

# Your Data Can Make the World a Better Place: Here's How. And Who to Trust

CHAOS



<http://www.seangoggins.net>

# We are obsessed with data

## Sean McGuire Stats

PUNTING STATS											
YEAR	TEAM	PUNTS			AVG			LNG		YDS	
2018	 WIU	2			39.5			43		79	
DEFENSE STATS											
YEAR	TEAM	TOT	SOLO	AST	PD	SACK	FF	INT	YDS	TD	
2016	 WIU	0	0	0	0	0.0	0	0	0	0	

\*Defensive statistics are not considered official.

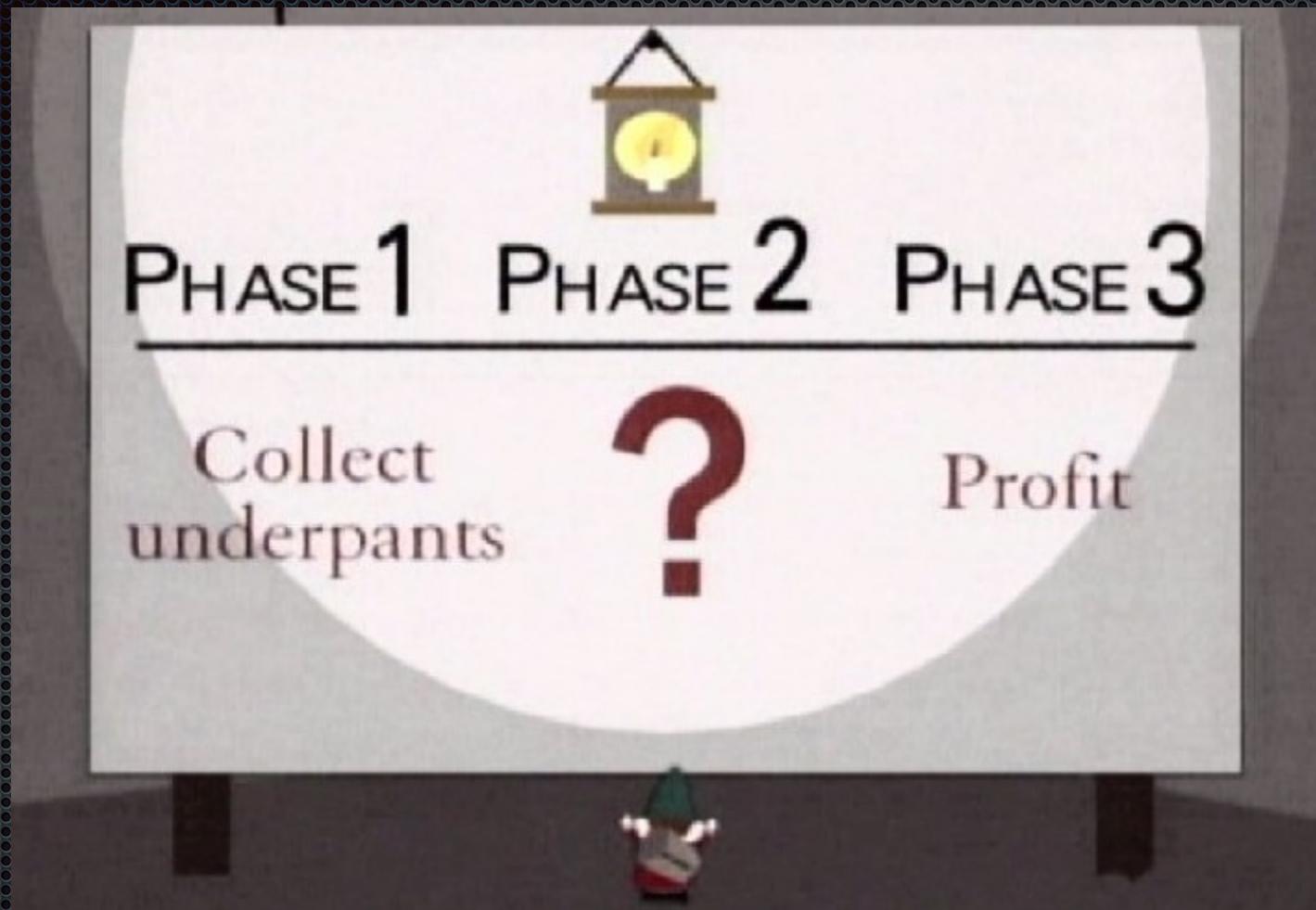
  

SCORING STATS											
YEAR	TEAM	PassTD	RushTD	RecTD	RetTD	TotTD	2PT	PAT	FG	TotPT	
2018	 WIU	13	1	0	0	1	1	0	0	8	
2017	 WIU	25	1	1	0	2	1	0	0	14	
2016	 WIU	20	5	0	0	6	0	0	0	36	
2015	 WIU	6	2	0	0	2	0	0	0	12	

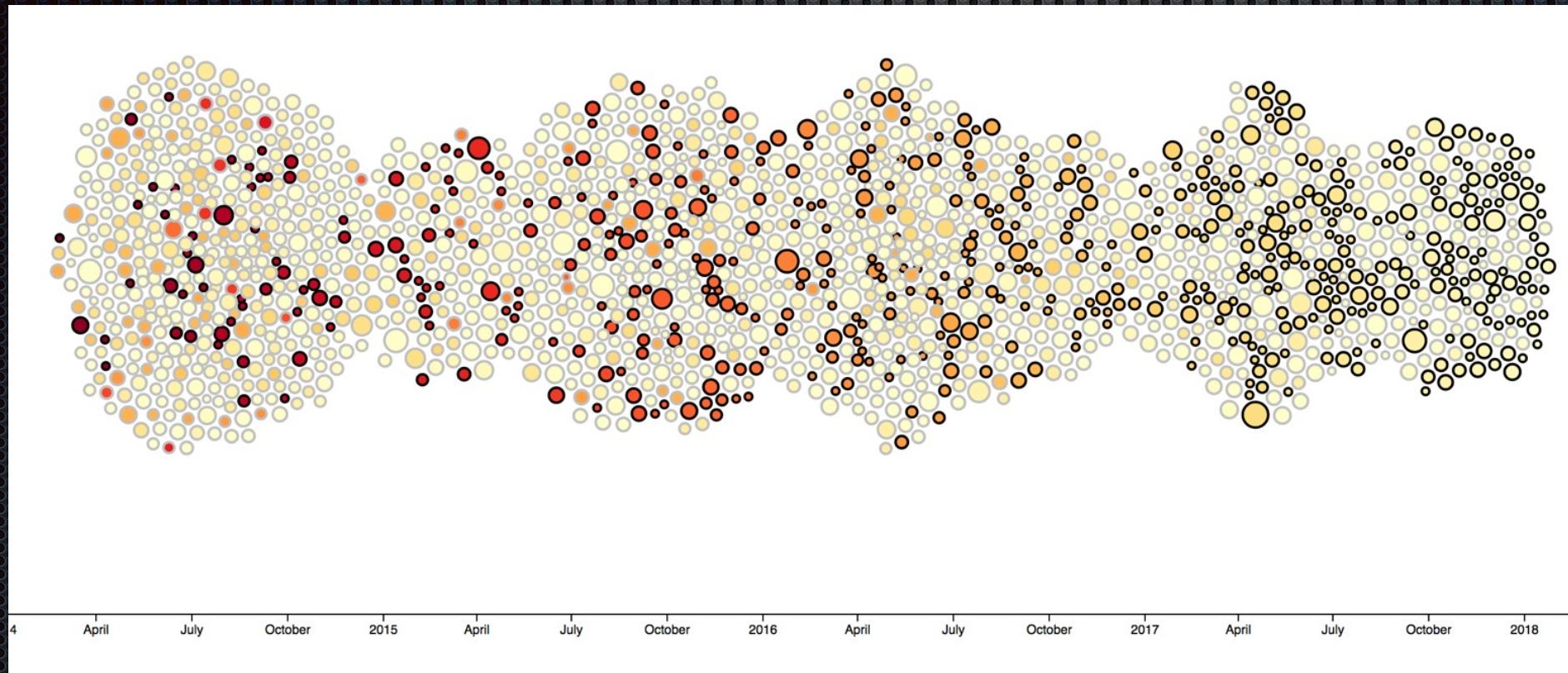
But, Unless the Data Informs, its Useless.  
And Data Exists to Help Tell a Story.



# BI: Benevolent Incompetence



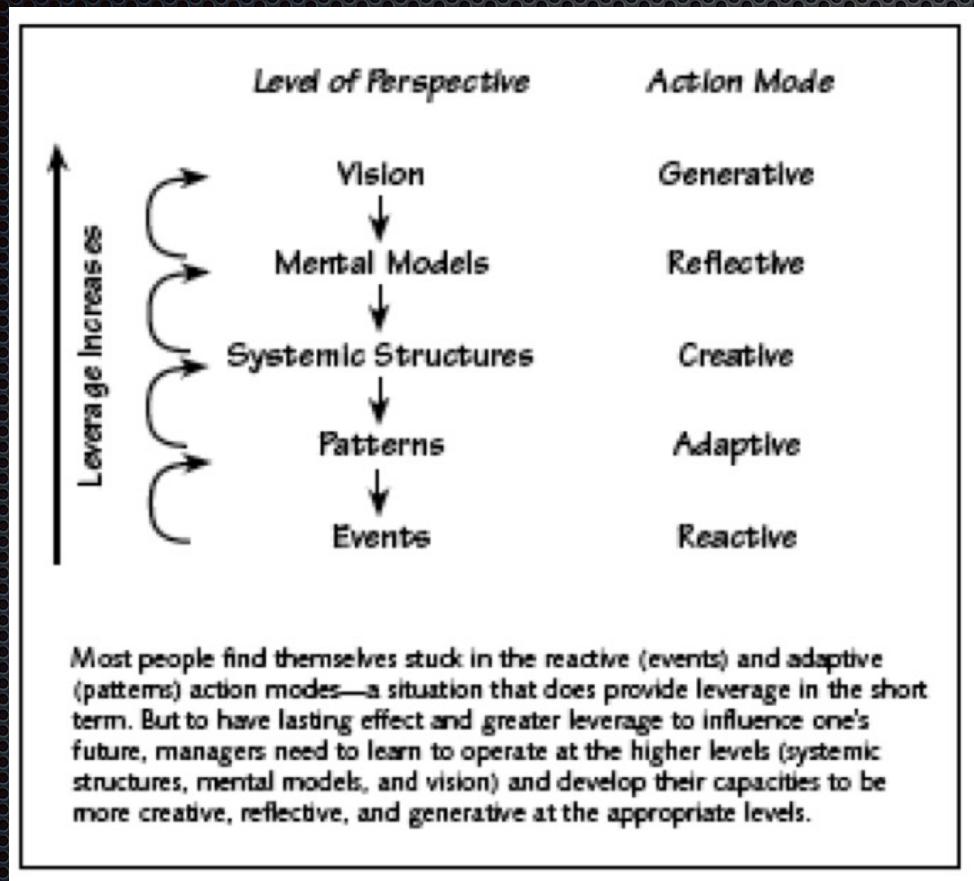
# IQ: Intimate and Quiet



# Make the World a Better Place

- Know the data you have out there.
- Understand who you are giving it to.
- Give it freely for public benefit, and more carefully to people who make money from your data.

# Here's How (Leading to “Who to Trust”)



Systems Thinking

# Key Points

- Electronic Data is a record of your behavior
- It can help shape a more efficient world
- It can be used to market and manipulate you
- It can be used to evaluate and marginalize you
- It can help us make better decisions
- We almost always
  - Fail to understand what we are looking at and its origins
  - Place too much trust in the data itself. We are not critical enough

There's this little thing of Data  
becoming part of what we all do



# What is a Data Futurist?

## Black Mirror & The X-Files



# What is a Data Futurist?

Black Mirror & The X-Files

Engagement



# Privacy and “The Greater Good”



Trust

# What is a Data Futurist?



- I know what you did (online) last summer
- Work with many data focused companies
- Founded a Data Science Masters Degree Program
- Understands the relationship between software and data

# Engagement

Open Source  
Software Health

# CHAOS

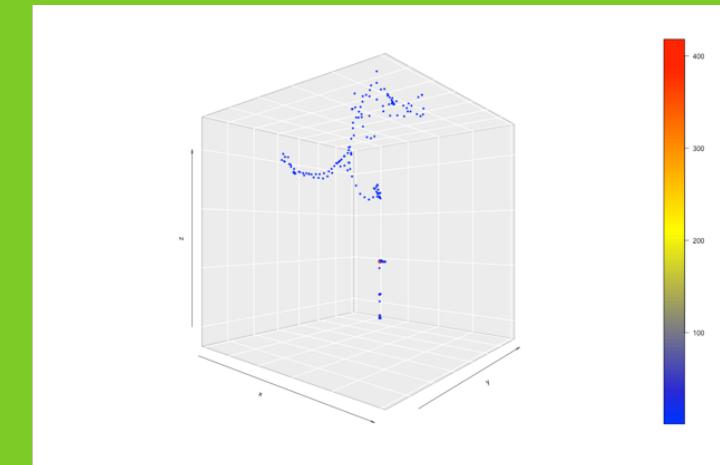
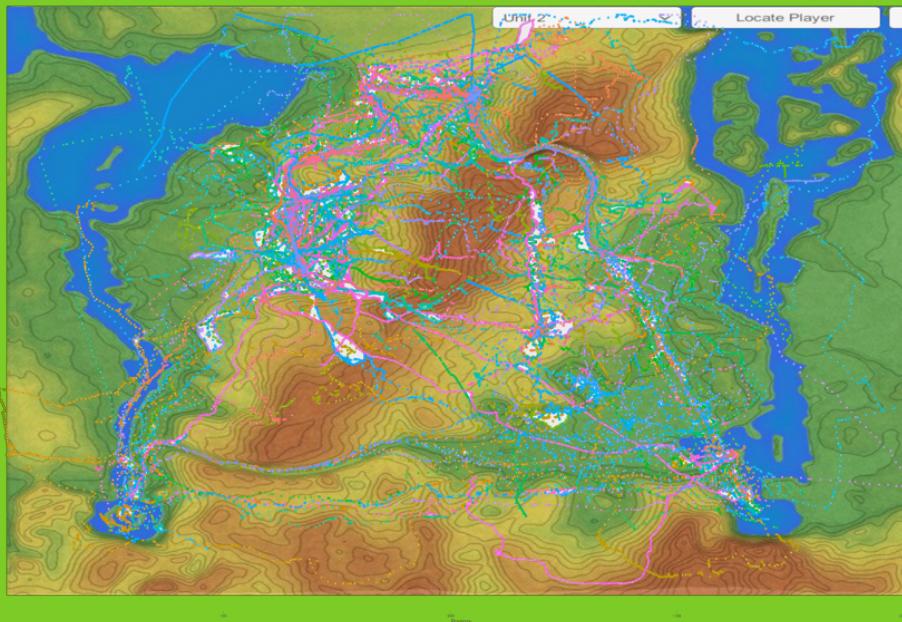


Alignment of Privacy  
Interests of People  
and Making Money  
from Internet Clicks

A screenshot of a web browser showing the Global Consent Manager interface. It features a blue shield icon with yellow stars from the European Union flag. The text "GLOBAL CONSENT MANAGER" is displayed, along with a "Learn More..." link. Below this, it says "Managed Site www.bbc.com first visited today, not trusted". At the bottom, there is a "BLOCKING CONSENT DIALOG" button with a "ON" switch.



# Who Does What with Your Data?



 Mission hydrosci

## Mission Hydro Sci Teacher Dashboard

All Classes 

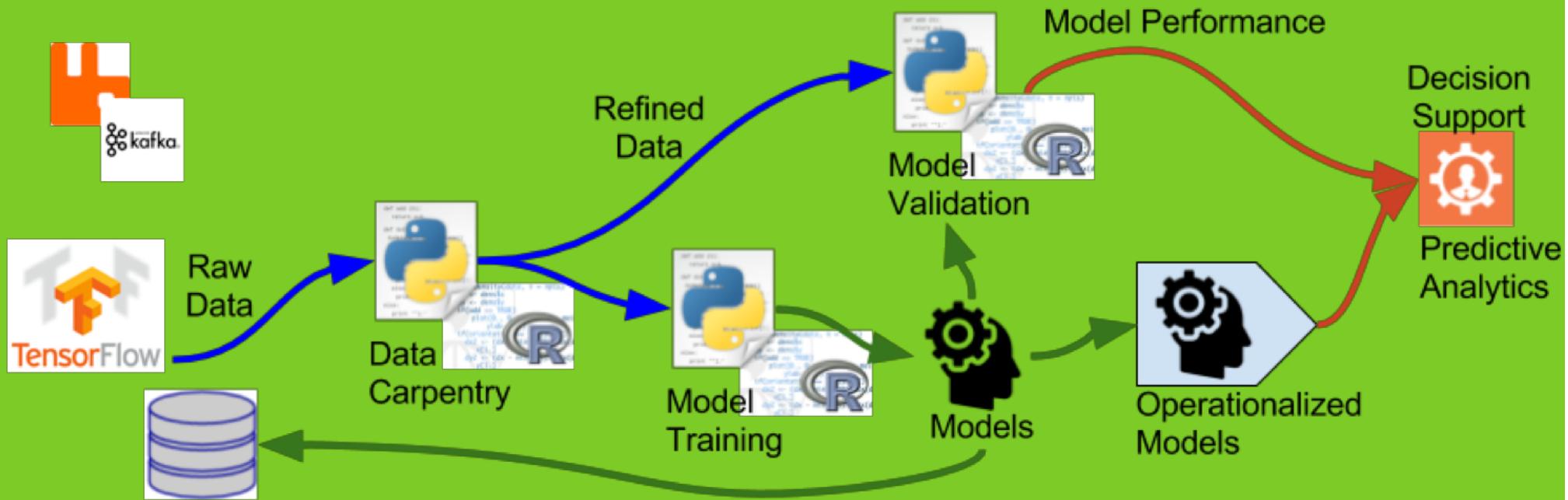
### Time Grid - Progress Chart

### Quest Times

Search:

player ID	Check in with ARF	Talk to Toppo	Talk to Jasper	What just happened?	Find the Team	Settling WAT247	The Largest Watershed
alex... 	00:33:24	00:35:39	00:38:23	00:39:20	00:44:12	00:52:18	00:54:04
alexyl... 	00:06:21	00:09:36	00:11:42	00:12:49	00:23:12	00:27:52	00:34:26
alla... 	00:04:04	00:10:08	00:14:17	00:15:15	00:29:04	00:47:45	00:48:33
alla... 	00:48:56	00:51:03	00:53:16	00:53:34	00:10:07	00:22:16	00:22:36
allan... 	00:03:18	00:11:59	00:15:29	00:17:05	00:25:50	01:11:40	01:16:09

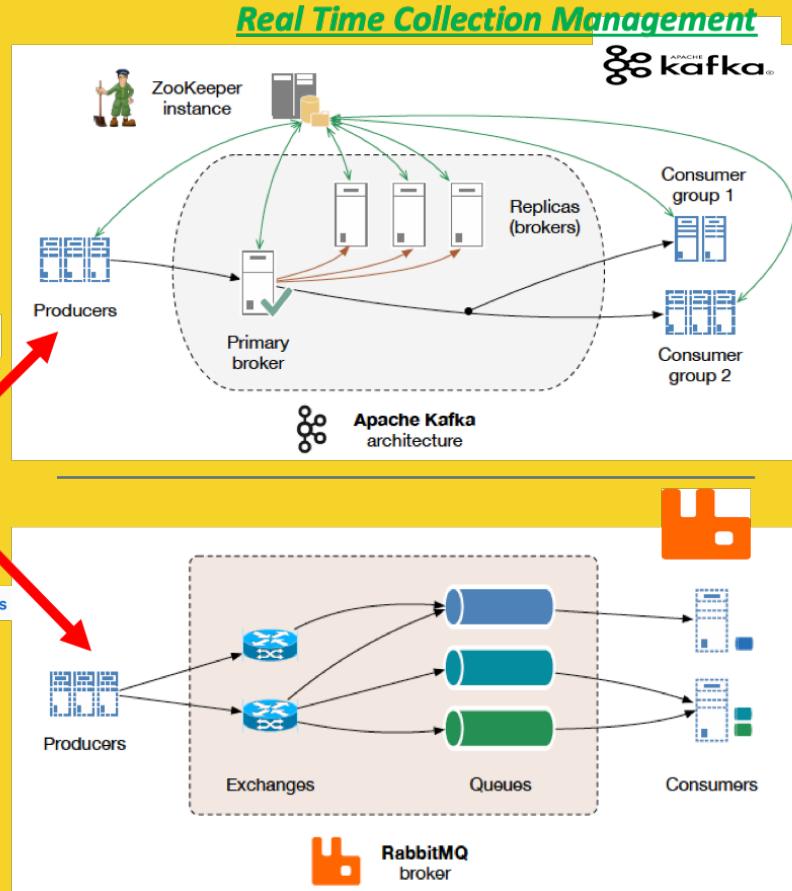
# Who Does What with Your Data?



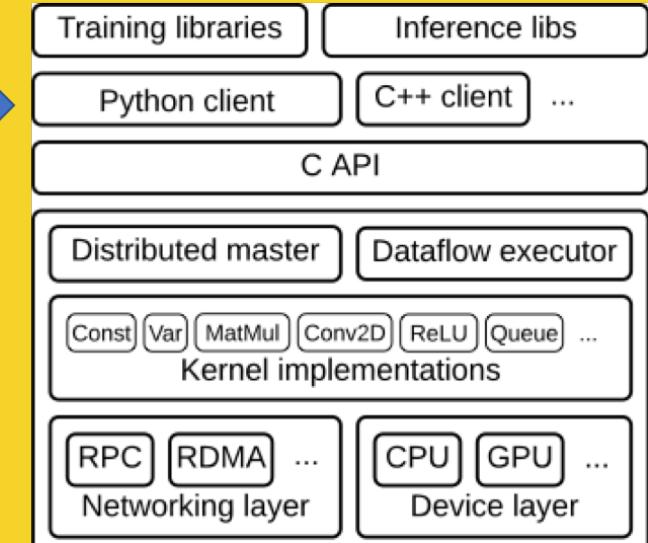
# Who Does What with Your Data?

## Real Time Data Collection & Modeling with Tensorflow

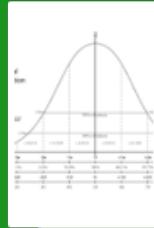
### Sources



### Machine Learning: Real Time



Intrinsic Data Quality



## Statistics

- Organized
- Complete

0	0	0
0	0	0
0	9.0	0
0	0	0
7.0	0	0
0	0	10.
8.0	0	0
0	0	0

## Data Mining

- Semi-Structured
- Sparse Matrices



## Machine Learning

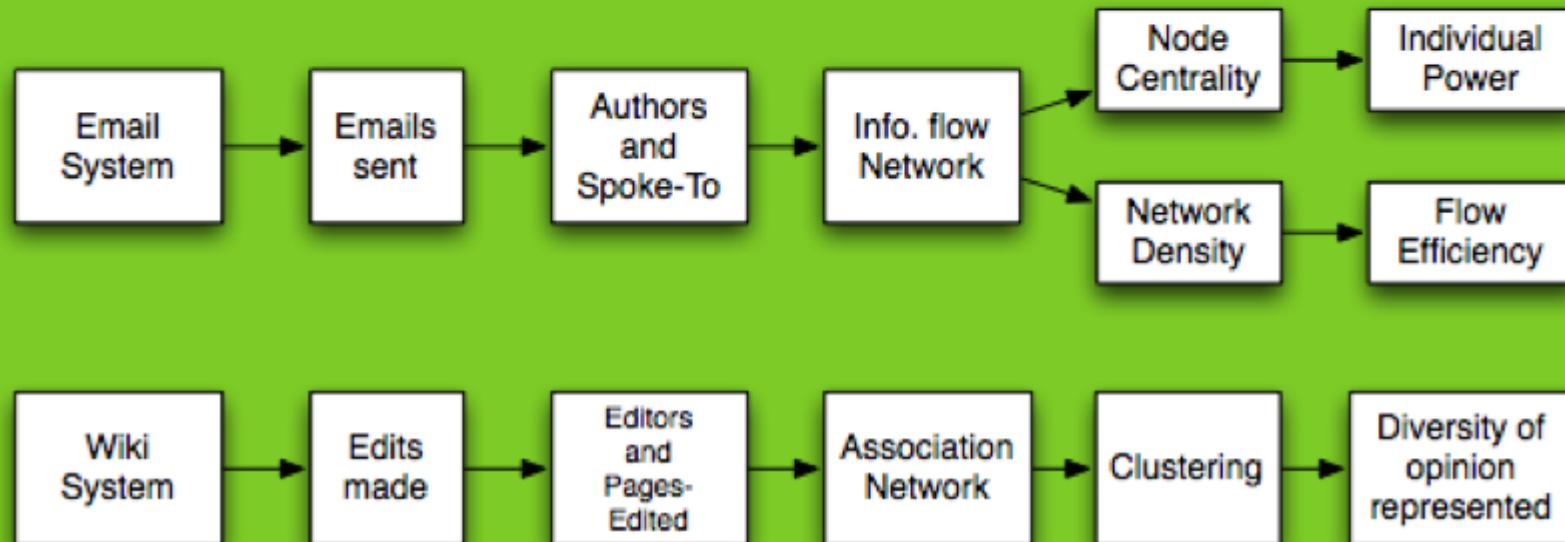
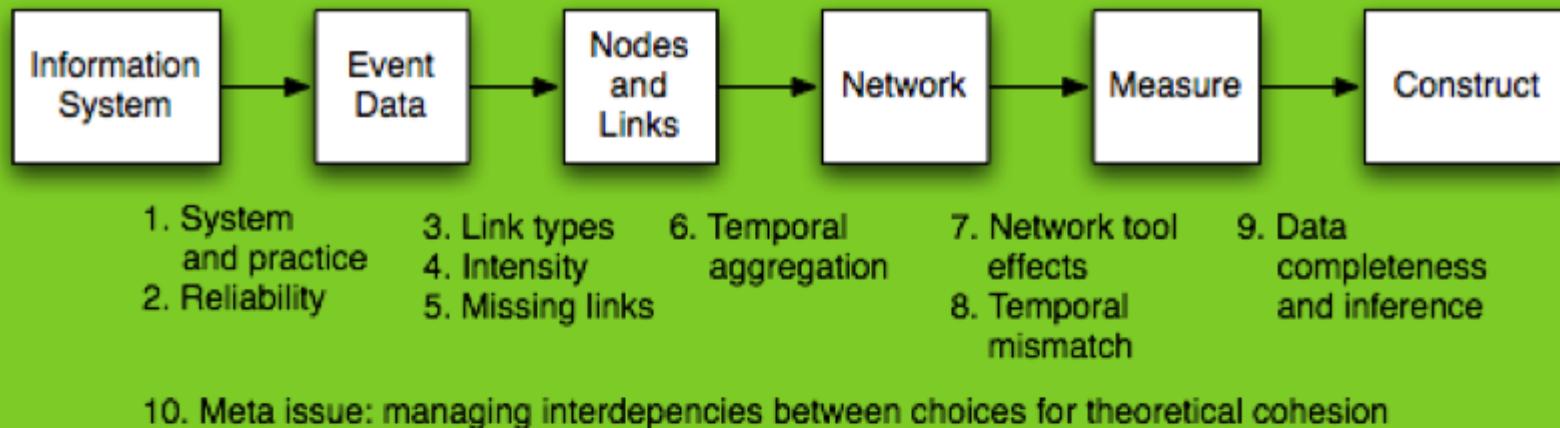
- Unstructured
- Unbounded



# What we are doing with your data

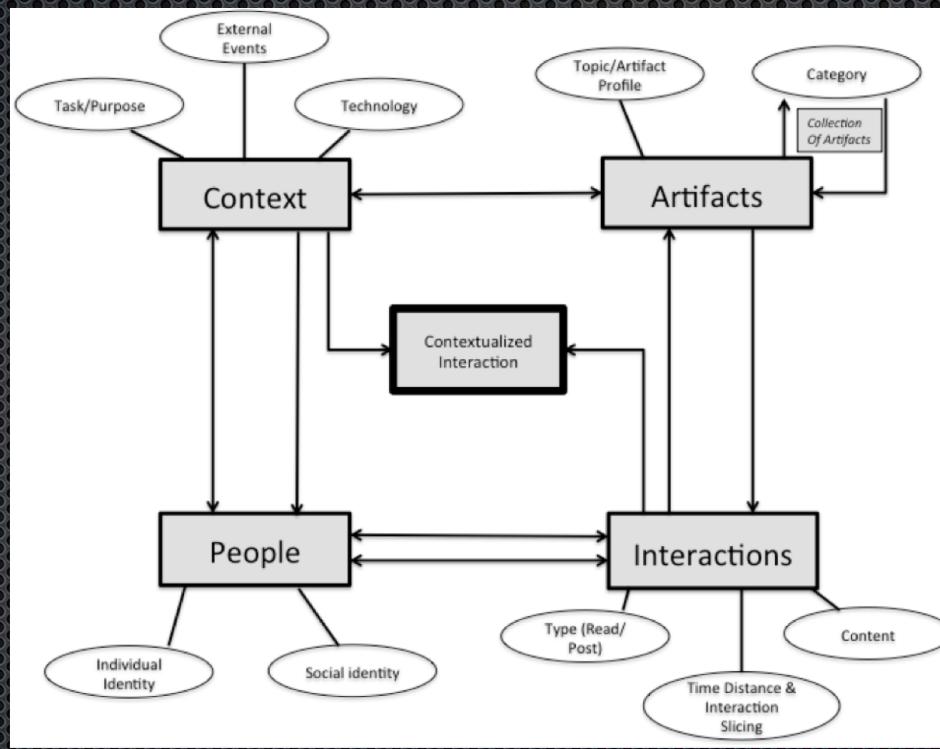
# What is a Data Futurist?

The Business of Data, The Business of Software, and the Demand that We Know what we are doing.



For many reasons, DATA IS OFTEN WRONG

# Complex Shaping of Data to Extract Meaning: And that Meaning CAN BE WRONG



# Protecting Privacy

- GDPR: Privacy and the Interests of Publishers