Society

Big Data for Managers: Creating Value

By

Atal Malviya and Mike Malmgren. Routledge, London, 2018, 174 pages, paperback, ISBN: 9781138593084.

Data science is the 21st Century subject. But in Arthur Conan Doyle's A Study in Scarlet published in 1887, Sherlock Holmes said that it is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts. In the book entitled "Big Data for Managers: Creating Value", the authors Atal Malviya and Mike Malmgren presented big data concept in the context of different analytic perspectives. Actually, data without analysis and interpretation is lame. Data itself is unable to walk till the stick of analytics is held tight. The book starts with an introduction that outlines different contexts of the big data concept.

The target audience of the big data discussions of the book and the structure of the book are described here. Alvin Toffler remarked that you could use all the quantitative data you can get, but you still have to distrust it and use your own intelligence and judgment. Toffler's view instantly resonates Clifford Stoll's saying, Data is not information, information is not knowledge, knowledge is not understanding, understanding is not wisdom. The role of analysis and interpretation is ubiquitous when working with data. Chapter 2 entitled "Big data revolution" gives a historical review of the development of data science. At first, the authors described how big data technology is applied by organisations or enterprises to create a new business or radically amend a traditional business to promote value addition. The stories of two businesses, Airbnb and Uber, are described here. The data analytics techniques actually make unstructured data into a structured one. There are many sources of unstructured data like social networking (Facebook, Twitter, Instagram, etc.), WhatsApp, blogs,

etc. that can hold important insights on customers, trends and sentiments expressed among millions of internet users. The authors opined that mining this multitude of data is the major scope of big data. In Chapter 3 entitled "Creating value from big data", the process of calculation of financial value is discussed. The modes of using big data for creating values are discussed here. Through the creation of values, big data can provide a competitive advantage in today's data-rich business environment. Andrejs Dunkels remarked that it's easy to lie with statistics. It's hard, to tell the truth without statistics. Hence, it's hardly possible to ignore data and statistics today, particularly in case of taking any concrete decision.

Chapter 4 entitled "Big data techniques and solutions", several data analytics techniques, tools and examples are discussed. In all, six big data analytics techniques are discussed here, viz. statistical analysis, social network analysis, semantic analysis, data visualization, predictive analysis and other analysis. The statistical analysis techniques need to be covered with a bit more details. There is no discussion on correlation (product-moment or rank), nonlinear regression or relationship between correlation and regression. In social networking and semantic analytics, the quantitative approaches are not introduced. The crux of the text analytics lies in the concept of co-word and keyword cluster are evaded here. The data visualization techniques are introduced picturesquely while predictive analysis included no specific model or technique. Edwards Deming quoted In God we trust only. All others must bring data. Data is the life-blood of any scientific phenomenon or process or theory, etc. if analysed and presented in a logically compatible way. The importance of data analytics certainly outshines data itself in the context of decision and policy matters.

Chapter 5 entitled "Introducing the model" presented C-ADAPT model of big data value creation. The practical templates for managers involved in building strategies for big data projects are provided here. The framework of the model is presented and its different elements are explained. This chapter is useful and informative for any big data project. The sub-chapter entitled Testing the value created... presented C-ADAPT worksheet that will be helpful during the execution of any big data project. Chapter 6 entitled "Big data case studies" presented some case studies about big data analytics and value creation. The cases presented here are from IT companies like Intel, food chain like Domino's Pizza, flight kitchen like Gate Gourmet to global retailer like Tesco or agro-based companies like John Deere or Delta Airlines, Walmart, Airbnb, *et al*. This chapter shows that big data analytics can be used across any industry and different types of businesses. The authors showed that C-ADAPT model could be mapped or applied if needed. Some case studies are interesting, for instance, price recommendations using big data for Airbnb, smart searching of commodities using semantic analysis for Walmart, using big data to drive the traffic for Huffington Post *et al*. The Chapter 7 entitled "What practitioners say" includes the opinions from the business managers and leaders. The authors received over 200 responses from business managers, working in different geographical locations and with a wide variety of organizational setup. The case studies justify the viability of data as the new raw material of business. The main focus of data analytics is to turn data into information and information into insight as said by Carly Fiorina. Just like Peter Sondergaard, who said Information is the oil of the 21st century and analytics is the combustion engine, it may be concluded from the book that big data is the main fuel of the knowledge society and data analytics is the combustion engine. The concluding chapter discussed the overall scenario of the case study processes and discussed some issues might be pointed towards the future direction.

Reviewed by

Bidyarthi Dutta

Department of Library and Information Science, Vidyasagar University Midnapore, West Bengal, INDIA.

E-mail: bidyarthi.bhaswati@gmail.com