

# Analytics: A Practitioner's Perspective



**RXA.IO**  
*harness your data™*



# jason harper



WORK

PLAY

- 17 years of Business and Marketing Analytics Experience
- Several Ad Agencies & Brands
- Auto Tier 1, 2, & 3 Marketing Experience
- Travel, CPG, eCommerce, Tech
- Multiple patents for analytics processes
- Enjoy R, Python, Tableau, Alteryx, Machine Learning



@JasonHarper



/JasonHarper



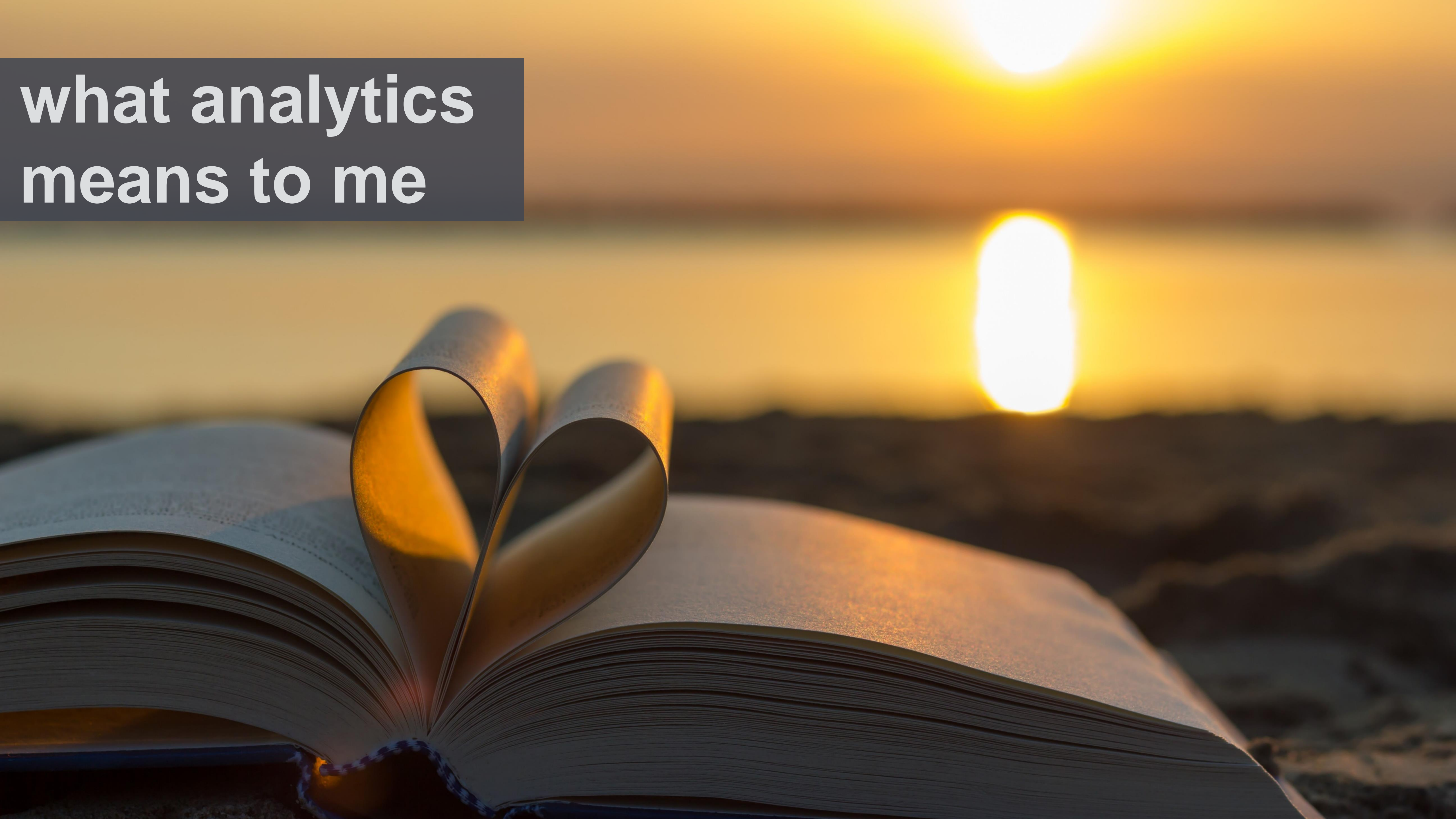
JasonHarper.com

Jason is the founder and CEO of RXA, llc ([www.rxa.io](http://www.rxa.io)), an Ann Arbor, MI based data and analytics company. He has earned an MBA from the University of Michigan's Ross School of Business, as well as Master's (EMU) and Bachelor's degrees in Economics (U of M).

Prior to founding RXA, Jason created and lead the analytics practice at FordDirect and the Marketing Intelligence Group at Organic, inc. Jason has held analytics leadership positions at several advertising agencies and brands and has worked across a variety of industries from Hilton Hotels and Chrysler to Hasbro and U by Kotex.



**what analytics  
means to me**

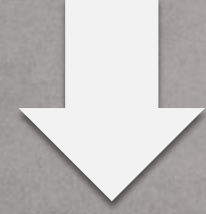




[illegible]



This is you.







**DESCRIPTIVE**





PREDICTIVE



# PRESCRIPTIVE



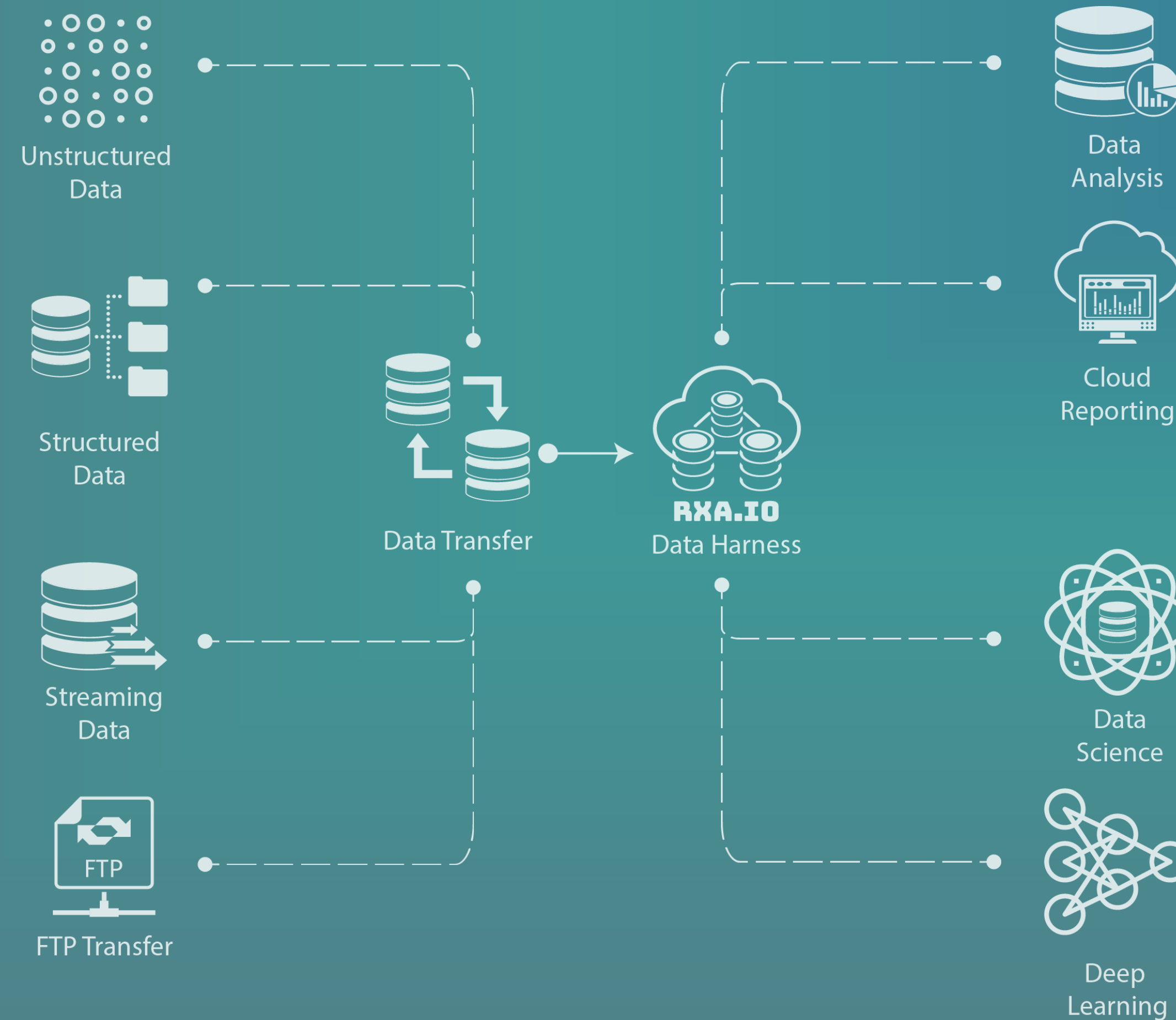




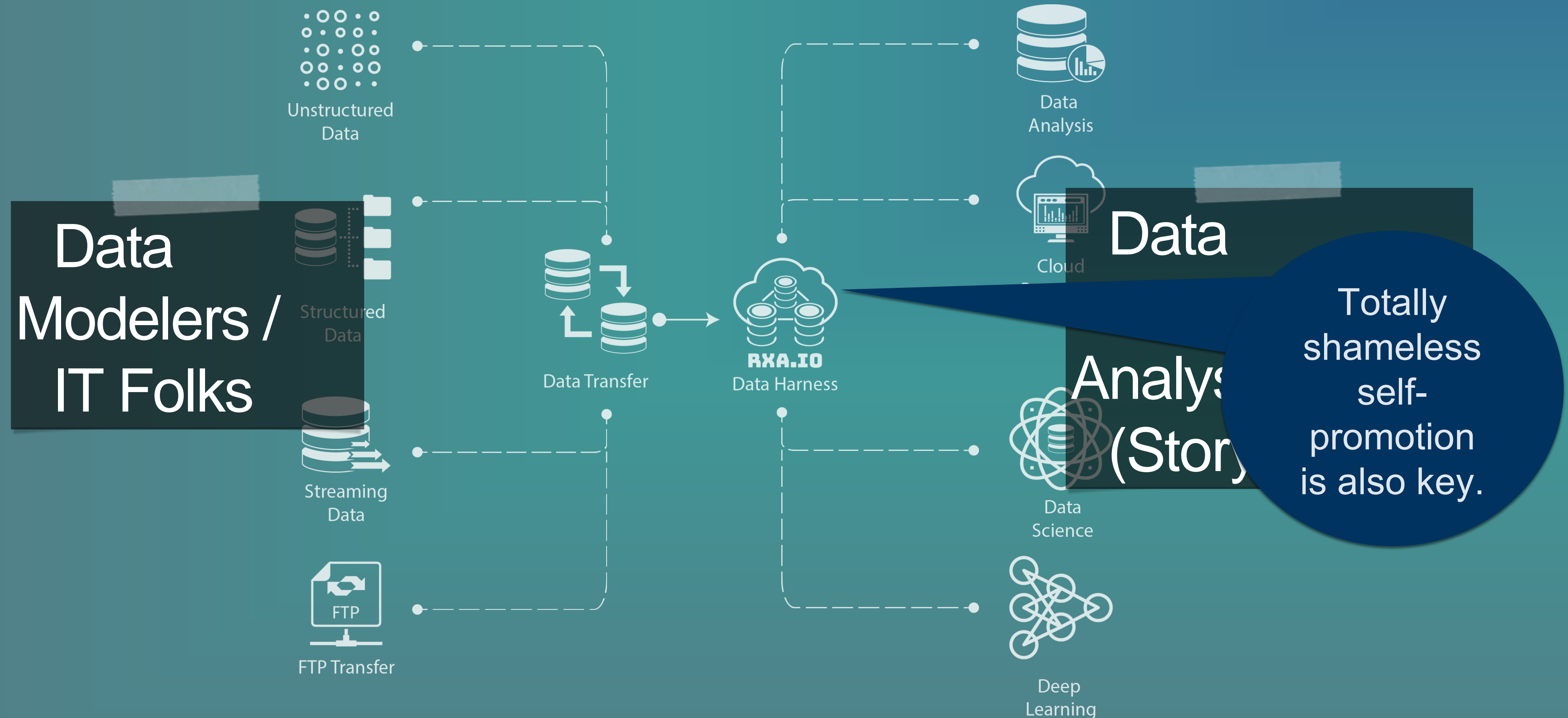
# OPTIMIZATION



# The Analytics Platform



# The Analytics Platform



These are the real nerds...  
until something goes  
wrong... then heroes



Data Security



Data Access



Data Backup



Data Recovery



# CASE STUDIES



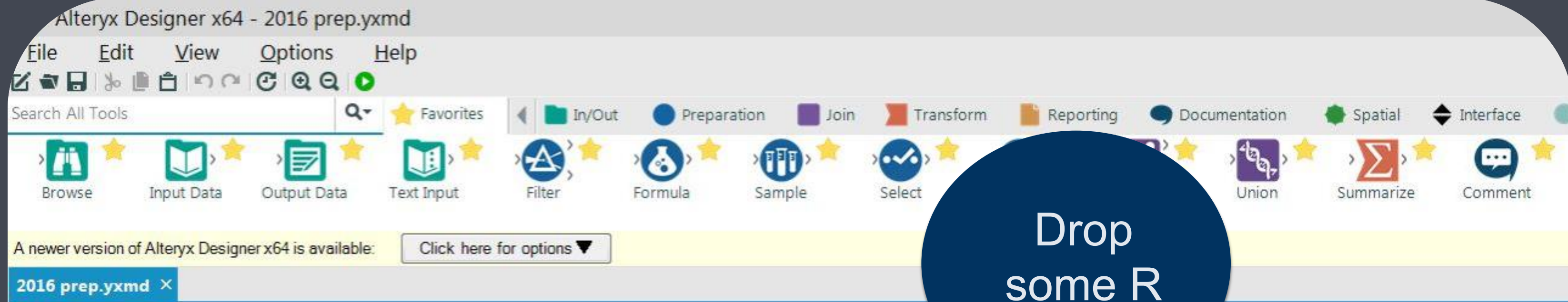
“the guy with the most data wins”

*-Tim O'Reilly,  
Silicon Valley “oracle”*



alteryx





Bring in  
your  
data.



Cleanse  
your  
data.



Drop  
some R  
on it.



Create  
your  
output.



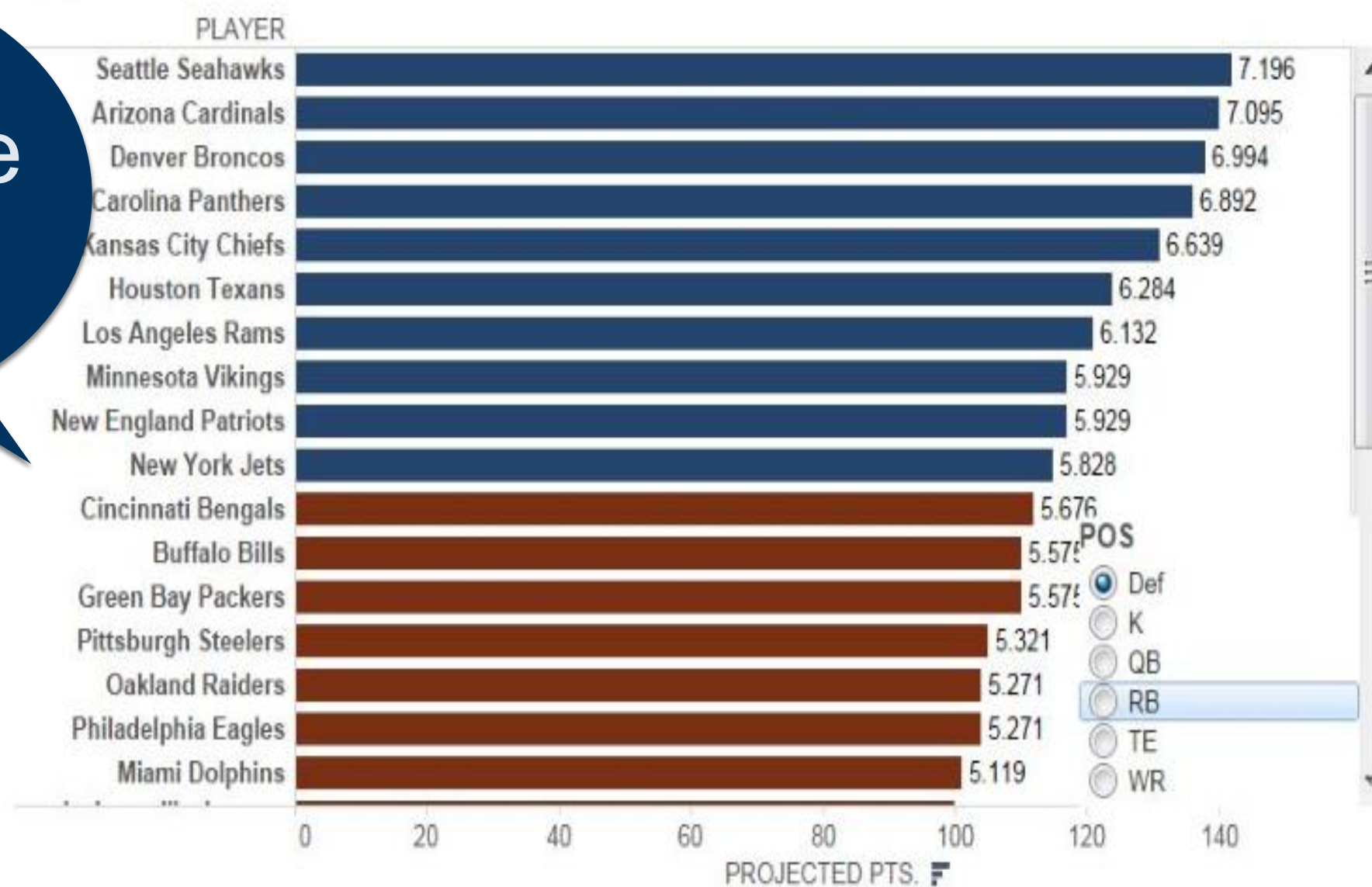
Play with  
your  
data.



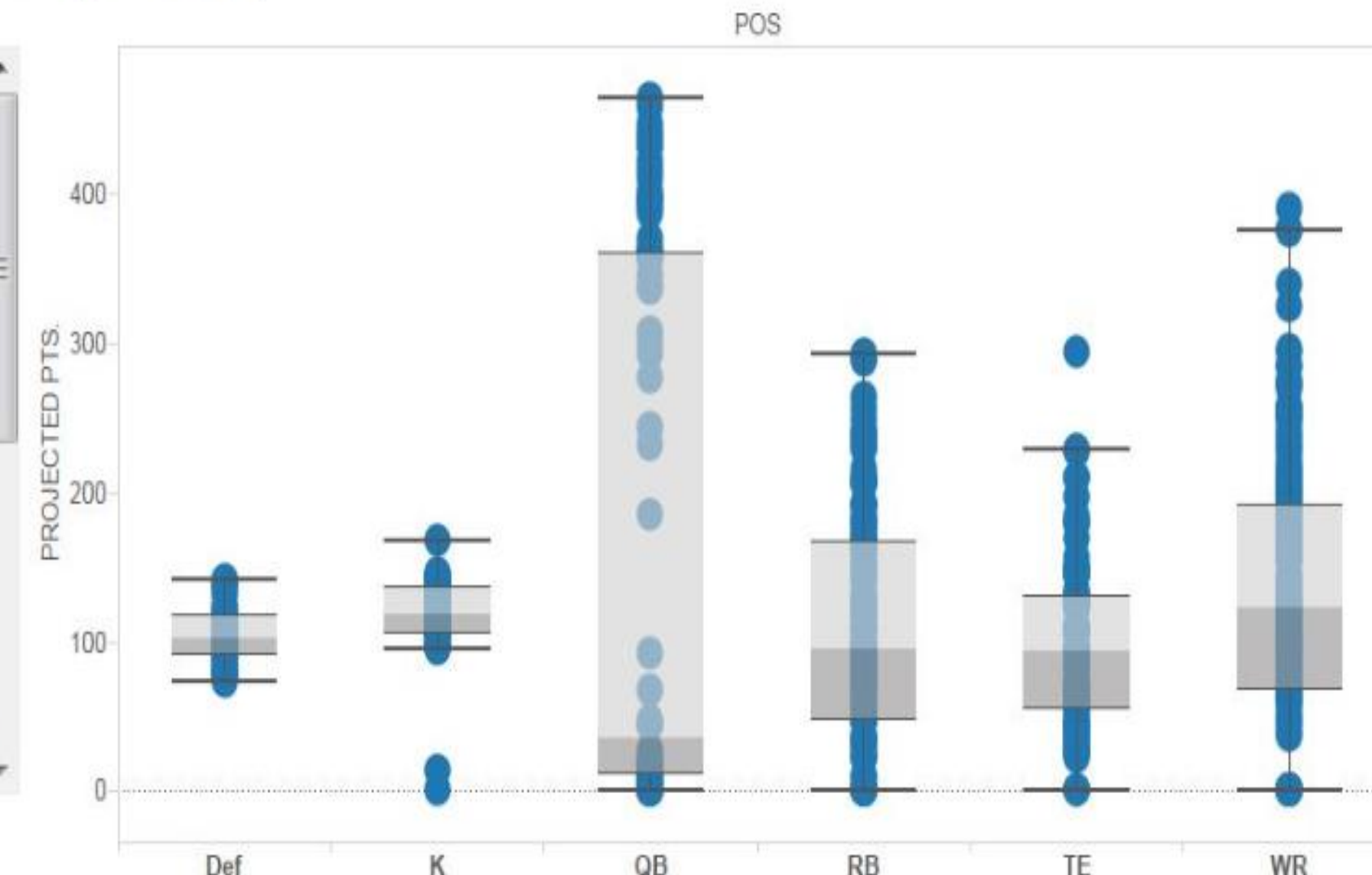


Visualize  
it.

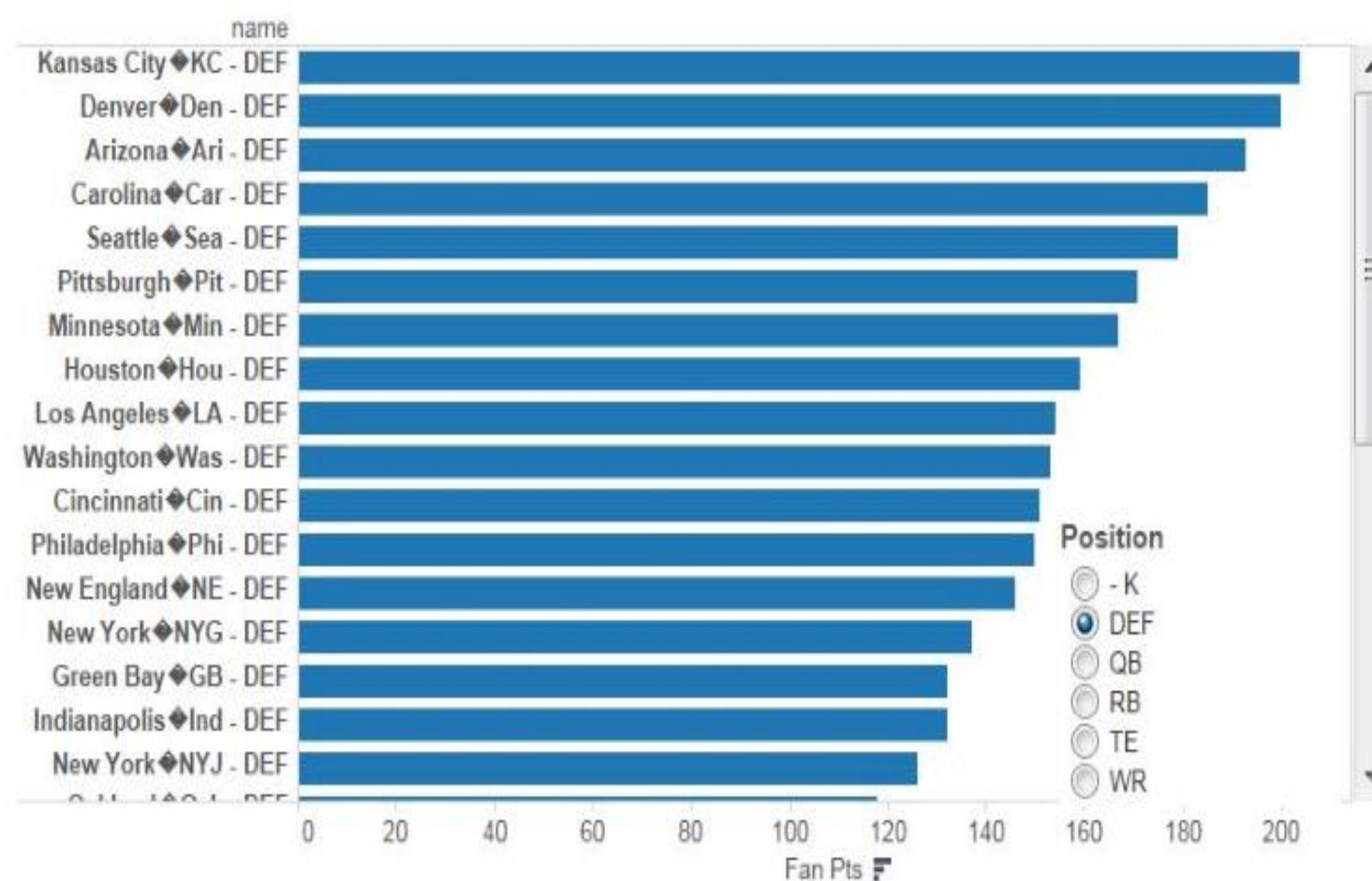
Projected



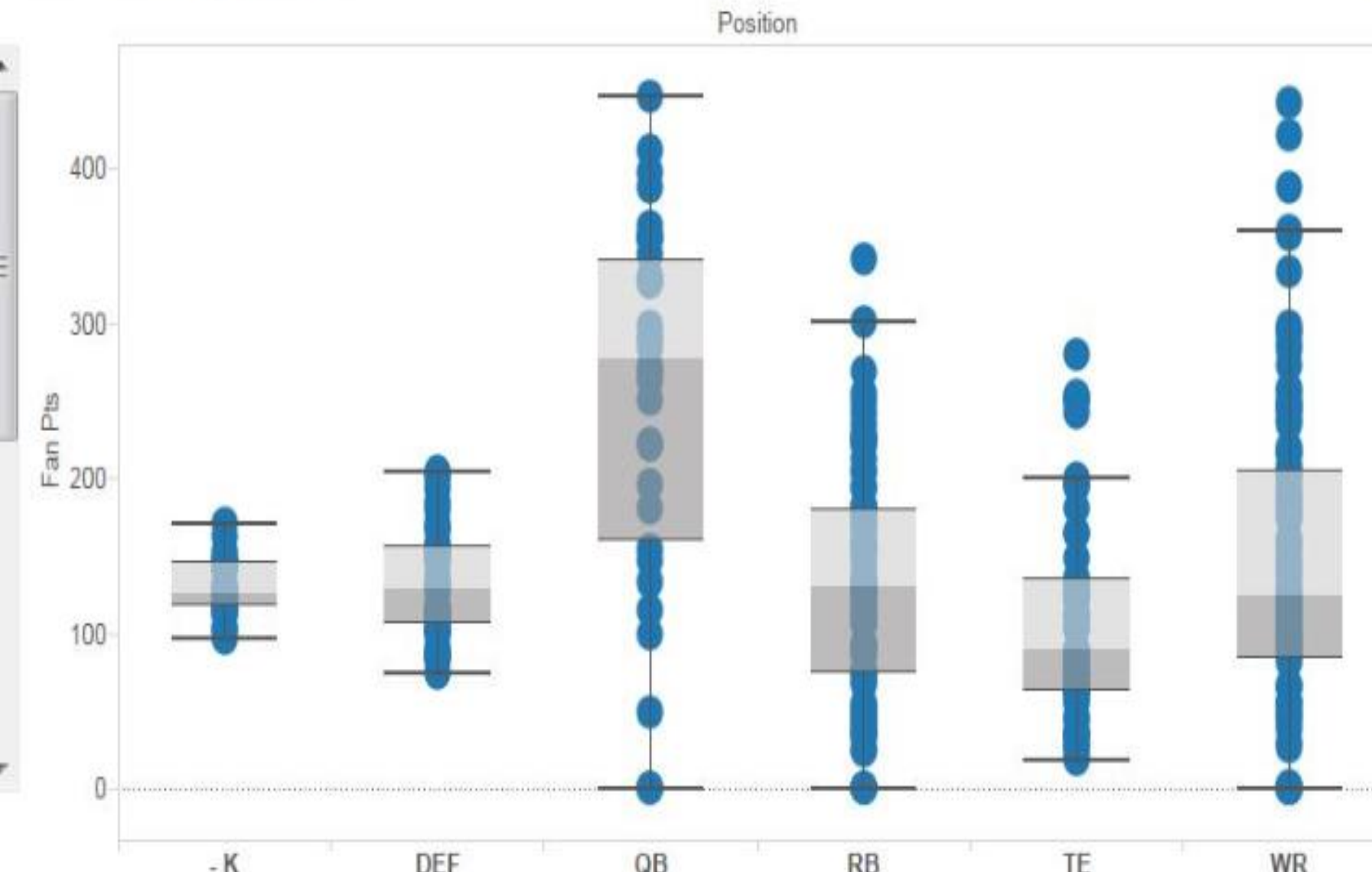
Projected by pos



2015 Actuals



2015 Act by Position








# Standings

Current Standings ▾

Standings

Schedule

Get results.


Rank	Team	W-L-T	Pts For	Pts Agnst	Streak	Waiver	Moves
*1	 Franks Tanks	11-1-0	1732.38	1447.98	W-6	10	17
*2	 Wrecking Ball	9-3-0	1592.56	1445.52	W-2	9	3
*3	 Pack Attack	8-4-0	1562.78	1377.08	W-5	8	3
4	 Lucky Louies	6-6-0	1592.66	1618.32	W-3	7	16
5	 Yanni Football	6-6-0	1567.76	1560.88	W-1	6	7
6	 He Hate Me	6-6-0	1544.92	1445.88	L-1	12	29
7	 Mookie	6-6-0	1498.60	1392.42	L-1	5	15
8	 Started As TE Now WR	5-7-0	1483.30	1585.12	L-3	11	18
9	 GrooGruxKing	4-8-0	1476.04	1513.32	L-4	4	19
10	 Called Well	4-8-0	1423.14	1587.02	L-2	3	3
11	 The Fighting Emus	4-8-0	1234.18	1482.58	W-1	2	14
12	 Rock of the Marne	3-9-0	1203.38	1455.58	L-3	1	-

Last standings update: Wed Nov 30 04:12am EST\* = clinched playoff spot

Playoffs locked 4 weeks out, first round bye locked 2 weeks out.

Highest point total (1,732), by over the weekly average point total... I've scored more points in 11 weeks, than most teams score in 13-14.

Last standings update: Wed Nov 30 04:12am EST\* = clinched playoff spot

15  Rock of the Marne

3-8-0

1503.38

1422.28

L-3

1

-



# Brand Conversations



# Velocity and Acceleration in Social Media

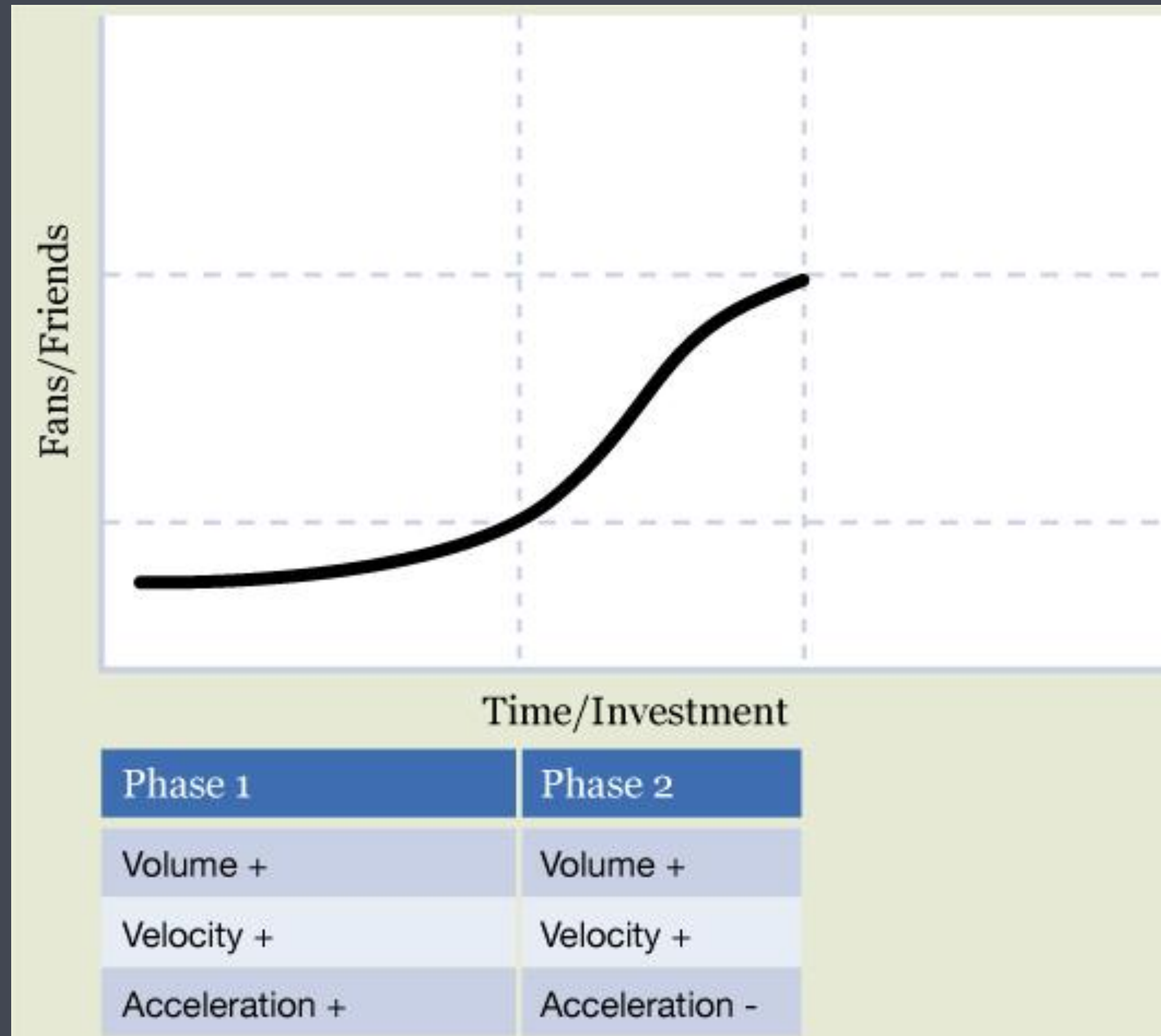


The 'hot' zone represents that place in which we see the velocity for the increase in activity quickest; this then represents the area where our campaign must be most efficient.

Additionally, this curve will show us the impact that incremental changes in investment will make against the reach in a lower funnel effort.



# Velocity and Acceleration in Social Media

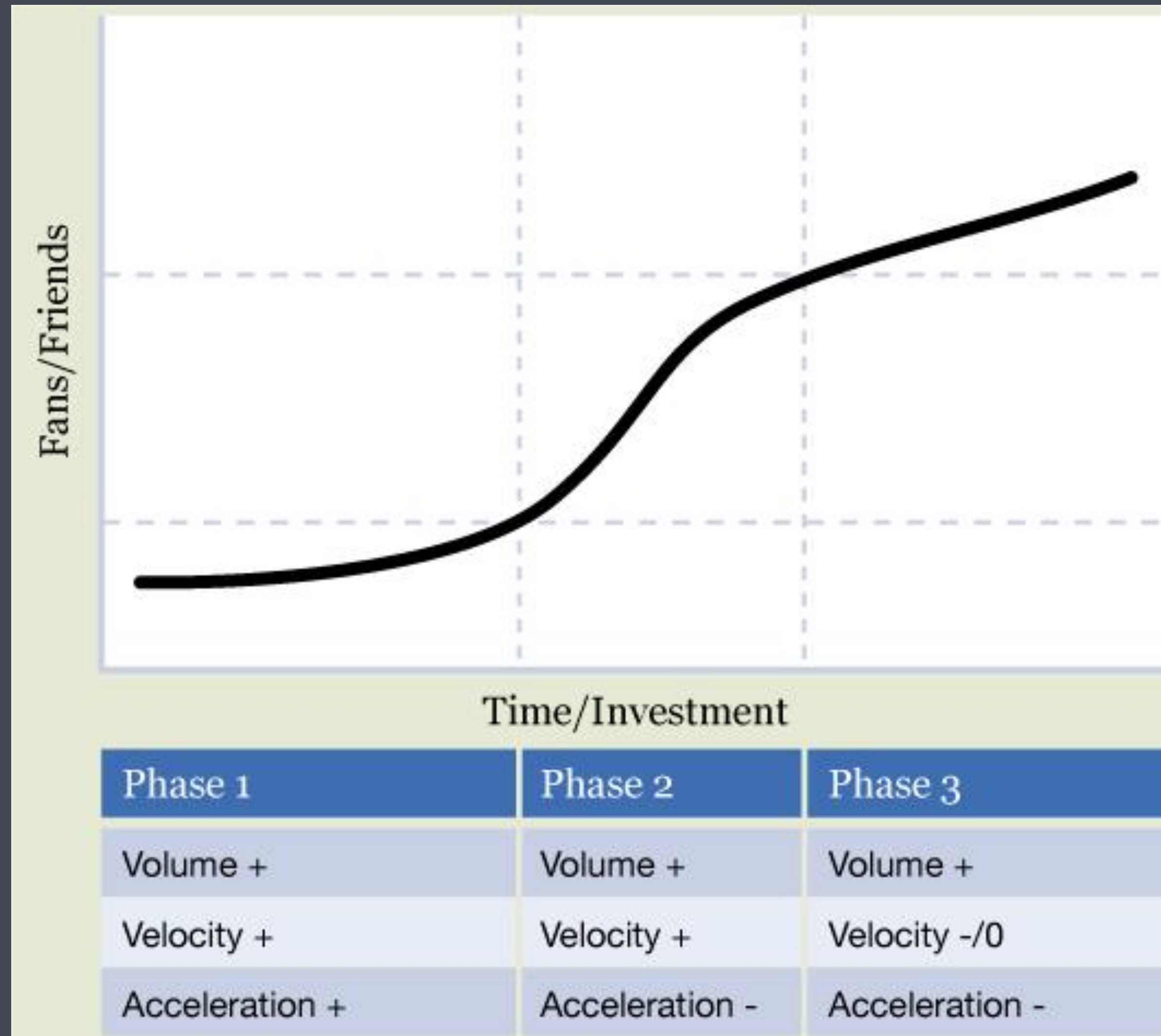


The 'hot' zone represents that place in which we see the velocity for the increase in activity quickest; this then represents the area where our campaign must be most efficient.

Additionally, this curve will show us the impact that incremental changes in investment will make against the reach in a lower funnel effort.



# Velocity and Acceleration in Social Media



The 'hot' zone represents that place in which we see the velocity for the increase in activity quickest; this then represents the area where our campaign must be most efficient.

Additionally, this curve will show us the impact that incremental changes in investment will make against the reach in a lower funnel effort.



$$f\left(\frac{Baseline}{Acceleration}\right) = \frac{Baseline}{Ceiling}$$

The ratio of the initial shift compared to the baseline is related to the ratio of the baseline to the ceiling.

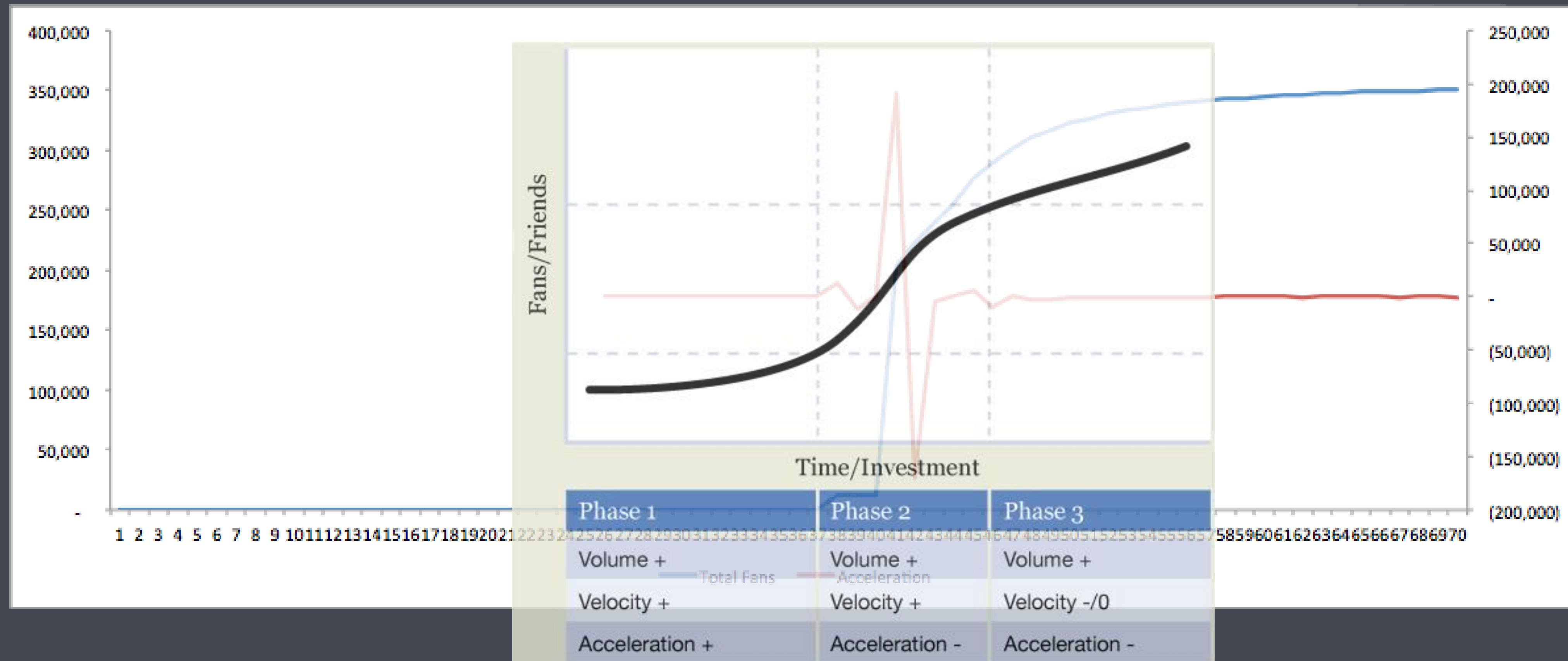


Evidence



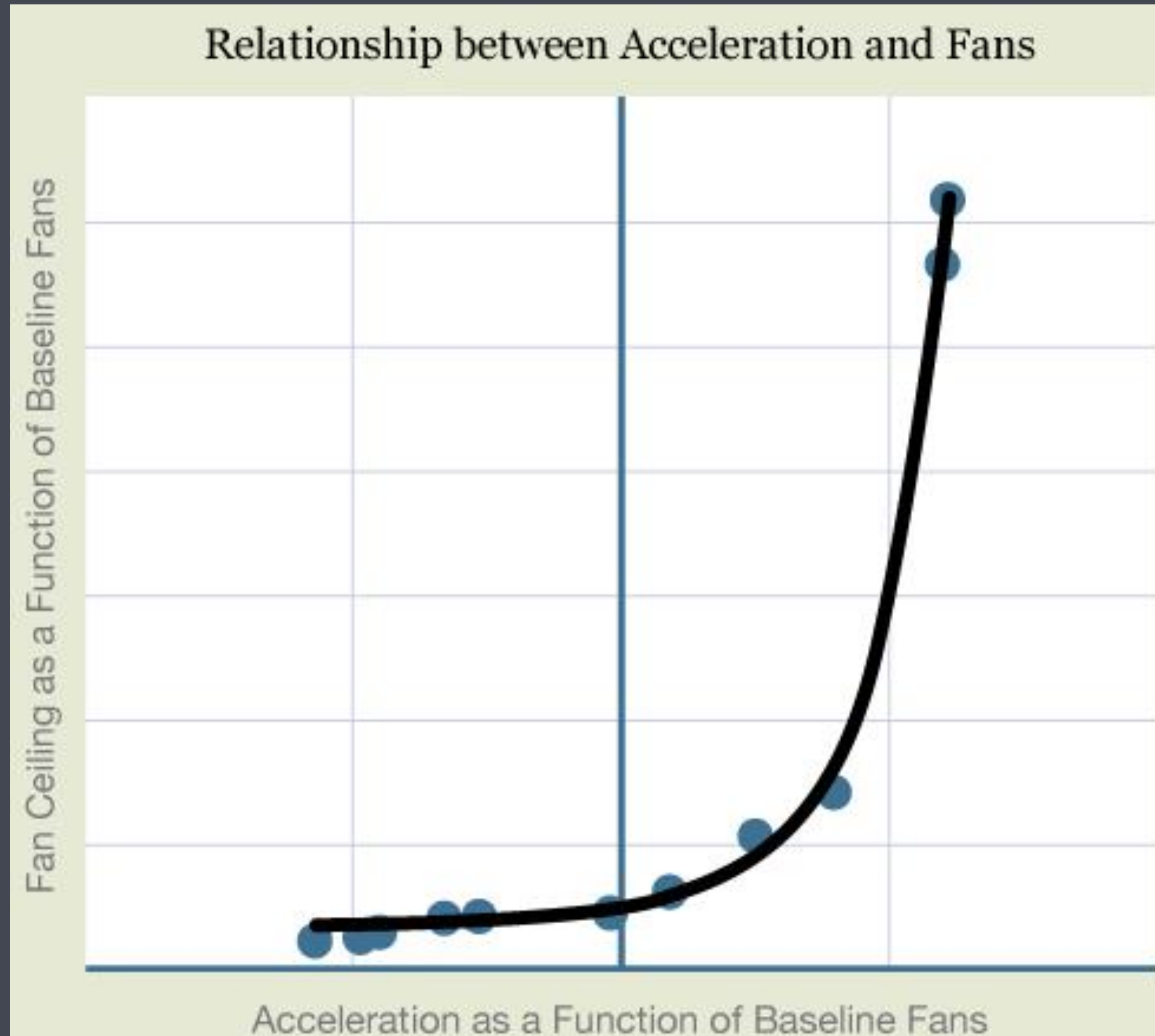


# We looked at several fan pages' data with widely varying numbers of fans





# Understanding the Relationship



Understanding this relationship allows Marketing Managers:

To accurately forecast whether fan page levels will reach their goals, and make adjustments accordingly if it is determined it will fall short

To monitor the online conversation for complaints and provides information as to which issues are big and which aren't

$$f\left(\frac{\text{Baseline}}{\text{Acceleration}}\right) = \frac{\text{Baseline}}{\text{Ceiling}}$$









Shine the Light

Enable Dialog

Provide Reason  
to Change

*How are we going to  
make this happen?*

*What do we create?*

*What should we build?*



# Business Objectives

Source	Investment/ Impressions	Click-Through Rate	Visits	Conv. Rate	Samples
Display	\$x.7MM/ x65MM	0.30%	x95,000	15%	x4,000
Paid Search	\$x.1MM/ x48MM	0.50%	x,240,000	19%	x25,000
Social			x,246,000	14%	x55,000
Walk Up & Mobile			x,775,000	9%	x49,000
Total	\$x.8MM/ x13MM	0.45%	x.8MM	13%	x.3MM



[GET REAL](#)[REAL ANSWERS](#)[PRODUCTS](#)[THE MISSION](#)

Welcome, **Cinnamon**.  
You are signed in.  
[Logout](#)

[Free Samples](#)[Coupons](#)[Find Stores](#)

*I can't believe I was so freaked out.  
I even hid in the bathroom!*

Why are only 65% of girls prepared for their first period?  
**Break the Cycle\***

 [Get a sample ▶](#)

**CHALLENGE THE NORM** 

**SCHOOL YOURSELF** 

**TAKE BETTER CARE** 

**JOIN THE CAUSE** 



[GET REAL](#)[REAL ANSWERS](#)[PRODUCTS](#)[THE MISSION](#)

Welcome, **Cinnamon**.  
You are signed in.  
[Logout](#)

 [SEARCH](#)[Free Samples](#)[Coupons](#)[Find Stores](#)

Sign up and get these  
U by Kotex\* freebies:



Your sample package will include:

- (1) U by Kotex\* CleanWear\* Regular Pad
- (1) U by Kotex barely there\* Liner
- (2) U by Kotex Click\* Regular Tampons

Canadian residents: [English](#) | Résidents du Canada: [Français](#)

## YOUR INFORMATION

First Name

Last Name

Address

Apt, Suite, Unit, etc.

City

State

 Zip 

E-mail Address

Gender

☐ Female ☐ Male

Date of Birth

Month  Day  Year

[PRIVACY POLICY](#)

\*Required

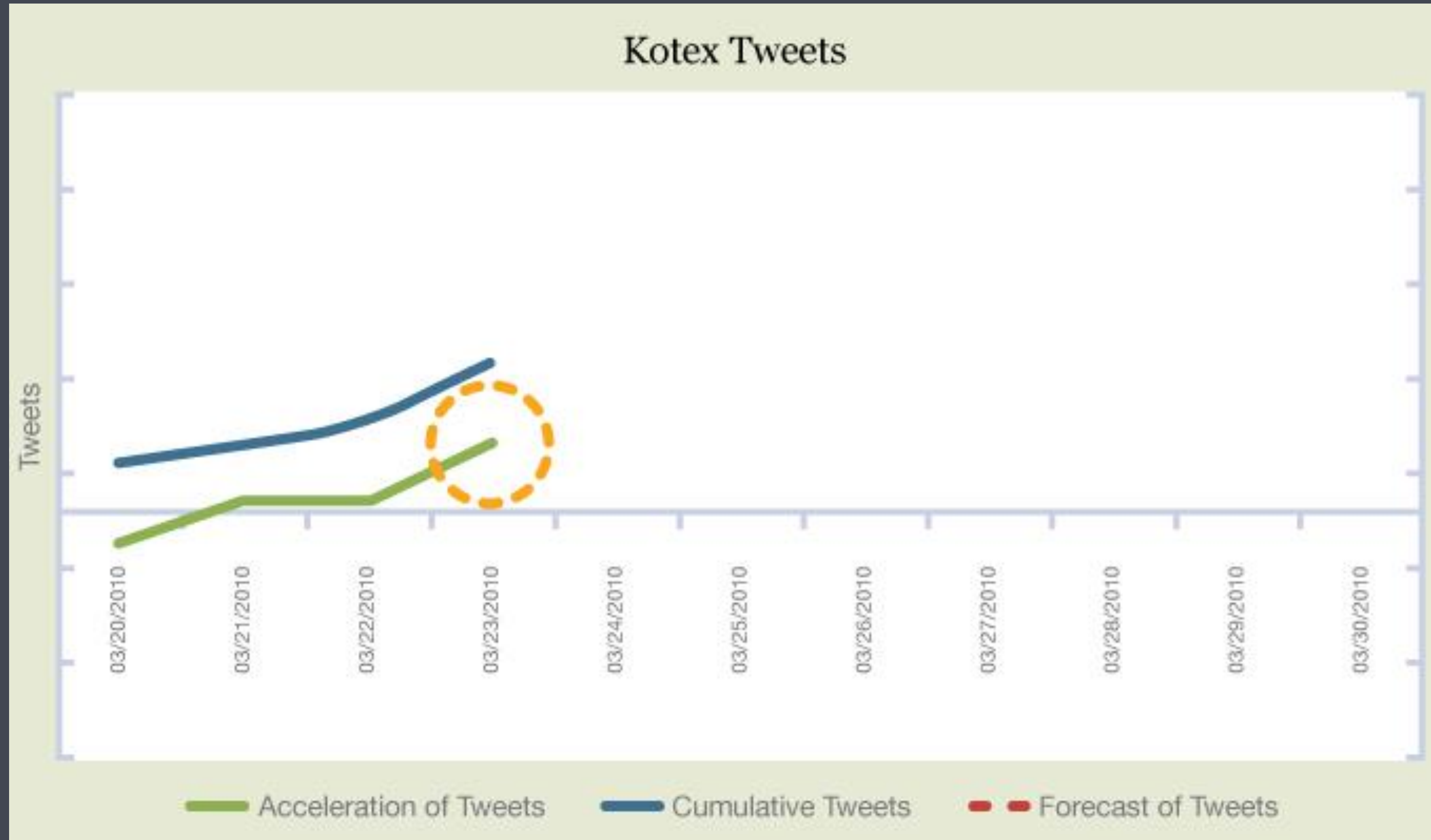
[Submit](#)

While supplies last. Please allow 10 weeks for delivery. Available to U.S. residents only in continental U.S. You must be 13 or older to receive this sample. Limit two samples per household. Your privacy is important to us. Please [click here](#) to view the Kotex® Privacy Policy.



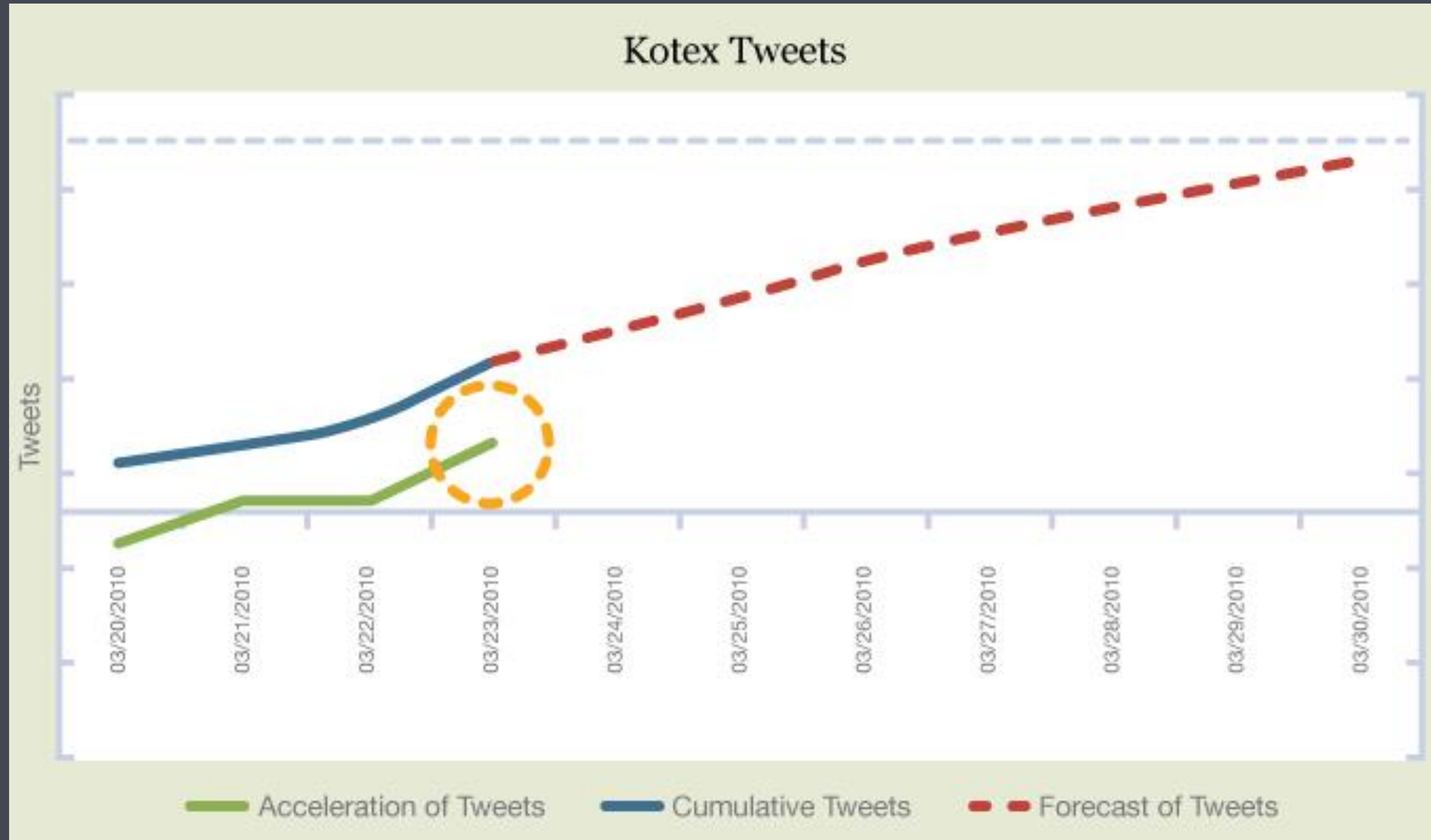
UbK's Acceleration





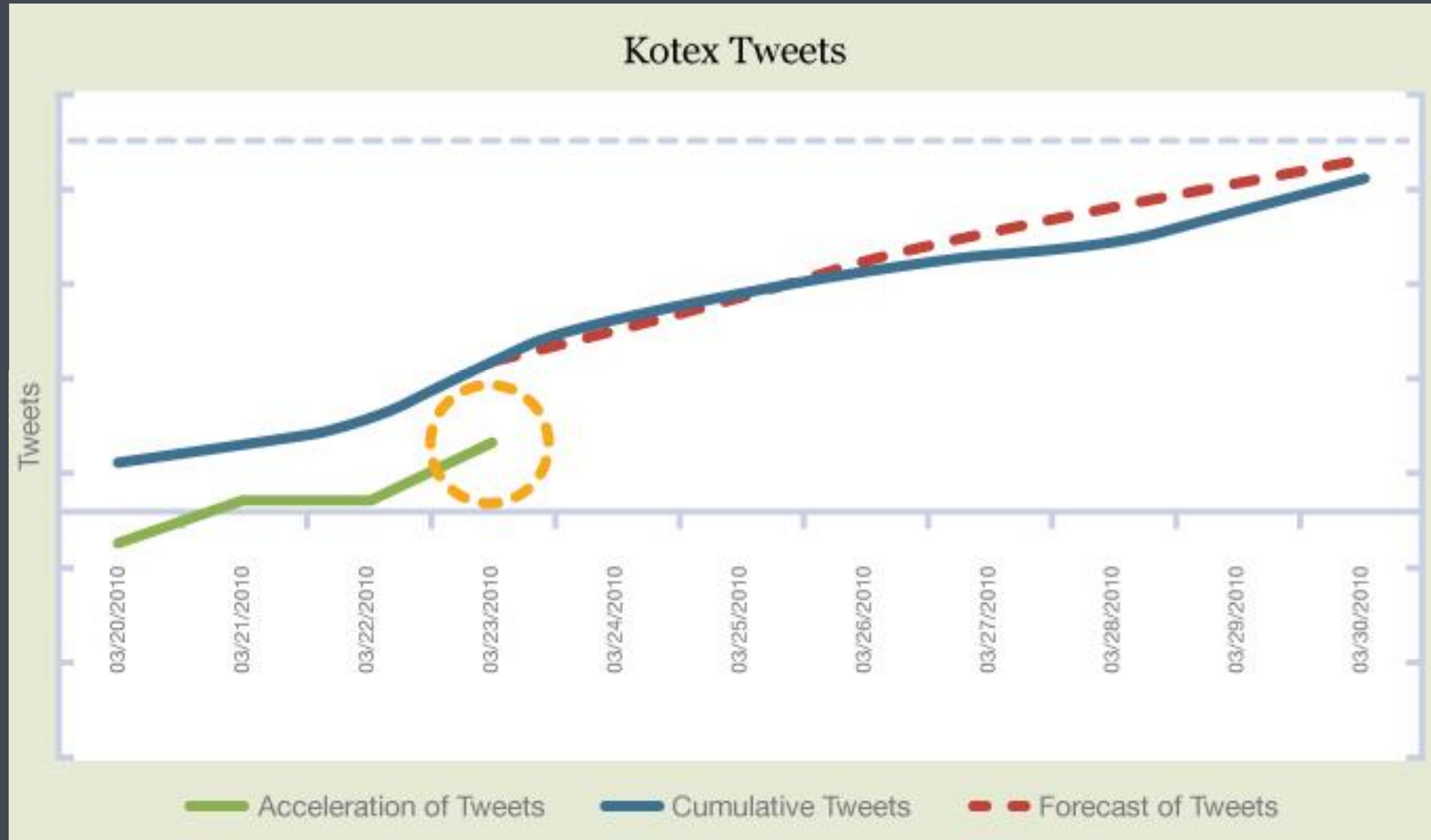
Forecasting Tweets Based On Acceleration





Forecasting Tweets Based On Acceleration





Forecasting Tweets Based On Acceleration



*"The model helped Kimberly Clark **optimize its media spending,**  
product placement and website features **in real time,** in an effort to reach its  
ambitious goal. 'Organic's Velocity and Acceleration model helped us project the plateau  
level of tweets following the U by Kotex launch,' says Aida Flick, the Kotex brand director  
at Kimberly-Clark. 'From there, we were able to tie in the relationship between the tweets  
and the sample requests.'"*

*MIT Technology Review*

*"A New Model for Predicting Social-Media Impact"*

*Wednesday, October 20, 2010*





a final thought.





**Stay focused on  
what's really  
important**



# QUESTIONS?







**RXA.IO**  
*harness your data™*

thank you.

---

jason harper | [jason@rxa.io](mailto:jason@rxa.io)



[www.rxa.io](http://www.rxa.io)



[learn@rxa.io](mailto:learn@rxa.io)



313-283-9901



# appendix

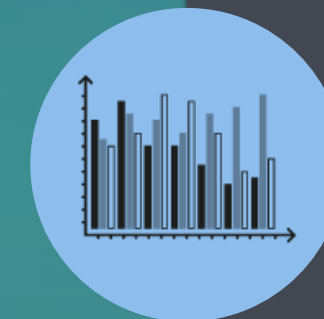


# Business Optimization

Take advantage of the new and expanding world of digital data to understand your business like never before. Uncover patterns and discover relationships to make better and faster decisions. Learn what it means to win by failing fast and optimizing your system to propel you past your competition.



Churn Prevention  
Customer Life Time Value  
Customer Segmentation



Cross-Sell and Up-Sell  
Next Best Action  
Product Propensity Models



Utilization Modeling  
Risk Analysis  
Quality Assurance



# Customer Analytics

Churn Prevention  
Customer Life Time  
Value  
Customer Segmentation

Predict which customers are at high risk of defecting, and those that are high value.

Identify customer issues and understand the most efficient ways to address them.

Happy customers are less likely to churn and more likely to increase their spending.

Implementing targeted satisfaction and retention programs is a very cost effective way to impact revenue.



# Marketing Analytics

Cross-Sell and Up-Sell  
Next Best Action  
Product Propensity Models

Get the right products with the right offer in front of the right customer at the right time.

Your customers are happy when you give them what they want.

Increase your share of their wallet, satisfaction and loyalty by giving them what they want.

Drive efficient growth in your business.



# Efficiency Analytics

Utilization Modeling  
Risk Analysis  
Quality Assurance

Understand the factors that drive utilization of your fixed resources.

Identify areas of opportunity and predict the impact of taking action.

Identify quality issues early, and address them before they become an issue.

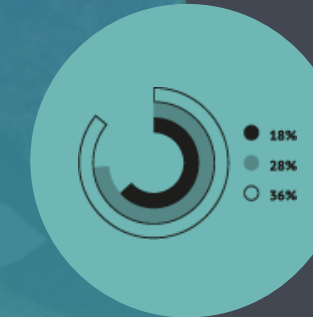
Predict threats to your business and pro-actively take measures to avoid financial losses.

Predict price movements and economic developments that affect your business and may weaken your position in the market.

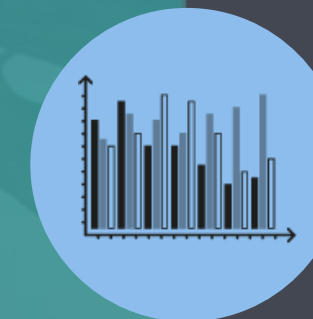


# Cloud Reporting

Cross-Platform Business Intelligence



Single source of truth and single location to look. During the data collection process, business rules are applied and the data is tested for quality and integrity. Ensuring the organization is working together with the same, trusted, information.



Cross-Platform objectives, and holistic thinking reduce time spent gathering, and increase time spent analyzing. By having all your key information in a single reporting solution, systemic bias and human errors are greatly reduced.



When all the relevant performance information is collected in one location, managers can spend their time where they should...optimizing the business.



Cloud Reporting Systems are designed to visualize the data you have brought together; to optimize the system, not just the parts.

Reporting systems are at their best when there is one, single source of truth. There is only one view of success, and everyone can access it.





# Cloud Based Reporting

Your business is unique, and your reporting will be as well. It is driven by the choices you have made. Your objectives, your customers, your systems and providers.

What is not unique, is the need for it to be accurate and available to your managers when they are trying to make decisions.







thx:)