

Deep Learning

Maturing Enterprise Analytic Systems

Practical Advice for Leveraging Business
Value from Deep Learning Systems

Dr. Richard Hackathorn
Bolder Technology Inc.

October 22, 2019 – #1106

UNIVERSE

DENVER 2019

teradata.

On A Mission! Educating Corporate IT About...

Managing Deep Learning Systems at Scale



**Artificial Neural Networks
that *perform well***

**Enhancing Enterprise
Systems**

**End-to-End Data-to-Action
(Developing, Deploying,
Operating & Governing)**

**From stovepipe
applications to analytic
modules in systems**

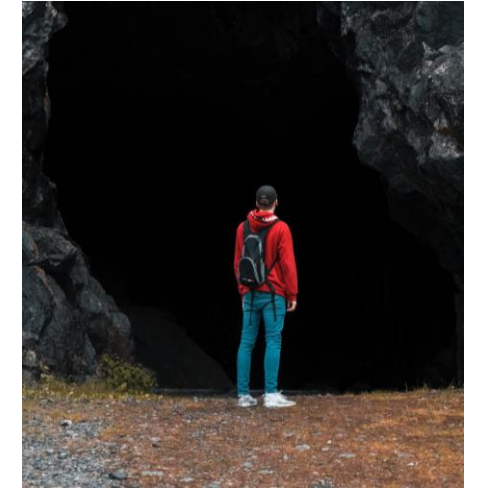
Twists & Shifts with DL re Qlik & Alteryx



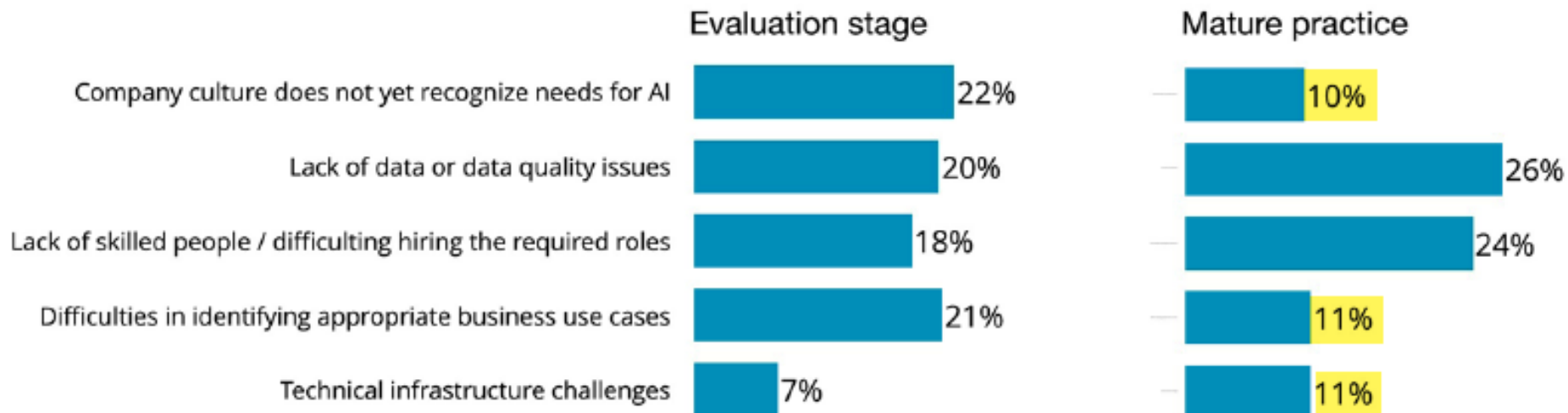
- Rapid evolving & not evenly distributed
- Analytic literacy (AI, DL, ML, Stat) for everyone
- Shift from developing apps to deploying systems
- Shift from manual crafted logic to auto learning logic
- Lack of solid DataOps infrastructure
- Role of biz/data analyst is critical
- BI vendors face painful strategic options re analytics

How Much Things Have Changed

- Strata survey with 1300 responses in Nov 2018
- Most IT companies are being left behind

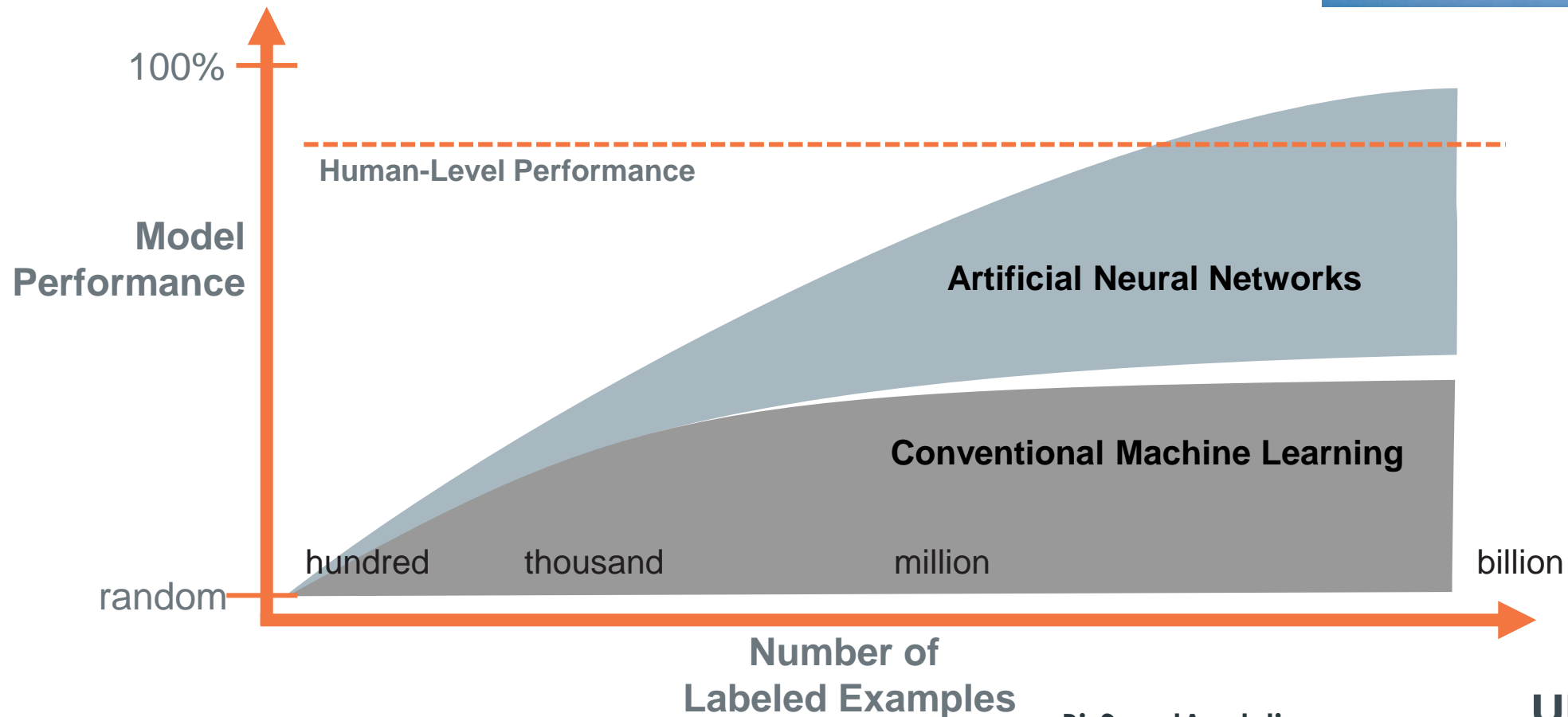


What is the main bottleneck holding back further AI adoption? (Select one.)



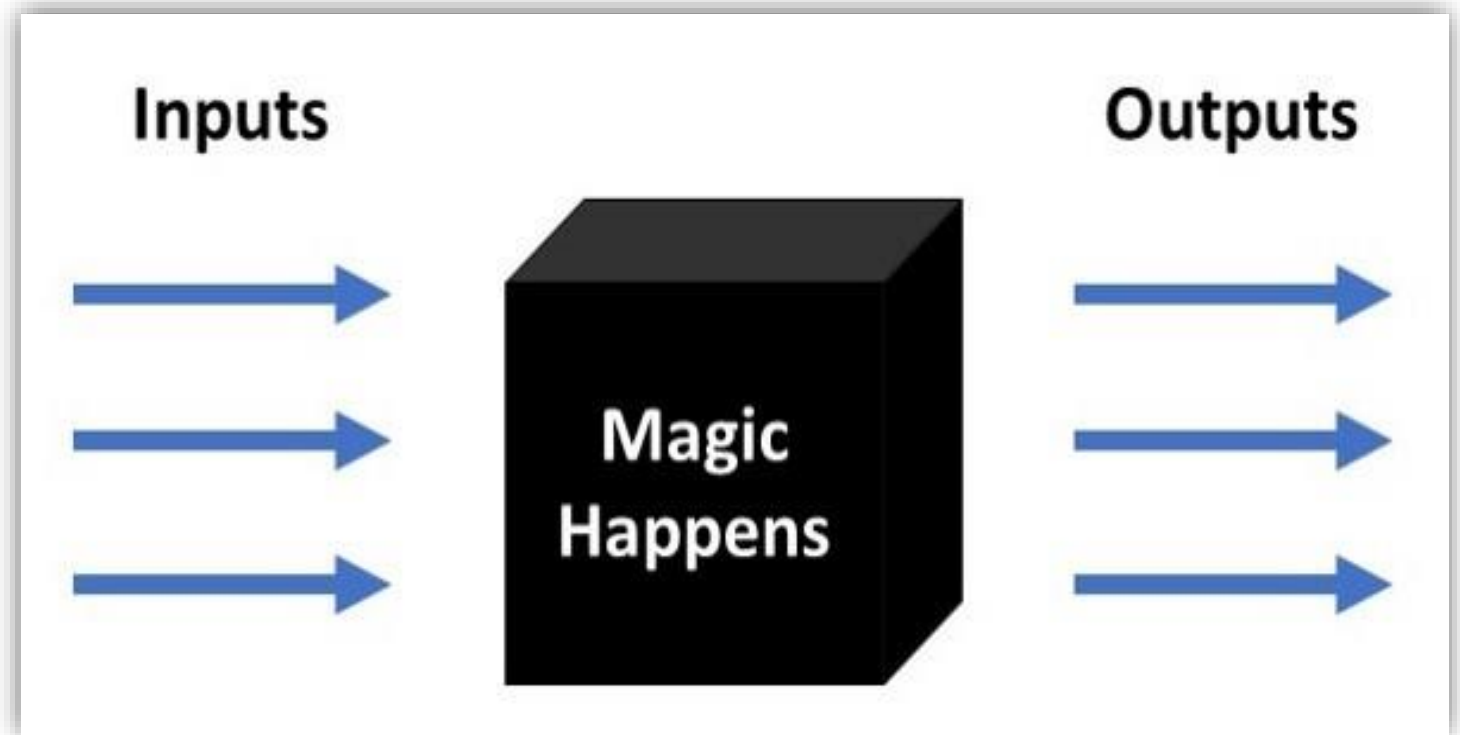
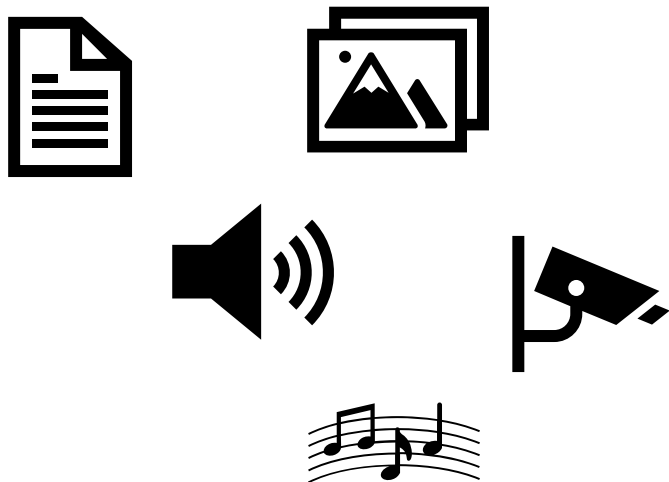
Strength (and Weakness) of DL

- Whoever owns & manages lots of data wins!



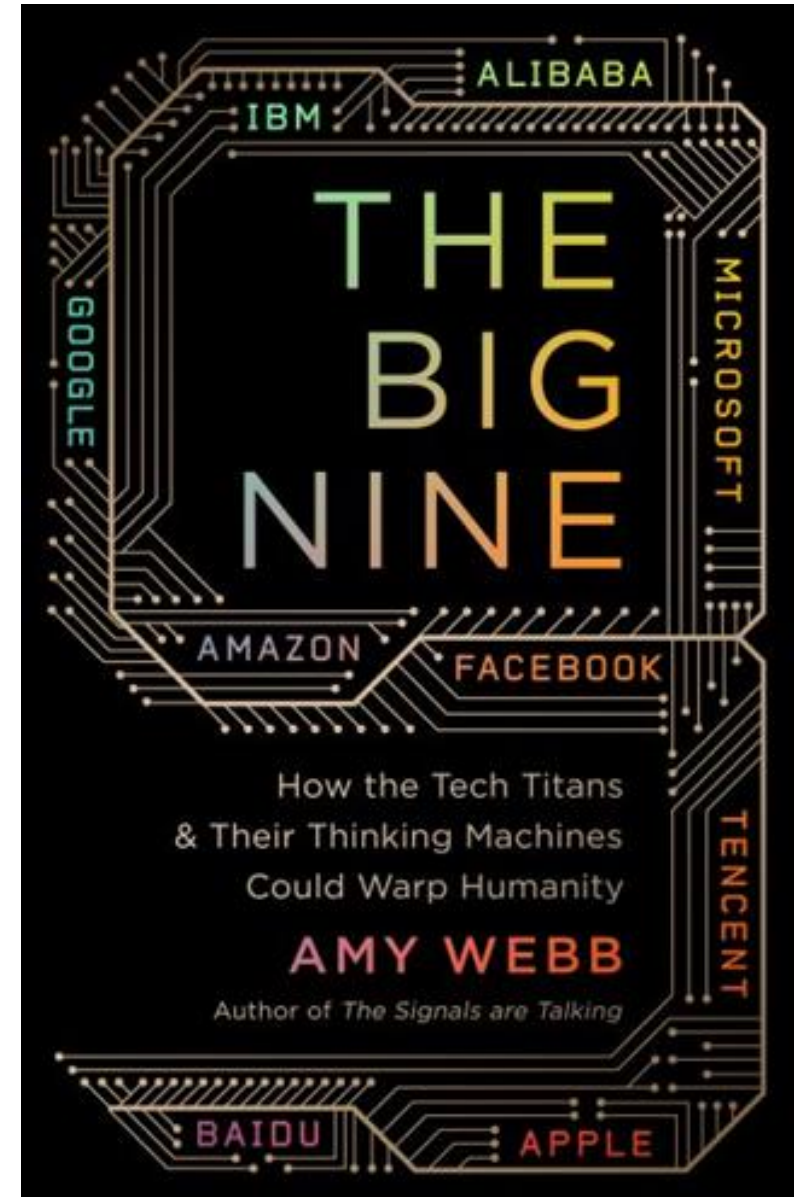
Manage to the Blackbox

- Magic happens inside neural networks!
- Managers: Focus on outputs and then inputs. Biz use case?
- HOWEVER... not your usual inputs and outputs



The Big Nine by Amy Webb

- Fact-full, non-tech, controversial book!
- AI (deep learning) driven by Tech Titans...
Google, Microsoft, Amazon, Facebook, IBM, Apple, Baidu, Alibaba, Tencent
- Lots of economic, political, social, ethical issues to which we must pay attention



Take-Aways for Managers

- Educate everyone on basic analytic literacy.
- Manage to the Black-Box, defining output & then inputs.
- Be creative & precise about defining YOUR business use case
- Got the data? Owe it? Got DataOps infrastructure to manage it?
- Could you get the right data? Where's the signal? Have IoT?
- Understand legal, social and ethical implications of analytics.

Details and links available at BizSmartAnalytics.com

Thank you.

UNIVERSE
— DENVER 2019 —

©2019 Teradata