



Booz Allen Innovation Center, Washington DC

# STEPS TO DATA SCIENCE MATURITY



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SOUTHERN DATA SCIENCE CONFERENCE, ATLANTA

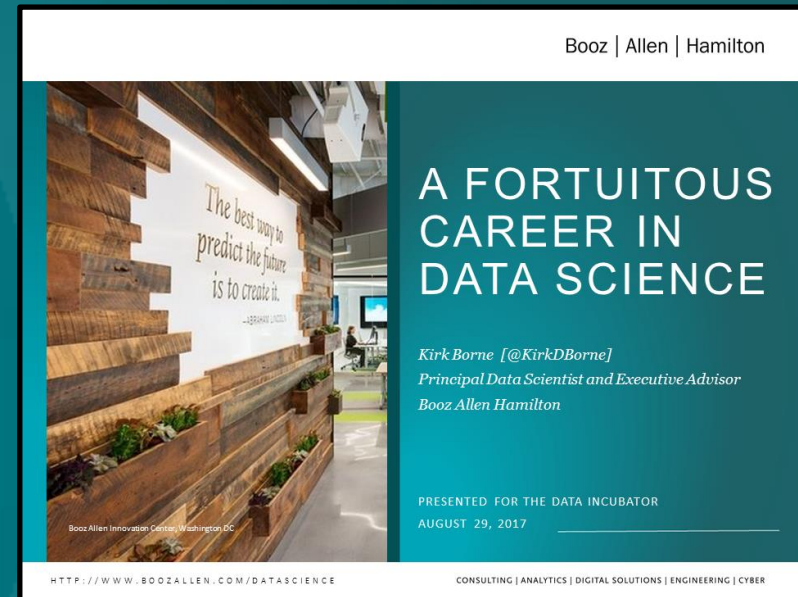
APRIL 12, 2018

# Data Literacy For All

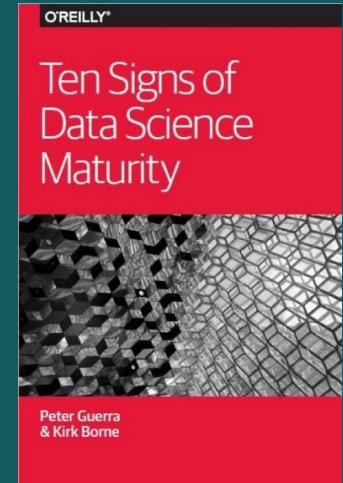
<http://rocketdatascience.org/?p=356>

My journey from Astrophysics into Data Science was motivated significantly by a strong desire to build Data Literacy in the next-generation workforce!

Learn about my journey here:  
<https://youtu.be/W19sGuvX7lw>



# DATA SCIENCE MATURITY IN ORGANIZATIONS



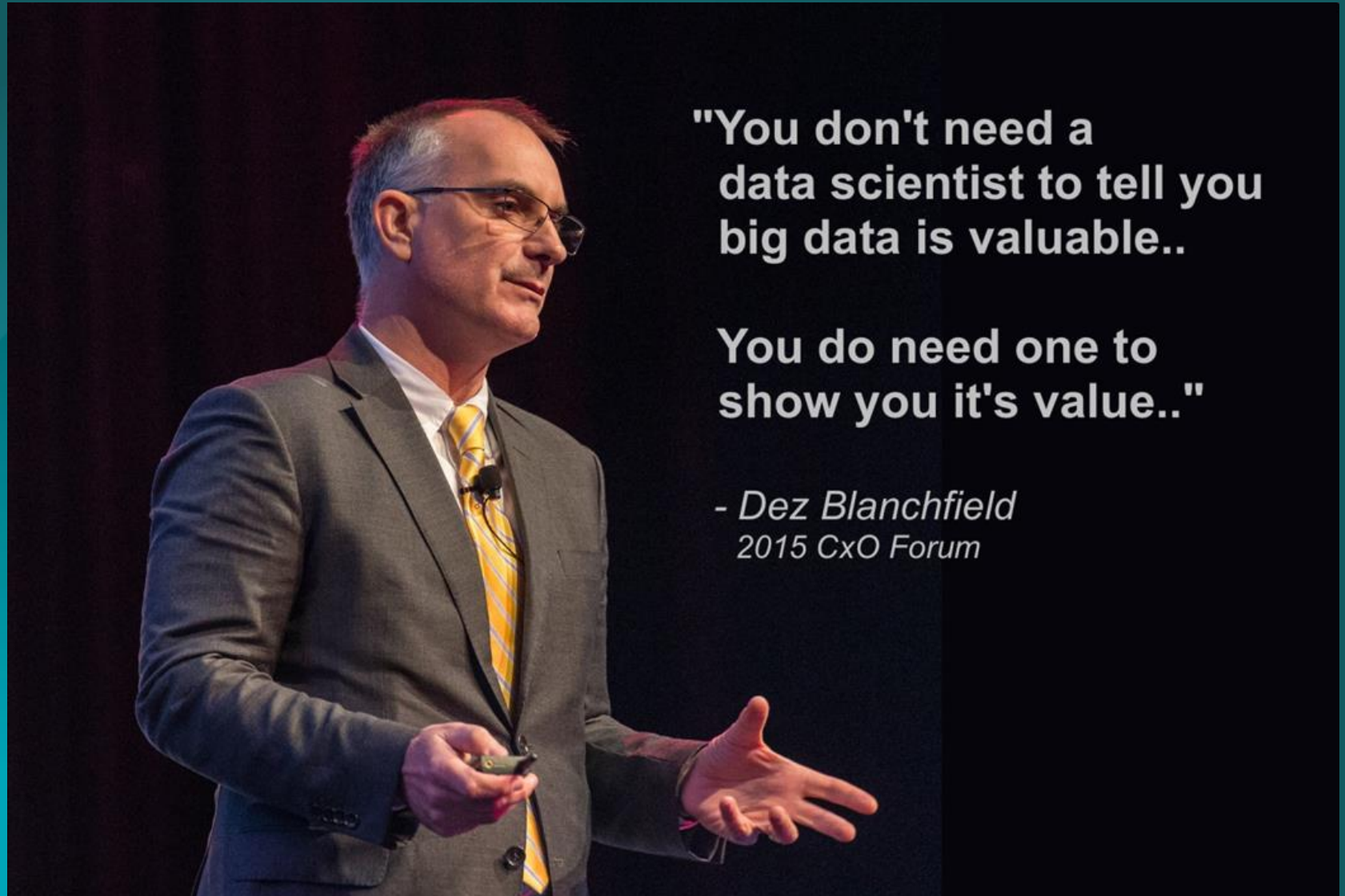
## Data Science ...

- 1) ...is “curiosity in action” that creates & organizes knowledge
- 2) ...embraces & personifies a culture of experimentation
- 3) ...follows rigorous scientific methodology (i.e., experimental, disciplined,...)
- 4) ...systematically explores the world through observation & experiment
- 5) ...relentlessly asks the right questions, and searches for the next one
- 6) ...is testable and repeatable
- 7) ...adopts a fast-fail learn-fast culture (knowing that errors are informative)
- 8) ...attracts & retains diverse participants (granting them freedom to explore)
- 9) ...is a way of doing things, not a thing to do
- 10) ...presents insights by illustrating and telling the data’s story.

<https://www.oreilly.com/ideas/10-signs-of-data-science-maturity> -- <http://www.boozallen.com/datascience>



# THE MOST IMPORTANT “V” OF BIG DATA = VALUE!



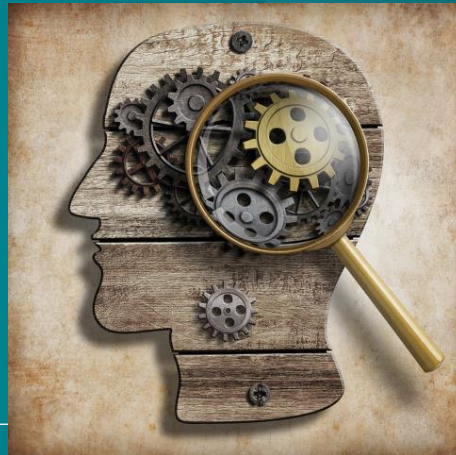
[https://twitter.com/dez\\_blanchfield/status/645139875440668672](https://twitter.com/dez_blanchfield/status/645139875440668672)

# SAILING THE “7” SEAS OF DATA:

## THE INDIVIDUAL’S JOURNEY TO DATA SCIENCE MATURITY

### The Seven Seas (C’s) of Data Scientists:

- 1) Cognitively Curious (ask questions ... the right questions!)
  - 2) Creative (design thinker)
  - 3) Courageous problem-solver (rocks the culture, willingness to fail)
  - 4) Cool under pressure (tolerance for ambiguity)
  - 5) Continuous life-long learner (hackathons, online classes, ...)
  - 6) Communicator (data storyteller)
  - 7) Collaborative (“data science is a team sport”)
- + 3 more:
- 8) Critical Thinker
  - 9) Computational
  - 10) Consultative



# DATA SCIENTISTS ARE EXPLORERS – EXPLORING VAST AND ENDLESS SEAS OF DATA, WITH A PASSION TO SOLVE TOUGH PROBLEMS

*“If you want to build a ship, don’t drum up people to gather wood and don’t assign them tasks and work, but rather teach them to yearn for the vast and endless sea.”*

– Antoine de Saint-Exupery

<http://www.nytimes.com/2008/04/11/world/europe/11exupery.html>



<https://www.pinterest.com/pin/377106168772298092/>