

# **Brightfield Group**

**CARMA** 2018

- Focus on financial data about the Cannabis industry
- ...examples of data?
- .....examples of complexity of products/state laws...
- Cannabis sales world wide expected to be \$31 billion by 2021







# Social Media LIstening (SML)

- Early work: pre-2017 use of SML...
- St. Louis and Zorlus (2012) Twitter posts corr. spread of flu.
- McGregor et al (2014) identified 14 themes of discussion of glaucoma patients
- Lievens and Van Iddekinge (2016) predicted who would be good employees



## SML more recent

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- Sul et al (2016) Twitter posts to stock prices.
- Culotta and Cutler (2016) correlate Twitter posts to 200 product brands along three perceptual attributes (approach corr. with more expensive survey techniques).
- Antoniou (2017) posts corr. to cognitive profiles (re: Meyers Briggs, MBTI).



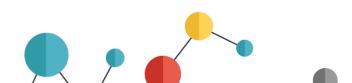
## **Cannabis related listening**

- Only cannabis study using sml was by Ngyen et al (2016) corr. Twitter posts to cannabis use, by phone used, times of day, nothing on cannabis product types.
- As far as we can tell, there has been no use of social media listening to profile cannabis users or to corr. to cannabis brands or brand shares.

### **CARMA 2018**

# Social Media Monitoring to Predict Market Size and Forecasts in Cannabis

- 38,000 twitter messages
- 2,319 forum messages
- 1,695 profesional articles collected
- For 86 of the leading cannabis brands in the U.S.



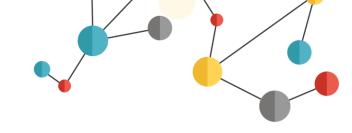




• Searched for keywords

KivaConfections Kiva%20Confections Kiva%20Terra Terrabites Terra%20Bites%20 Petra%20Bites PetraBites



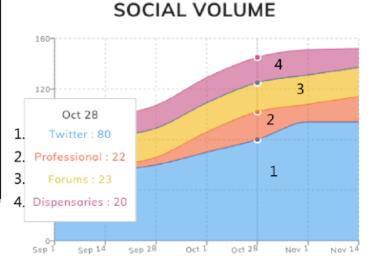


### **Measuring Social Volume**

#### Table 1. Full dataset structure

Field	Description	Example	
brand	The brand name	Kiva Confections	
source	Where this is coming from	Leafly, Reddit, etc.	
search	The search function used	Kiva%20Confections	
timestamp	Timestamp	27-Dec-16	
quarter	Quarter	1	
text	Text from Twitter Posts, Reddit Posts	I am feeling awesome after eating this edible from Kiva Confections	
User_type	Whether or not a twitter username is a dispensary, brand, or individual	Dispensary handle	
id	Reddit has a unique Identifier for each post	342	
composite	Sentiment Composite Score for Text	0.5	
Topic	A topic id that signifies a topic	20111 = days of the week	

#### Figure 1. Social volume tracked over time for sample brand



This Quarter

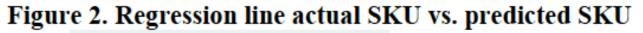




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### **CARMA 2018**

# Social Volume Correlates with Brand Performance



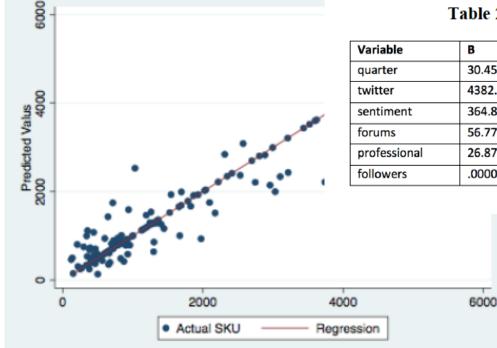


Table 2. Analysis of coefficients

Variable	В	SEB	t	P-Value
quarter	30.45	55.55	0.55	.04
twitter	4382.39	1112.32	3.94	.00
sentiment	364.88	1331.5	0.27	.08
forums	56.77	19.70	2.88	.00
professional	26.87	11.19	2.40	.02
followers	.0000375	.00000141	2.66	.01

Notes R2 = .9466 (p <.001)

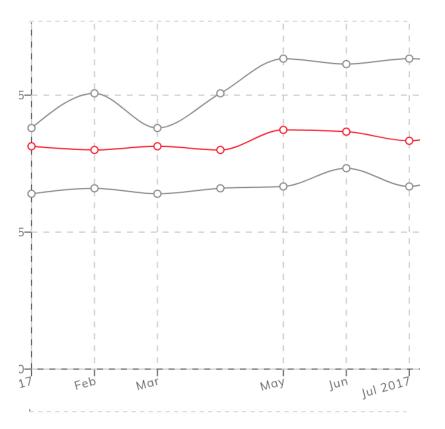




## **Predicting Brandshare**

#### NATIONAL BRANDSHARE

Growth over time



1.233%

BRANDSHARE CALCULATOR

Make adjustments to see change in shares

Twitter Followers

9425Articles20Forum Posts3Tweets310Sentiment Rating0.971506







### Caveats

- This research is on Cannabis brands, may not apply to other products
- More research should be done on profiling cannabis users and how the profiles (market segments) relate to specific products.



