

## **Big Data: A Revolution that Will Transform how We Live, Work, and Think**

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### Summary

Big data is the large-scale utilization of information in modern ways to innovate and produce useful insights. The book explores how big data can help solve big problems and make a big difference just by simply having more data, which invites three shifts of mindset: The ability of society to analyze vast amounts of data, embrace big data's messiness, and respect correlations rather than causality. Several chapters discuss how, along with impressive technological advancements, these changes made it possible for data to alter our understanding of the world. Next, the book talks about how humans can now make data out of almost anything ("datafication"), allowing more predictors in datasets as well as more data.

With all of the changes that big data can make to the world, the book also makes sure to note the dark side of big data, as there are many risks and disadvantages of big data and its predictions. Predictions can be so accurate as to criminalize someone before they have even committed a crime; this leads to some questionable moral applications and forces an important discussion about justice. Big data can also be invasive, and relying on predictions can be dangerous. Thus, big data transforms our understanding of how governments should enforce laws and how we should value, as individuals, our safety, privacy, and intuitions.

### Quotes

"The search for causality will take place after big data has done its work." (66)

"We risk falling victim to a dictatorship of data, whereby we fetishize the information, the output of our analyses, and end up misusing it. Handled responsibly, big data is a useful tool of rational decision-making. Wielded unwisely, it can become an instrument of the powerful, who may turn it into a source of repression, either by simply frustrating customers and employees or, worse, by harming citizens." (140)

### Response

This book challenged me to think critically about how big data is transforming our societies and what ethical implications that has. I appreciated that the book gave example after example of big data being used; this made for a fun and easy read. The book made me think about how I will act in the future as I work with data. What big data can do is impressive to me, and I hope to be able to use it for good, but what is good, bad, or neutral? This is an interesting and difficult conversation, especially as a data student hoping to head out into the data workforce. It also makes me truly think about what models and predictions I am contributing to, and how frightening big data really can be.

### Citation

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