

BIG DATA

A Revolution That Will Transform How We Live, Work, and Think

VIKTOR MAYER-SCHONBERGER and KENNETH CUKIER

VIKTOR MAYER-SCHONBERGER is professor of Internet governance and regulation at Oxford University's Internet Institute. He is the author of more than a hundred articles in academic journals and is a widely recognized authority on the topic of big data. He is also the author of eight books including *Delete: The Virtue of Forgetting in the Digital Age*. He is on the advisory boards of numerous corporations including Microsoft and the World Economic Forum.

KENNETH CUKIER is currently the data editor of the *Economist* and was previously the *Economist's* Japan business and finance correspondent and technology editor of *The Wall Street Journal Asia* based in Hong Kong. He is also a prominent commentator on big data developments. He is the author of numerous articles which have been published in *Foreign Affairs*, the *New York Times*, the *Financial Times*, *The Washington Post* and elsewhere. Mr. Cukier has been a keynote speaker at the World Economic Forum and at private events for companies.

The Web site for this book is at www.big-data-book.com.

ISBN 978-1-77544-774-0



MAIN IDEA



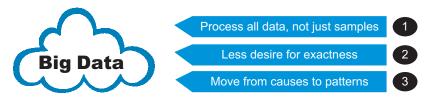
"Big Data" is defined as "the ability of society to harness massive amounts of information in novel ways to produce useful insights or goods or services of significant value." In practical terms, Big Data is where we use huge quantities of data to make better predictions based on the fact we identify patterns in the data rather than trying to understand the underlying causes in more detail.

A good example of the usefulness of big data was when the H1N1 flu virus struck in 2009. The traditional approach to tracking a virus was to collect data about doctor's visits which the Center for Disease Control and Prevention (CDCP) tabulated and then published a week or two later. Google came up with a different approach. Google suggested the spread of H1N1 could in fact be tracked by the Google searches people with the flu carry out when looking for remedies. Google then analyzed a staggering 450 million different mathematical models to come up with a collection of search terms which correlated with the historical data Google already had relating to the spread of seasonal flu. As a result, health officials could use the Google method to track the spread of H1N1 in real time and respond rapidly rather than waiting a couple of weeks for the CDCP updates.

Big data will be a source of new economic value and innovation in the future. It will also change the way information is analyzed and transform the way society is organized. The big data era which is just beginning will eventually challenge the way everyone lives and interacts with the world.

"Big data is all about seeing and understanding the relations within and among pieces of information that, until very recently, we struggled to fully grasp."

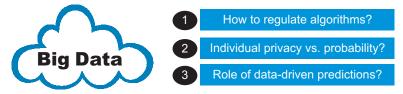
— Viktor Mayer-Schonberger and Kenneth Cukier



In the analog era, collecting and then analyzing data was enormously expensive and very time consuming. Digitization has essentially reversed that dynamic and as a result three emerging trends are going to grow substantially in the immediate future:



As big data becomes more and more widespread, several key issues will arise which society will need to address. Some of the more obvious of these issues will be:



Summaries.Com

The Ultimate Business Library



We condense **300+ page** business books into **8-page** summaries.

By reading summaries, you'll get the **key ideas** in **30 mins**, so you can spend more time turning your ideas into **dollars**.

Knowledge is Power — Invest in Your Future

For just \$2 per week, you will...

- > Learn from the mistakes and success of the smartest people in business;
- > Get fresh ideas, strategies & motivation that could be worth millions to you;
- > Follow emerging trends, so you can catch the wave before your competitors do;
- > Catch up on the classics you always wanted to read.

