

Customer Response to Usage Based Insurance

An Analysis of Social Media Sentiments

Commitment Beyond Numbers



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February 25, 2014

Discussion

Social Media in General

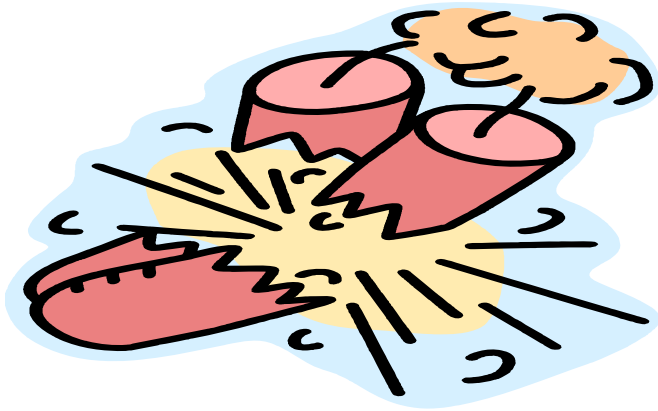
Long term potential

Twitter Data

Analysis results

Conclusions

The Growth in Social Media



Social Media Platforms



I need to eat

I ate

This is where I
ate

Why am I eating?

This is a review
of where I ate

Watch me eat



I have five
connections that
recommend me
because I eat so
well



Let's all eat
together

Is the Industry Taking Advantage of Social Media?

- Insurance companies are investing significant resources in a social media presence
- Current and potential customers are voluntarily sharing intimate details of their life with the world
- Current and potential customers are interacting with companies on a very personal level
- This information can be applied in different ways (service, marketing, competitive monitoring)

Twitter Data

- Twitter data - over 3 million insurance total tweets from January, 2012 to present (Keyword of Allstate, State Farm, Geico, etc.)
- Data
 - Content of the tweet
 - Specific tweet recipient
 - Sender of the tweet
 - Language of tweet
 - Where the tweet originated
 - Link to a picture of user
 - Latitude and longitude of the user
 - Date and time of tweet
- Advantages of social media data
 - Unfiltered
 - Broad view of non-customer reactions
 - Facilitates more timely analysis of trends

“This new world will undermine the polling industry”

Fabio Rojas. *How Twitter can help predict an election*



Text Mining Data Processing

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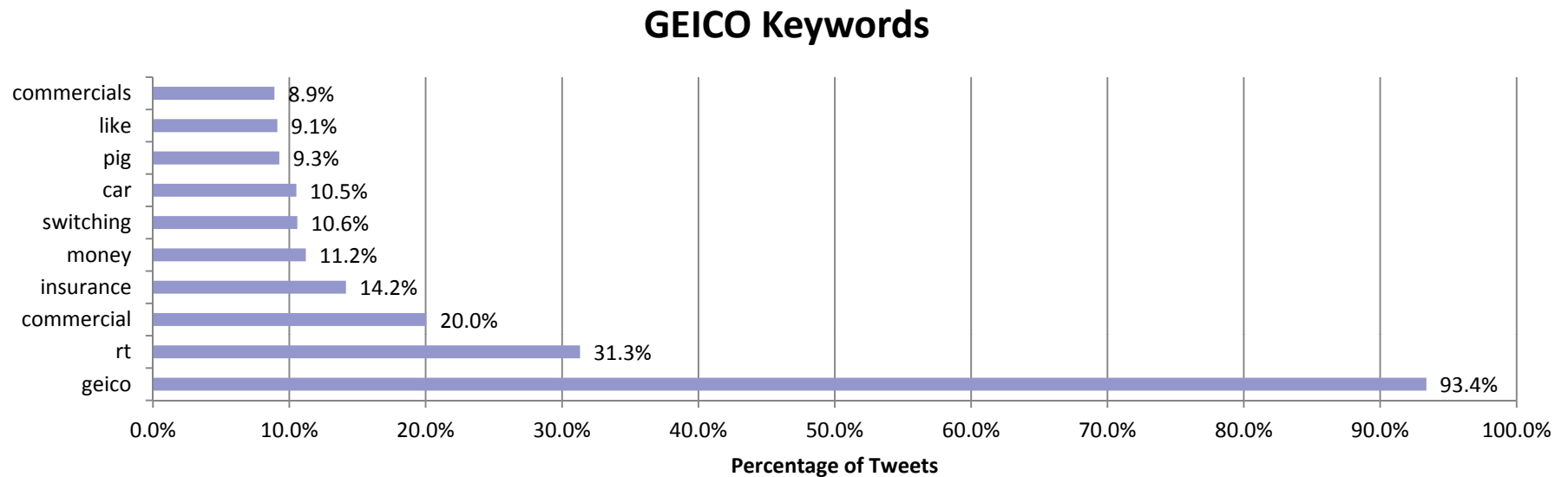
Data Processing Steps

- Remove punctuation and symbols (retain @ and #)
- Parse the tweet (35 words worked for Twitter – will need many more for other sources)
- Change table structures from tweets in rows to tweets in columns – keep indicator of order
- Correct spelling errors
- Add word indicators

<u>Tweet ID</u>	<u>User</u>	<u>Tweet</u>	<u>Word1</u>	<u>Word2</u>	<u>...</u>	<u>Word35</u>
1	@mosley	Text of tweet	W1	W2	...	W35

<u>Tweet ID</u>	<u>Word Order</u>	<u>Word</u>
1	1	Word1
1	2	Word2
...
1	35	Word35

GEICO Top 10 Keywords



- Advertising (commercial, pig, commercials)
- Brand recognition (“Saved money by switching car insurance”)
- Sharing component significant (rt 31%)



Analysis – Identifying Themes in the Data

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Analysis – Identifying Themes in the Data

- Clustering/Segmentation
 - Unsupervised classification technique
 - Groups data into set of discrete clusters or contiguous groups of cases
 - Objects in each cluster tend to be similar, objects in different clusters tend to be dissimilar

Keywords – State Farm

Cluster #	Number of Tweets	Category	Keywords	Description
1	1,491	sponsorship	around hit miss play run	Home Run Derby
2	3,778	sponsorship	anyone college comes kids lebron	College Sports Sponsorships
3	1,198	advertising	business music win	Music Festivals, Music Download
6	2,762	competition	care cool funny much nationwide pretty	Comparisons with Nationwide
7	4,689	sponsorship	another around football looks lost packers week	Football sponsorships, Packers, High School Football
8	1,260	advertising	couple help jingle million nobody nothing remember s	Do the jingle
9	1,080	advertising	another long named pretty talk wife woman	Jake from State Farm, woman singing "Waterfall"
10	5,142	advertising	aaron came check discount double giants lost maybe p	Discount Double Check, Packers
12	1,217	quotes	buy coverage insurance month quote start	State Farm Marketing, Insurance Quotes
15	471	advertising	discounts drive insurance less through	Discounts
19	1,000	sports	discounts giants hanging less more packers spent time	Packers & Giants
20	2,941	competition	change having same	Changing Insurance Companies
25	2,414	marketing	about care don florida insurance kids rates	Great rates
26	45	advertising	accident another anyone anything believe commercial	French model
27	1,152	claims	claims customers emergency help lost nationwide san	Hurricane Sandy

Analysis – Identifying Themes in the Data

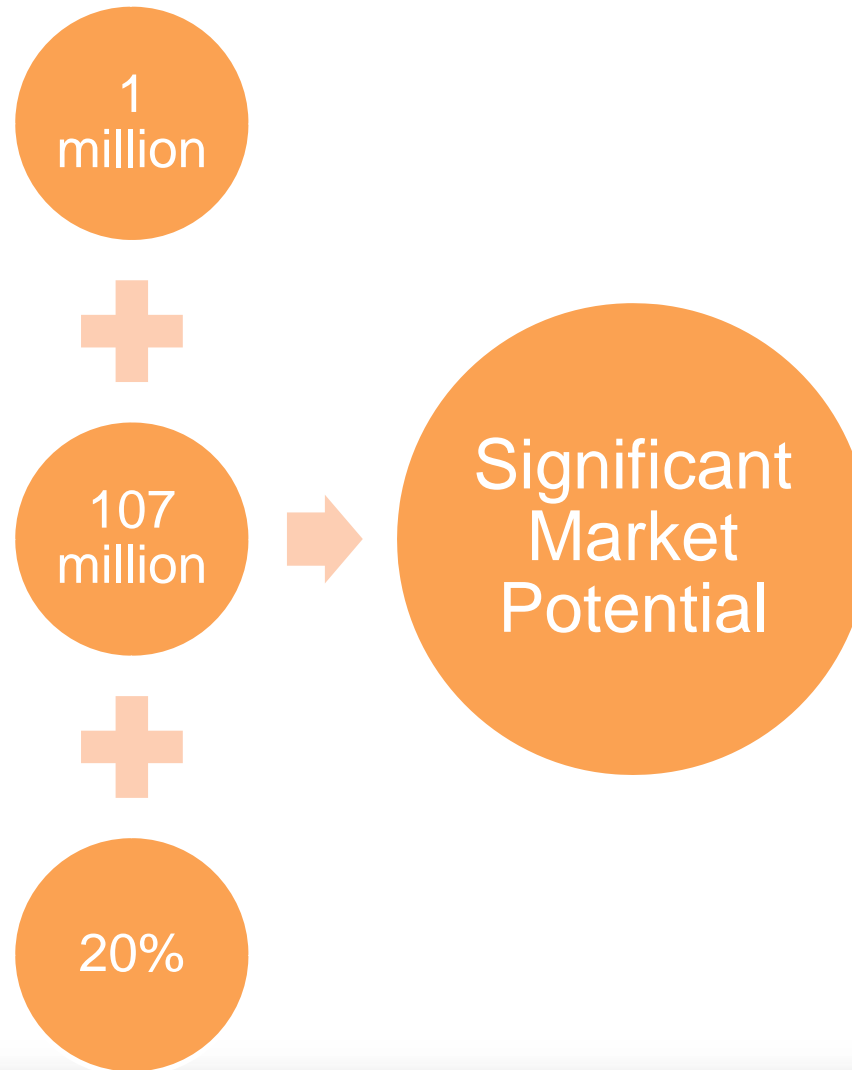
- Clustering/Segmentation
 - Unsupervised classification technique
 - Groups data into set of discrete clusters or contiguous groups of cases
 - Objects in each cluster tend to be similar, objects in different clusters tend to be dissimilar
- Association Analysis
 - Identification of items that occur together in the same record
 - Can lead to sequence analysis as well, which considers timing and ordering of events

Long Term Potential of UBI

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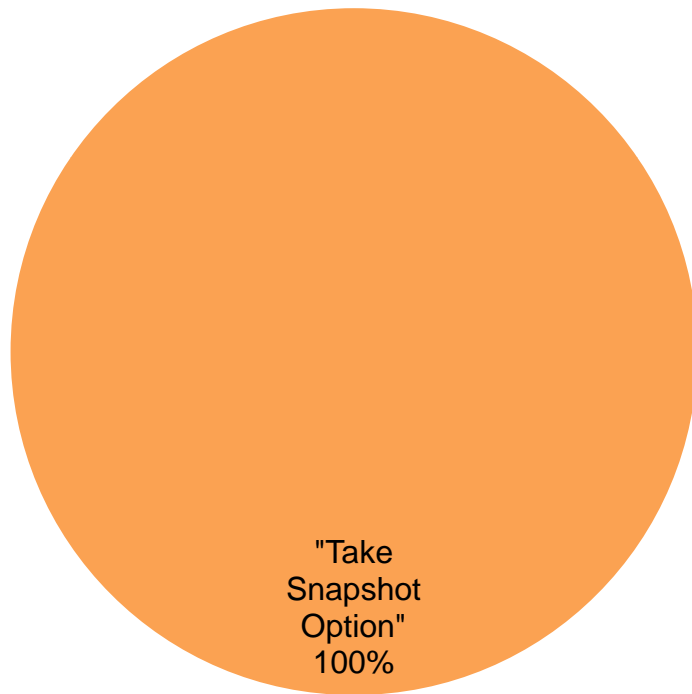


Long Term Potential of UBI

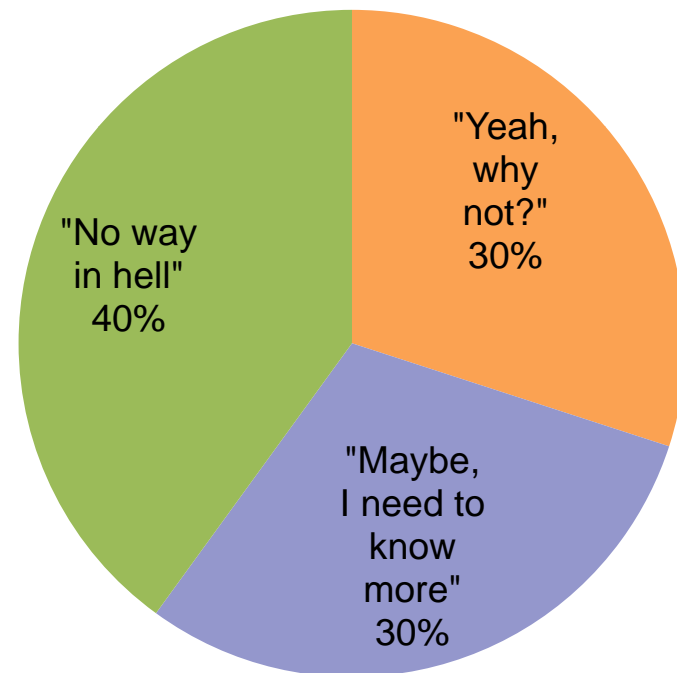


“But Wait...” - Glen Renwick, CEO of Progressive

“Intellectually...”



“Surveys of Prospective Snapshot Users”



“Getting consumers to engage in a product that they were never asked to engage in [historically] is a bigger burden intellectually than we would have assumed.”

Snapshot Data

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Twitter Data Subset

- Keyword searches for terms “Progressive” and “Snapshot” (3,400 tweets from September 2012 to June 2013)
- Data
 - Content of the tweet
 - Specific tweet recipient
 - Sender of the tweet
 - Language of tweet
 - Where the tweet originated
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Analysis Process

- Analysis
 - Text mining
 - Review of individual tweets
- Categorization of tweets
 - Status of user
 - Sentiment of the tweet
 - Positive feedback
 - Misconceptions
 - Customer complaints
 - Premium savings

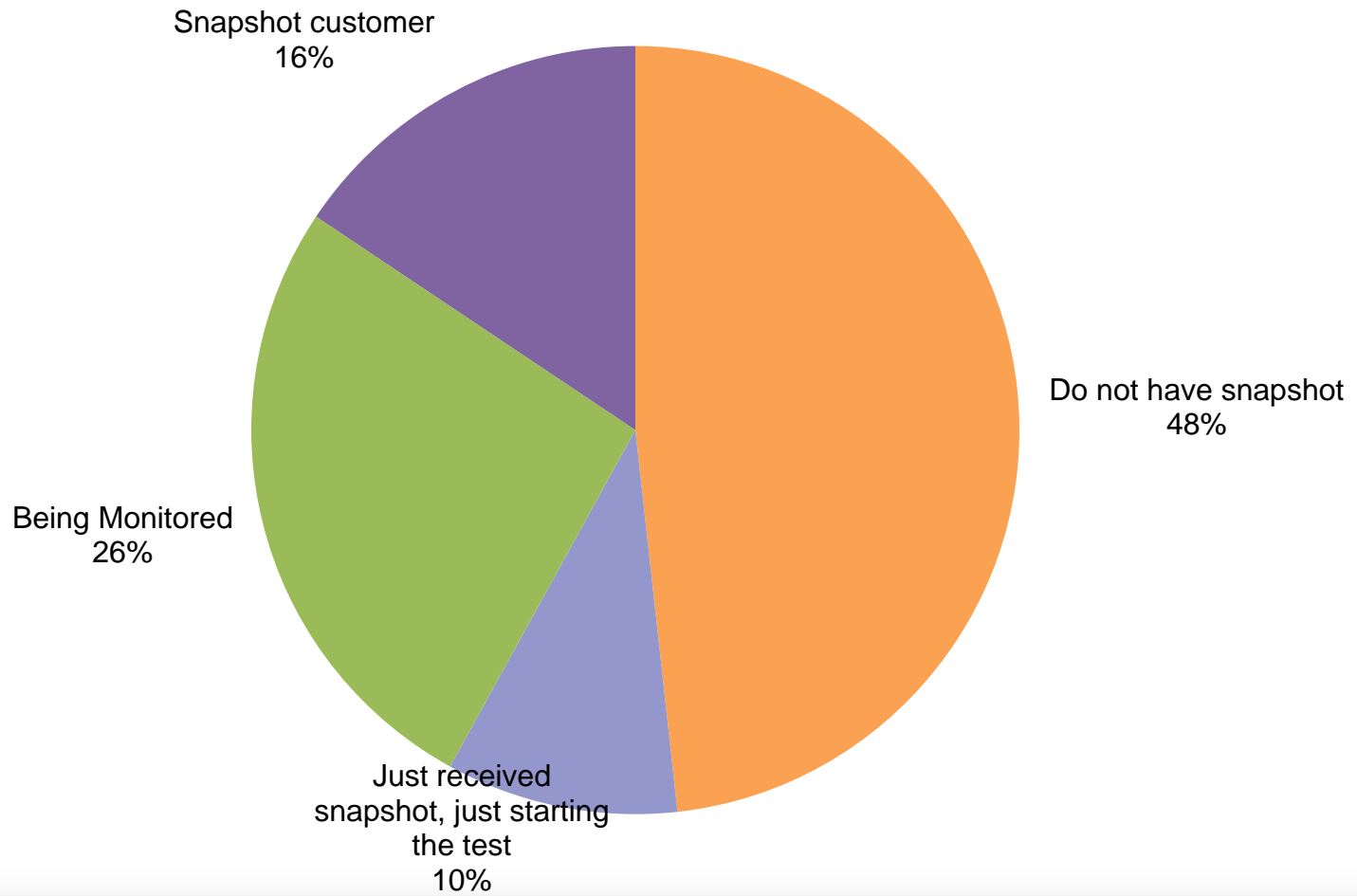
Snapshot Analysis Results

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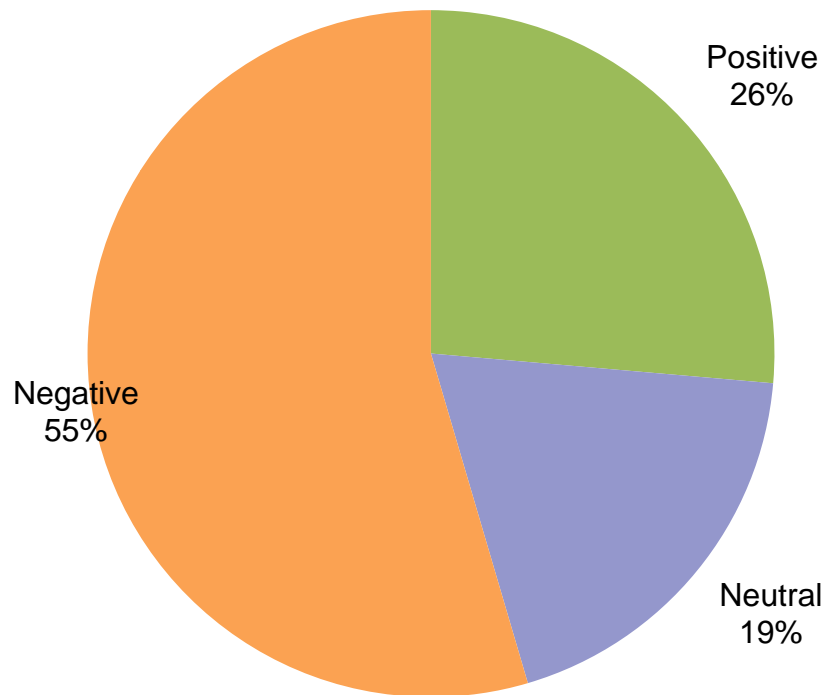
Customer Status

Status

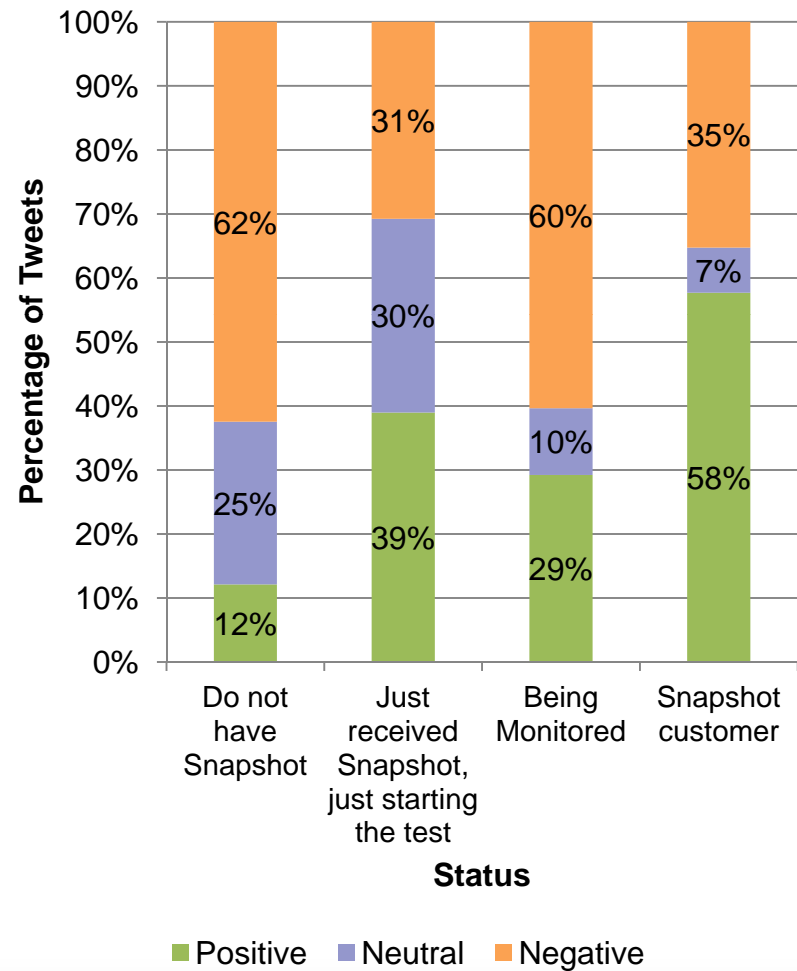


Sentiment of Comment

Tone



Tone by User Status

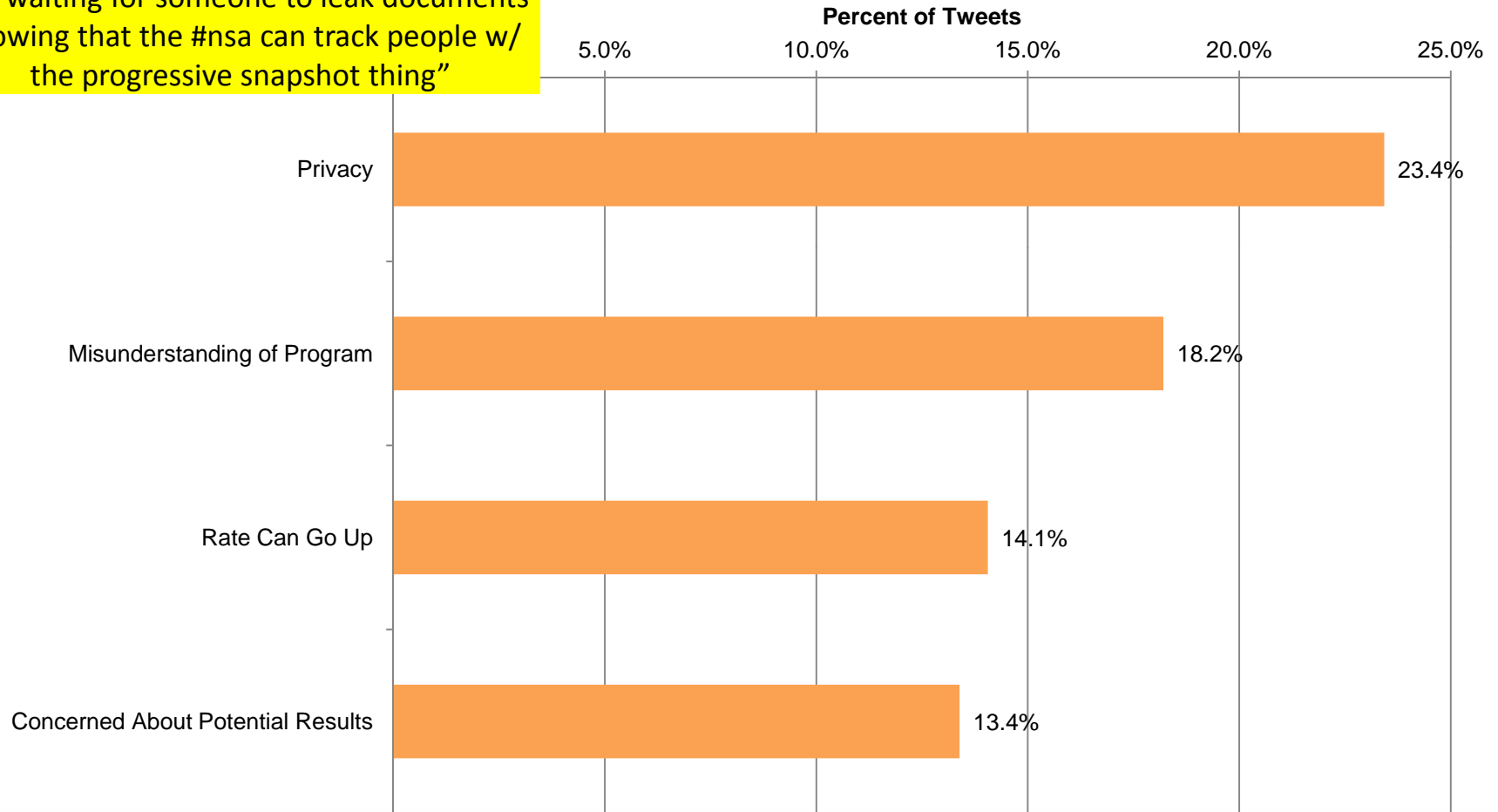


Non-Customer Negative Responses



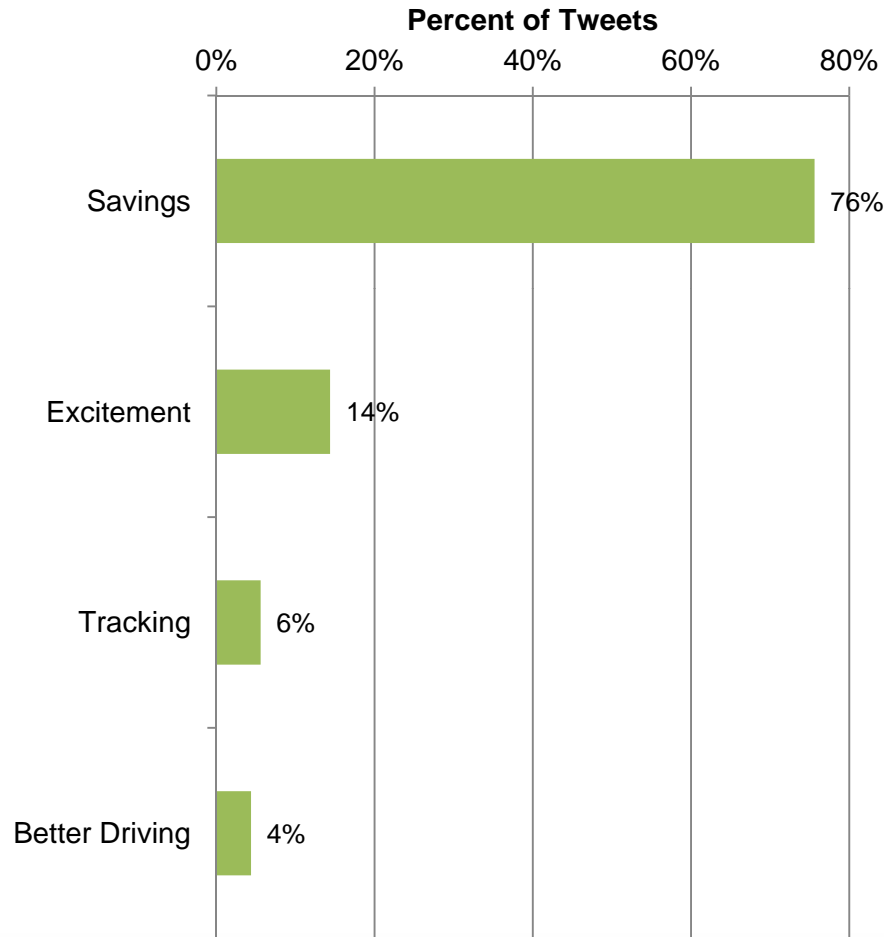
Non-Customer Negative Responses

“im waiting for someone to leak documents showing that the #nsa can track people w/ the progressive snapshot thing”

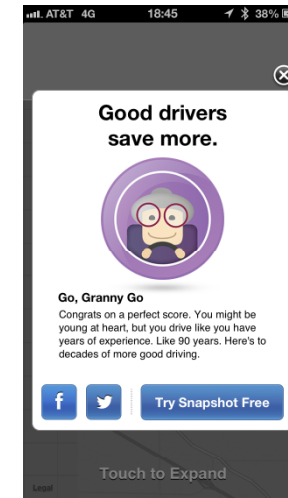
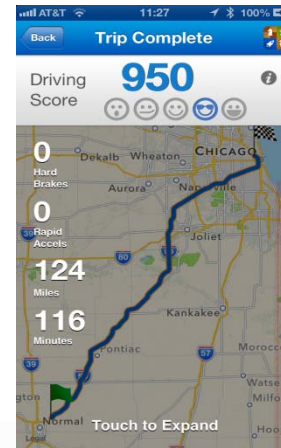


Customer Positive Responses

Customer Positive Responses



- Price change vs. additional services
- Customer validation
- Some consumers like data



"I'm liking Progressive's SnapShot device - not 'cause it'll lower my rates but 'cause it tells me when I've done something I shouldn't have."

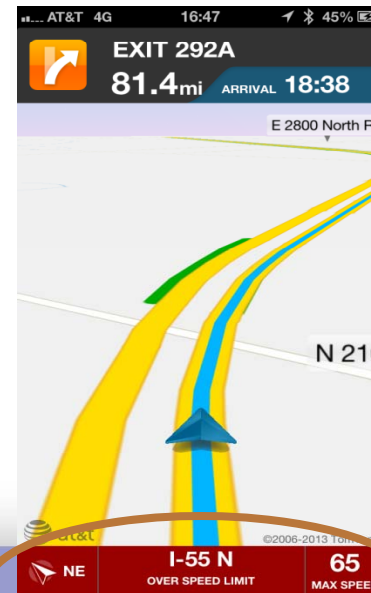
Customer Complaints

Complaint	Starting Test	Testing	Customer	Total
Driving Habits	34%	23%	16%	23%
Beeping	3%	21%	10%	16%
Snapshot Evaluation	1%	20%	12%	15%
Annoying	21%	13%	10%	14%
Premium Change	3%	10%	16%	10%
Installation	28%	1%	0%	4%



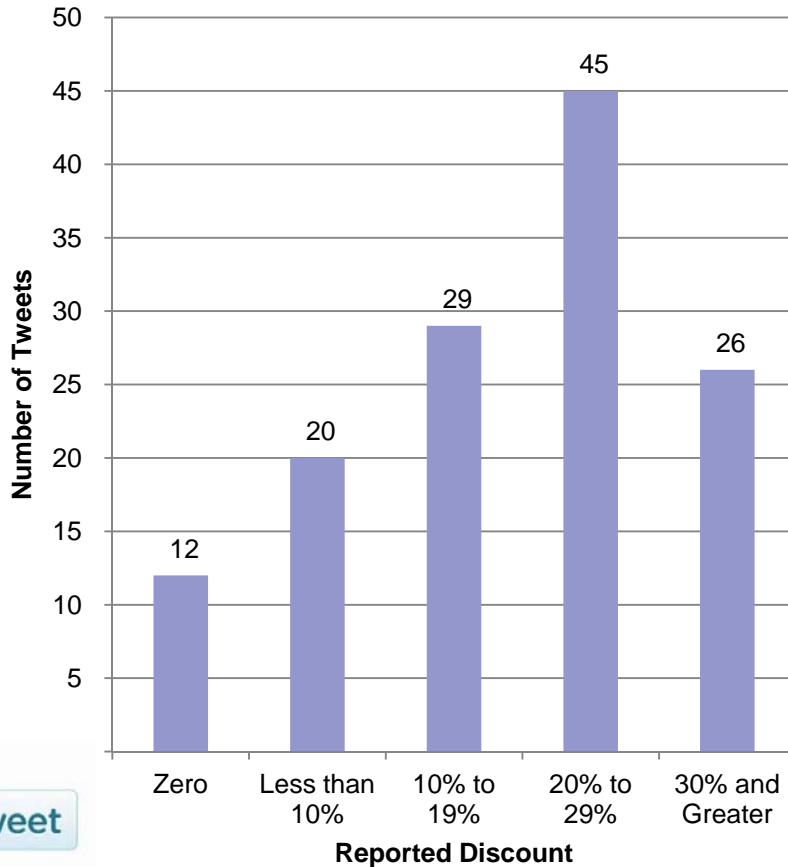
"Listen, Progressive Snapshot. You & I will NEVER agree on what a 'hard brake' is & no amount of beeping is gonna change that. #justsayin"

- Considerations
 - Behavior modification
 - Customer opinion
 - Feedback timing
 - Context
 - Negative reinforcement

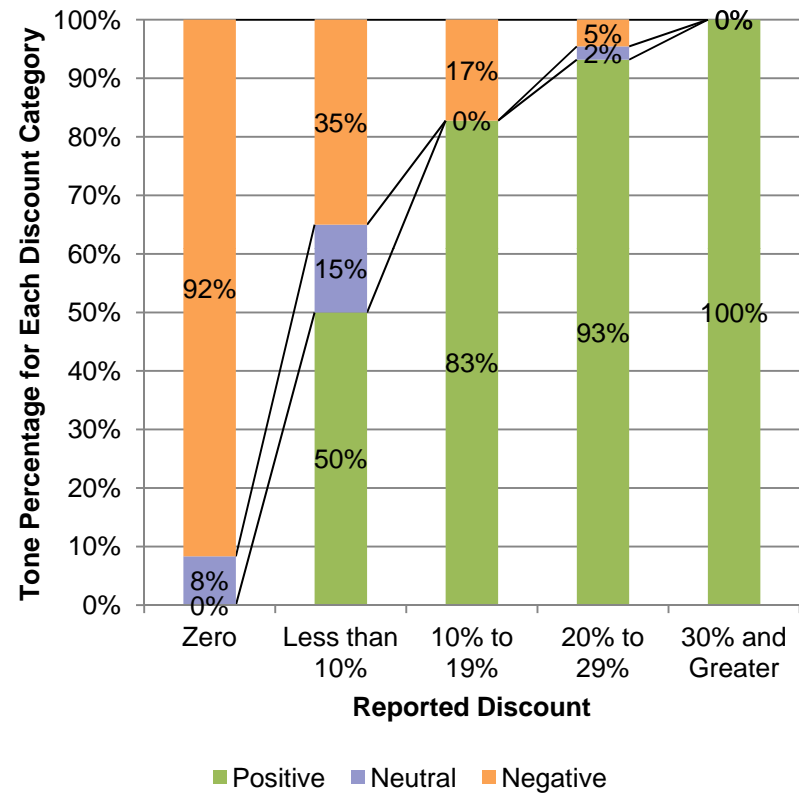


Reported Snapshot Discount

Reported Snapshot Discount



Reported Snapshot Discount by Tone



"Just got an email that I'm getting a 7% discount on my auto insurance after having that Snapshot thing. That's pretty @Progressive. ;)."

"I've had the Progressive snapshot plugged in to my car to record my driving and get a discount. Out of 30% I only got 2%. I suck."

Conclusion

- UBI is here to stay, and will be a game-changer
- UBI has the potential for significant growth
- Potential growth will not be achieved, however, without listening closely to the voice of the customer
- Ultimately, it will help create a more positive customer experience and improve the potential for UBI long-term

Customer Response to Usage Based Insurance

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