## Analytics Principles in Data Science

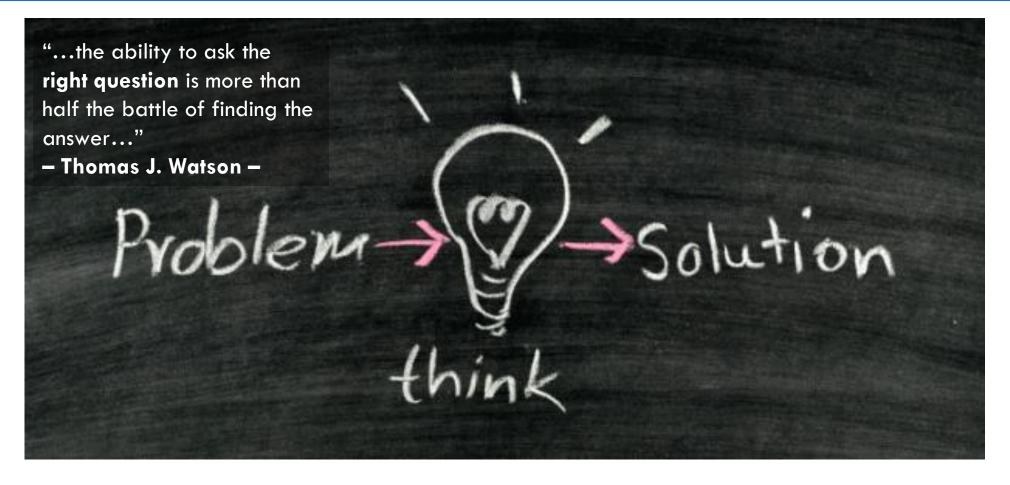
7 Things You Need to Know about Analytics

Sep 2020

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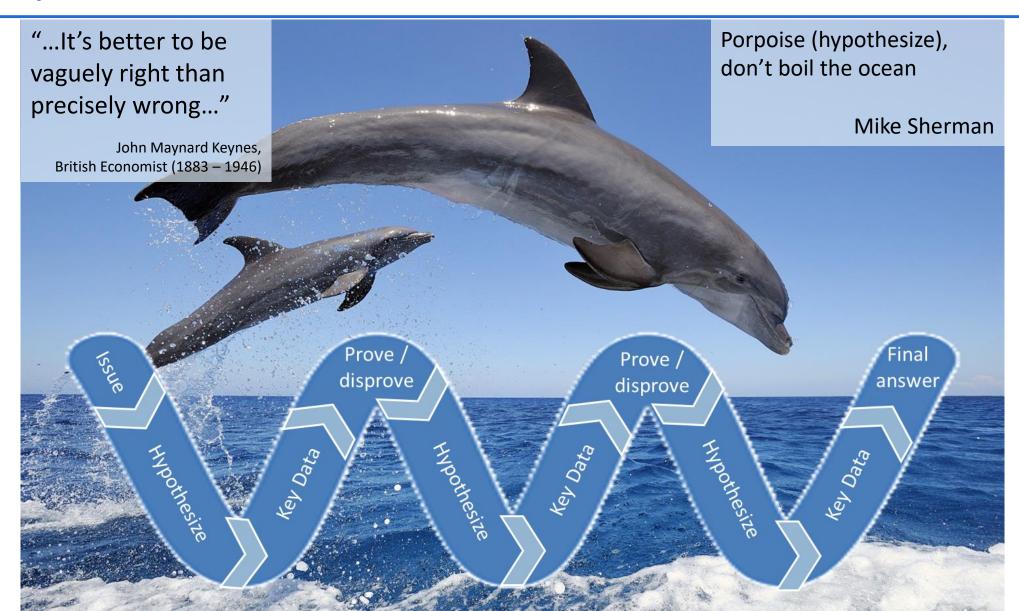
## 1. Problem First, then Solution. Don't flip.



"...If I had an hour to solve a problem and my life depended on it, I would use the first 55 minutes determining the **proper question** to ask, for once I know the proper question, I could solve the problem in less than five minutes..."

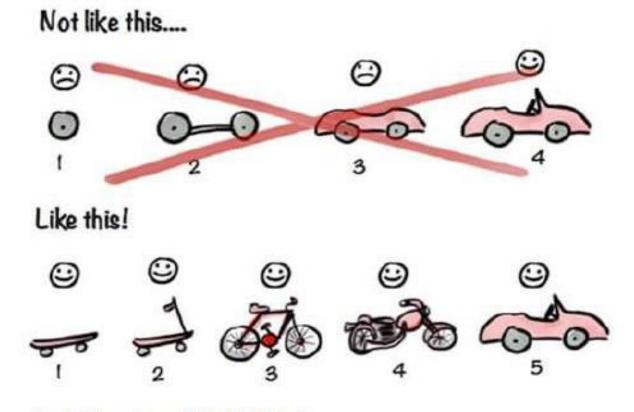
Albert Einstein –

## 2. Dirty Data Fast (DDF)



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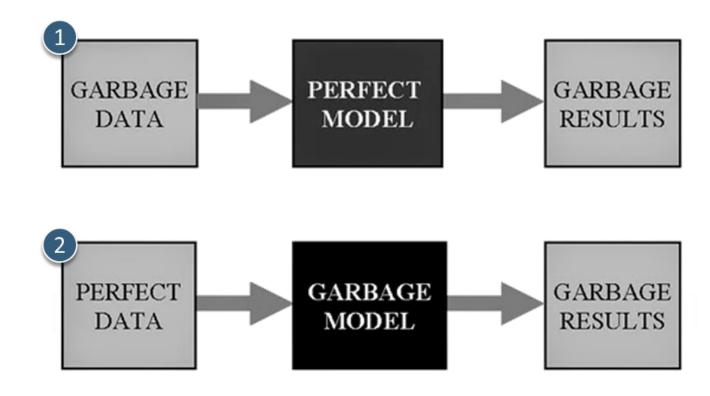
Focus on goals, not tools.



<sup>-</sup> Henrik Kniberg, How to Build a Viable Product -

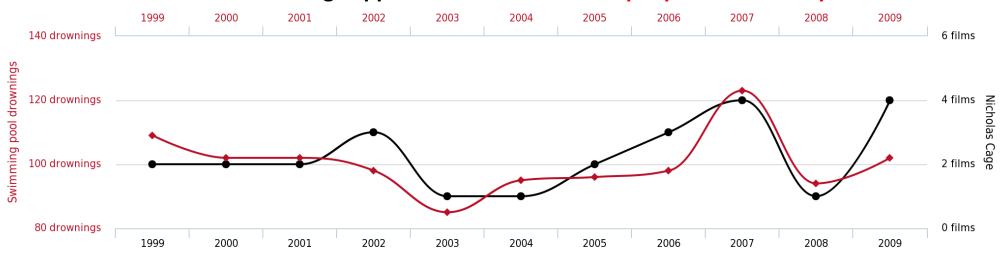
## 3. Garbage In Garbage Out

The G.I.G.O Paradigm



## 4. Correlation doesn't Imply Causation

#### Movies Nicolas Cage appeared in VS. Number of people drowned in pool

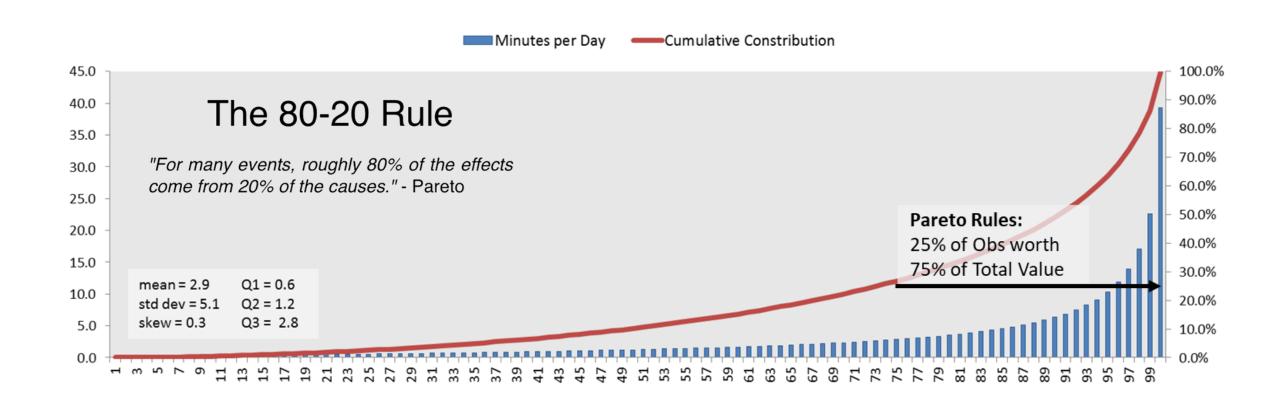


→ Nicholas Cage → Swimming pool drownings

tylervigen.com



## 5. Examine The 80/20 Rule



## 6. Show The Money

#### How likely are you to recommend us?

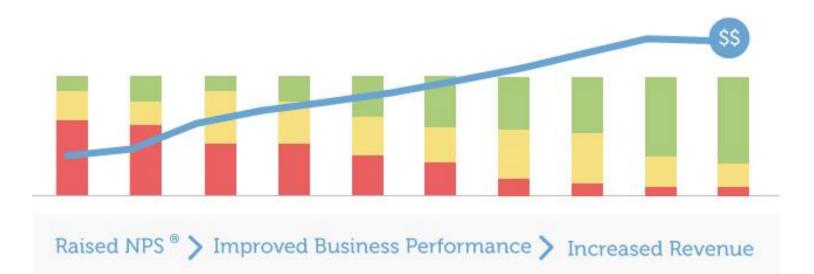
**DETRACTORS** 

**PASSIVES** 

**PROMOTERS** 



**NPS** = %Promoter – %Detractor



## 7. Keep it Short and Simple (KiSS)

#### "...If you can't explain it simply, then you just simply don't understand..."



- 1. Start with elevator speech
- 2. Outline key findings
- 3. Draw conclusion, don't put summary
- 4. Visualize highlighted data (avoid complex chart)
- 5. Put (extensive) appendix for scientific touch



#### **ELEVATOR SPEECH**

A 30-secs brief to get your boss attention

- 1. What's the most issue
- 2. How do you addressed it
- 3. What's the next step

#### **FACTS**

- I broke my knee
- A burglar knocked in my car window
- I got a speeding ticket

#### **SUMMARY**

 My knee, car and wallet were all damaged recently

#### **CONCLUSSION**

• I've been living dangerously

# Thank You

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