



Implications

BIG DATA - CHAPTER 7

Start

- ▶ Clever Startup
 - ▶ Decide.com -> Price prediction -> Accurate 77% -> Saving \$100 per product
 - ▶ **Big data mindset**
- ▶ 3 types of big data companies (value they offer)
 - ▶ Data
 - ▶ Skills
 - ▶ Big Data Mindset

Start

1. Data

- ▶ Companies that have the data or have access to it
- ▶ Ex: Twitter

2. Skills

- ▶ Consultancies, technology vendors, and analytics providers
- ▶ Ex: In the case of Walmart and Pop-Tarts, the retailer turned to the specialists at Teradata

3. Big-data mindset

- ▶ Unique ideas about ways to tap data to unlock new forms of value
- ▶ Ex: FlightCaster.com (flight delay prediction)
 - ▶ Analyzed flight over 10 years -> Matched against weather data
 - ▶ The predictions were so accurate that even airline employees started using it

▶ New Profession -> Data Scientist

- ▶ Skills: Statistician, programmer, infographic designer and storyteller

The big data value chain

- ▶ Data holders
 - ▶ Use data themselves or license it to others who extract its value
 - ▶ Some companies incorporate other roles
 - ▶ MasterCard -> MasterCard Advisors
- ▶ Data Specialists
 - ▶ Companies with expertise or technologies
 - ▶ Ex: Accenture installed wireless sensors in a score of public buses
- ▶ Big-data mindset
 - ▶ Companies free of imaginary prison bars

The big data value chain

- ▶ MasterCard Advisors



- ▶ source: <http://www.apacholidayshopping.com/2/> (MasterCard - A Spending Frenzy)

The big data value chain (Examples)

- ▶ Mobile phone companies collect huge amount of data
 - ▶ But are often culturally blinded to its worth
 - ▶ Solution
 - ▶ They could license it to others who are able to extract novel value from it
- ▶ Google x Amazon Big Data Strategies
 - ▶ Google
 - ▶ Collect data with secondary use of big data in mind
 - ▶ Amazon
 - ▶ More focused on the primary use of data, only taps secondary uses as a bonus

The new data intermediaries

- ▶ Companies that hold most value in big-data value chain must have
 - ▶ The mindset -> innovative ideas
- ▶ Inrix
 - ▶ A traffic-analysis firm
 - ▶ Is a big-data intermediary company
 - ▶ Analyzes the information to predict traffic flow
 - ▶ Sells the information to individual car companies

The demise of the expert

- ▶ The biggest impact of big data
 - ▶ “... statistical analyses force people to reconsider their instincts”
 - ▶ The statistician and data analyst let the data speak
- ▶ Coursera (online education company)
 - ▶ uses data on what sections of a teacher video may have been unclear
 - ▶ And feeds the information back to the teacher so they can improve
- ▶ Jeff Bezos got rid of in-house book reviewers at Amazon
 - ▶ Data showed that algorithmic recommendations drove more sales

A question of utility (Big data)

- ▶ Source of competitive advantage
 - ▶ Structure of entire industries will be reshaped
- ▶ Some of the best big data services are based primarily on
 - ▶ Innovative ideas
 - ▶ They may not require large initial investments
 - ▶ Small firms can license the data rather than own it
 - ▶ Analysis on inexpensive cloud computing
 - ▶ Pay the licensing fees with a percentage of income earned
- ▶ Despite the benefits, there are also reasons to worry
 - ▶ Our privacy and our sense of freedom (Ex: Google Ads)



End

Questions?