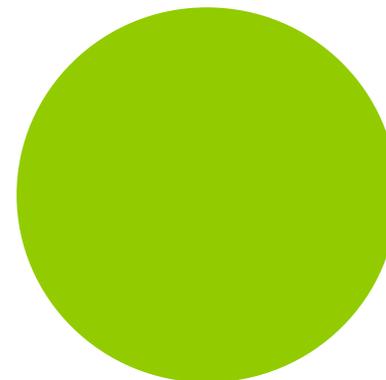
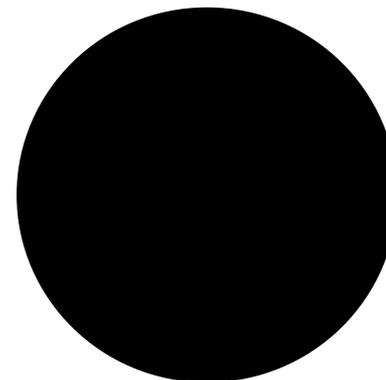
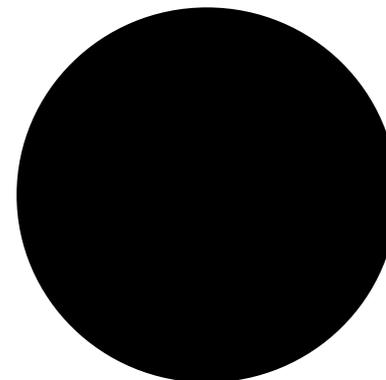


From Sentiment to Persuasion Analysis

Jason Kessler
Data Scientist, CDK Global

@jasonkessler
www.jasonkessler.com



**Customer-Written
Product Reviews**



Good Ad Content

Naïve Approach: Indicators of Positive Sentiment



"If you ask a Subaru owner what they think of their car, more times than not they'll tell you they love it,"

-Alan Bethke, director of marketing communications for Subaru of America (via Adweek)

~~Positive sentiment.~~

Engaging language.

Finding Engaging Content

Example Review Appearing on a 3rd Party Automotive Site

Rating: 4.4/5 Stars

Car Reviewed: Chevy Cruze

Text:

...I was very skeptical giving up my truck and buying an "Economy Car." I'm 6' 215lbs, but my new career has me driving a personal vehicle to make sales calls. I am overly impressed with my...

of users who read review:

20

Finding Engaging Content

Example Review Appearing on a 3rd Party Automotive Site

Rating: 4.4/5 Stars

Car Reviewed: Chevy Cruze

Text:

...I was very skeptical giving up my truck and buying an "Economy Car." I'm 6' 215lbs, but my new career has me driving a personal vehicle to make sales calls. I am overly impressed with my...

of users who read review:

20

who went on to visit a Chevy dealer's website:

15

The logo for CDK Digital Marketing is contained within a large speech bubble. It features three colored circles (two black, one green) to the left of the text "CDK Digital Marketing™".

● CDK
● Digital Marketing™

Finding Engaging Content

Example Review Appearing on a 3rd Party Automotive Site

Rating: 4.4/5 Stars

Car Reviewed: Chevy Cruze

Text:

...I was very skeptical giving up my truck and buying an "Economy Car." I'm 6' 215lbs, but my new career has me driving a personal vehicle to make sales calls. I am overly impressed with my...

of users who read review:

20

who went on to visit a Chevy dealer's website:

15

Review Engagement Rate:

$15/20=75\%$

Finding Engaging Content

Example Review Appearing on a 3rd Party Automotive Site

Rating: 4.375/5 Stars

Car Reviewed: Chevy Cruze

Text:

...I was very skeptical giving up my truck and buying an "Economy Car." I'm 6' 215lbs, but my new career has me driving a personal vehicle to make sales calls...

of users who read review:

20

who went on to visit a Chevy dealer's website:

15

Review Engagement Rate:

15/20=75%

Median Review Engagement Rate:

22%

Finding Engaging Content

Example Review Appearing on a 3rd Party Automotive Site

Rating: 4.5/5 Stars

Car Reviewed: _____

Text:

...The ride is very good for the class of car... ...The inside of it [doesn't compare] to my [luxury car], but it works for what I need it for. It has Bluetooth and that's all I need.

of users who read review:

18

who went on to visit a relevant dealer's website:

2

Review Engagement Rate:

$2/18=11\%$

Median Review Engagement Rate:

22%

Sentiment vs. Persuasiveness: SUV-Specific

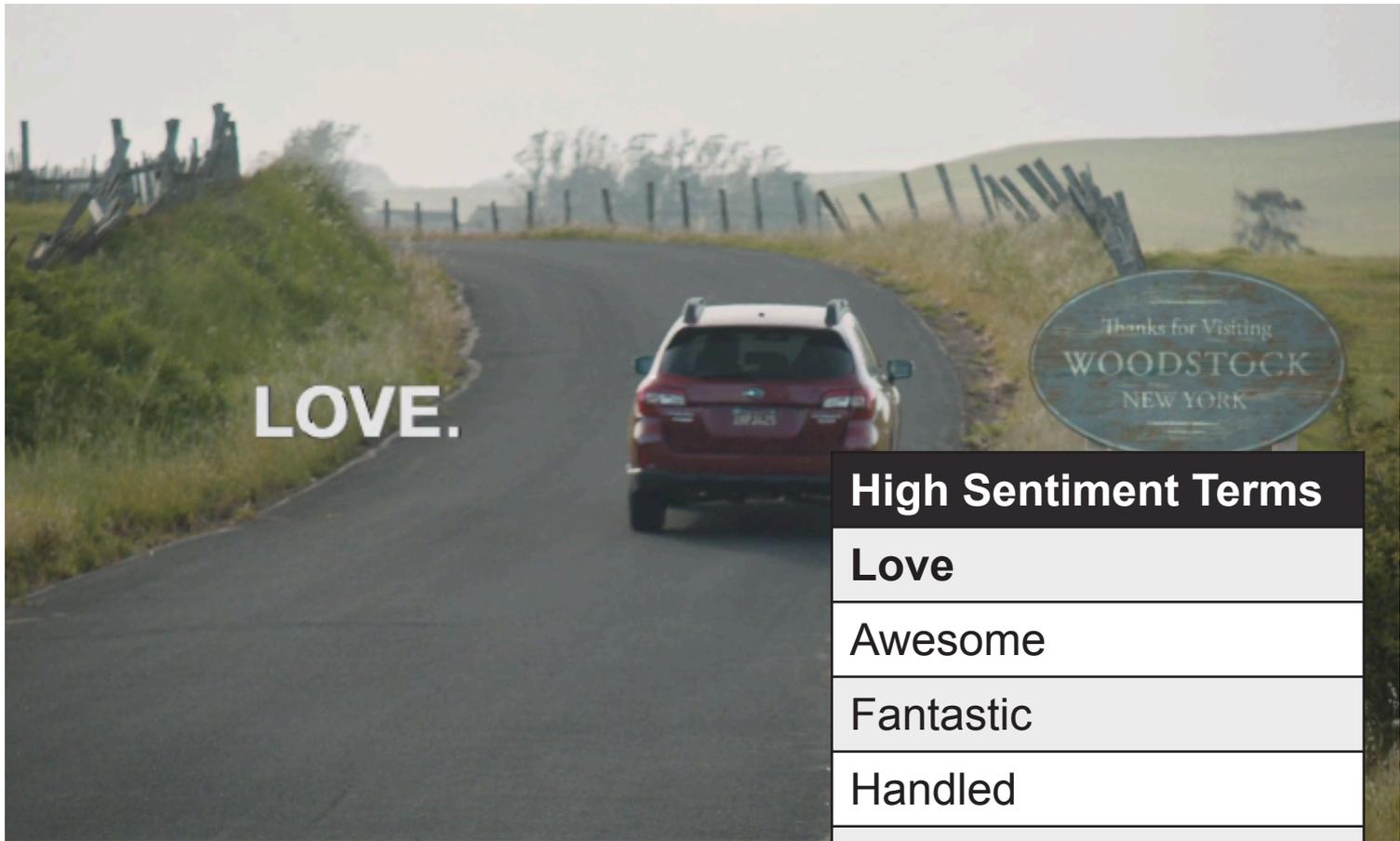
Positive Sentiment	High Engagement
Love	Comfortable
Comfortable	Front [Seats]
Features	Acceleration
Solid	Free [Car Wash, Oil Change]
Amazing	Quiet

Sentiment vs. Persuasiveness: SUV-Specific

Positive Sentiment	High Engagement
Love	Comfortable
Comfortable	Front [Seats]
Features	Acceleration
Solid	Free [Car Wash, Oil Change]
Amazing	Quiet

Negative Sentiment	Low Engagement
Transmission	Money [spend my, save]
Problem	Features
Issue	Dealership
Dealership	Amazing
Times	Build Quality [typically positive]

Can better science improve messaging?



High Sentiment Terms

Love

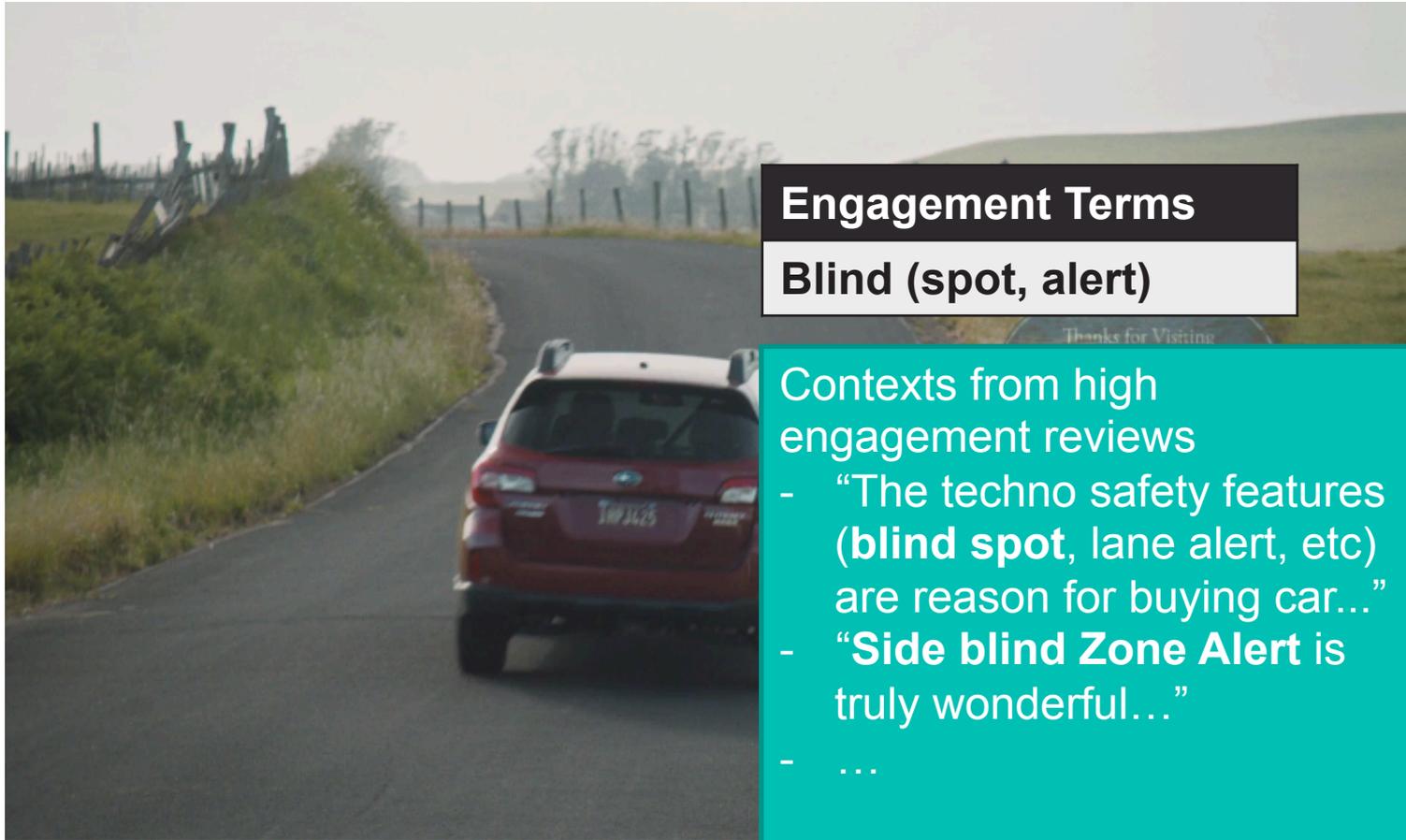
Awesome

Fantastic

Handled

Perfect

Can better science improve messaging?



Engagement Terms

Blind (spot, alert)

Contexts from high engagement reviews

- “The techno safety features (**blind spot**, lane alert, etc) are reason for buying car...”
- “**Side blind Zone Alert** is truly wonderful...”
- ...

Can better science improve messaging?

BLIND SPOT ALERT.



Can better science improve messaging?

BLIND SPOT ALERT.



Engagement Terms

Blind

White (paint, diamond)

Contexts

- “White with cornsilk interior.”
- “My wife fell in love with the Equinox in White Diamond”
- “The white diamond paint is to die for”

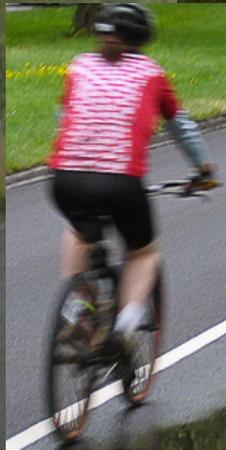
Can better science improve messaging?



BLIND SPOT ALERT.

Can better science improve messaging?

BLIND SPOT ALERT.



Engagement Terms

Blind

White

Climate (geography, a/c)

Contexts

- “Love the front wheel drive in this northern Minn. Climate”
- “We do live in a cold climate (Ontario)”
- ...climate control...

BLIND SPOT ALERT.



Yes, we're hiring!!



Is this
you?

- Data Scientist
- UI/UX Development & Design
- Software Engineer – all levels
- Product Manager

Head to
CDKJobs.com
-or-
talk to me

- 
- Find “Jobs by Category”
 - Click Technology
 - Have your Resume ready
 - Click “Apply”!

Sentiment vs. Persuasiveness

Positive Terms (boldness indicates frequency of use)

Predictive Rank	Suv Sentiment	Suv Conversion
1 (Most Predictive)	love	comfortable
2	awesome	vehicles
3	fantastic	front
4	quiet	wheel
5	loving	chevy
6	amazing	needed
7	perfect	door
8	models	this vehicle
9	roomy	awd
10	standard	gmc
11	heated	normal
12	wanted	acceleration
13	diesel	made
14	great	plenty
15	highly	radio
16	back seat	free
17	absolutely	side

- Hybrid vehicles
- Need to format table, curate word lists. Show various excerpts.
- Note: “amazing” is a top predictor of low persuasiveness