

# Volkswagen Group

## Questions & Answer Session

Dr.s Zach Izham  
(ex VWG Asghar Ghorbani)

# DATA:LAB / FUELING  
MUNICH / FUTURE  
BUSINESS





# What Exactly do You Do?

- Trusted advisory.
- Education.
- Architects of analytics solution.
- Executioners of some analytics solution.
- Employ new tech to solve old problems.
  - **Analytics:** All things to do with using data to gain insight.
  - **Trusted:** I'll tell you if you are getting high or having a stroke.



# Why Are You Sitting Here at a GPU Conference?

- Be cause I/ we Employ GPUs to:
  - Train models
  - Really understand opaque models\*
  - Validate Predictions
- Transfer this knowledge to model end users.

\*Need to add REF to both the other GTC talks.

## Don't Talk About it Show it

- How is this done?
- With a GPU based
- Use MapD\* to help clients understand their data.
  - Understand car to garage interactions through out the car's life span.
  - Understand car sharing requirements for specific areas.

\*[www.mapd.com](http://www.mapd.com)



# Challenges & How to Overcome Them

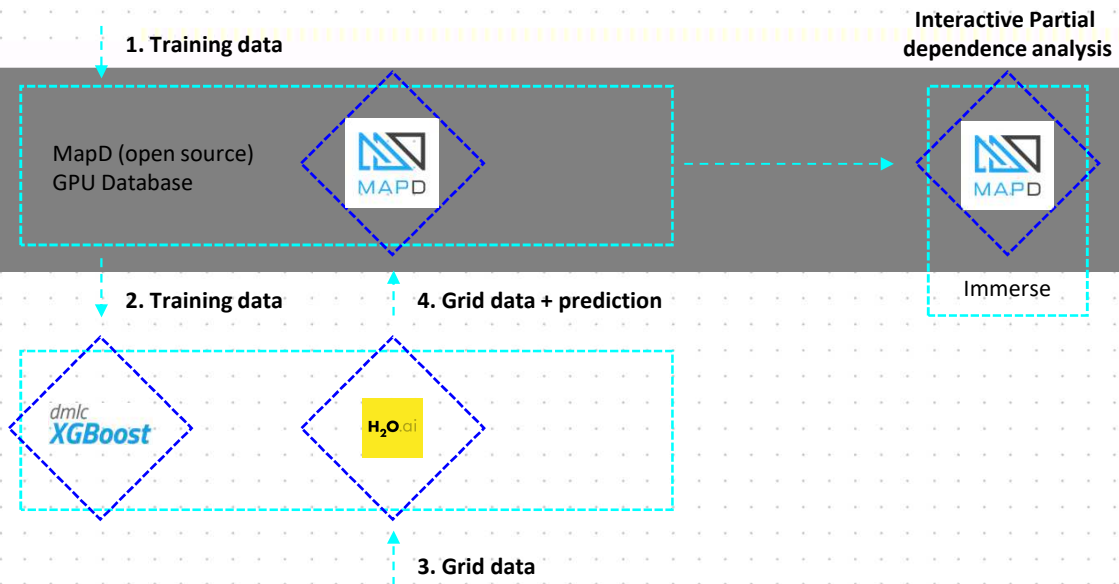
- Pushback:
  - Implementing new technology.
  - Employing new software.
- Solution
  - Showing the benefit – with numbers!
- Is this easy? NO
  - There are no short cuts.
  - There are no free lunches.
  - Education is slow and a war of attrition

\*



# Cloud Architecture and Specification

## Cheap and Cheery!



Name	# GPUs	# vCPUs	RAM (GiB)	Network Bandwidth	Price/Hour**	spot Price / Hour**
p2.xlarge	1 K80	4	61	High	\$0.972	\$0.234

\*\* Prices as of SEPT 2017



## Thanks & Connect

- Discover how we can help:
  - Education.
  - Advisory.
  - Execution.
- Twitter @drizham @ghorbani\_asghar