

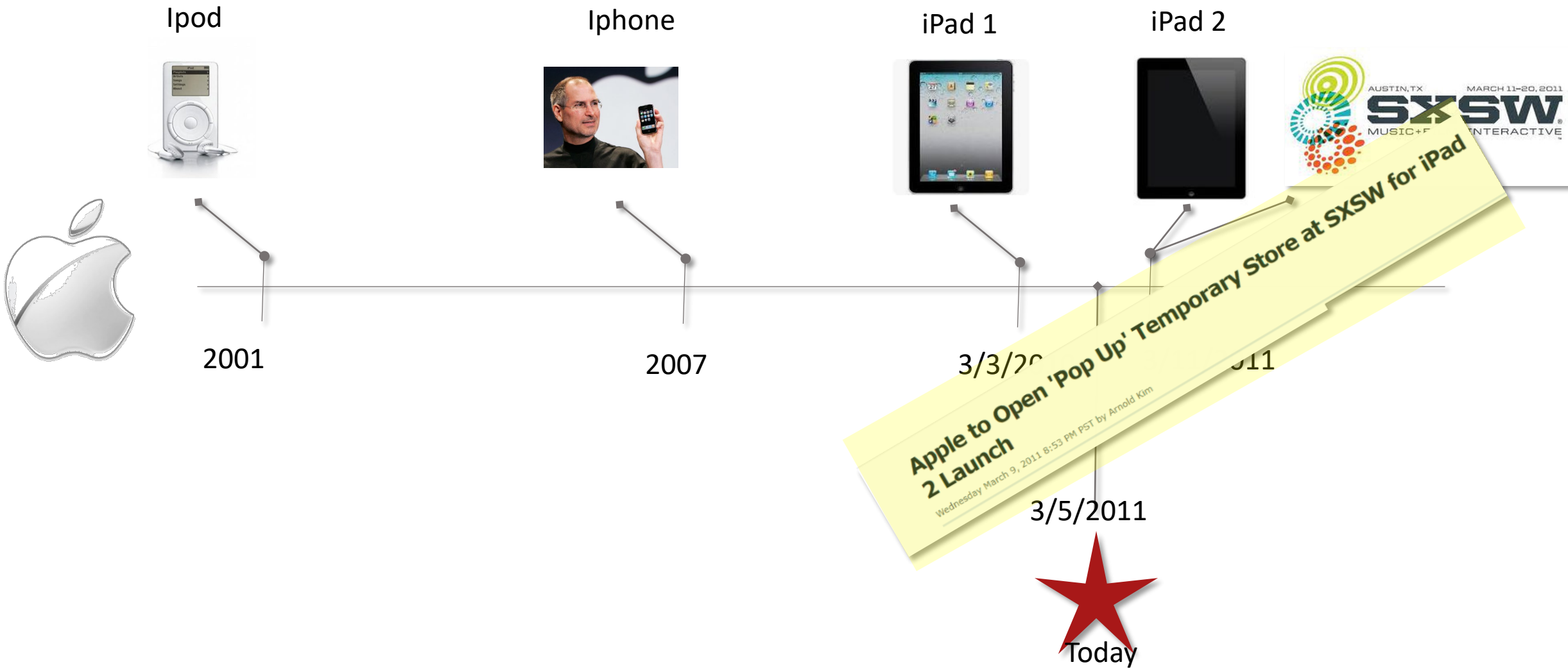


SENTIMENT ANALYSIS

What are people saying about the new iPad 2?



Background



Business Problem



SENTIMENT ANALYSIS

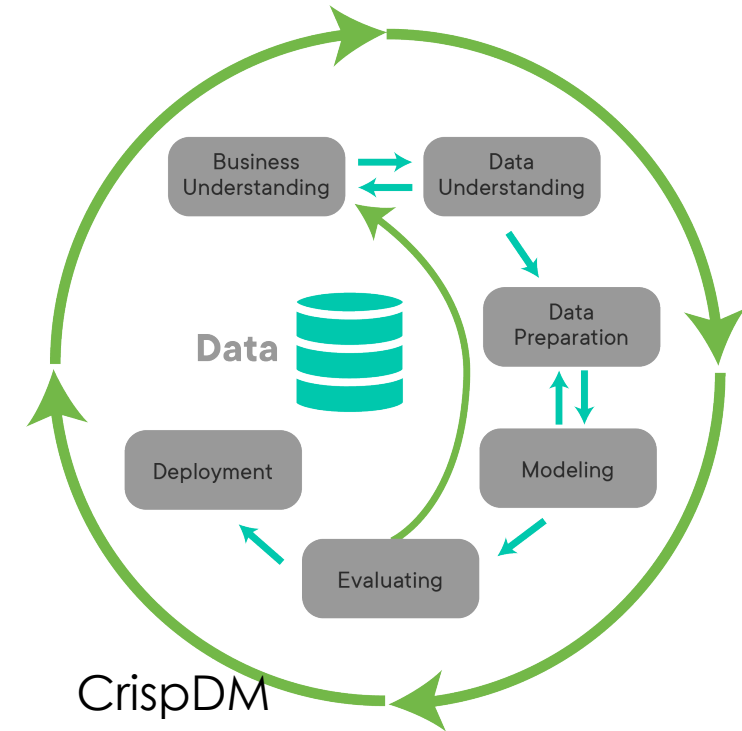


1. Summary of Feelings on The Brand
2. The Launching of Ipad2 & Reaction to the Mobil Store
3. Negative Feedback on Apple Products

Business Value

- Brand Health
- Customer Acceptance
- PR/ Advertising Strategy
- Future Product Development

Methodology



Data = #SXSW Hashtag + Positive, Negative Sentiments

The image shows a Twitter post with the text: "RT @harvardnlp New Paper on Neural image-to-markup generation. <3 #VMDecompiler". Red lines with arrows point from specific parts of the tweet to a legend below. The legend defines the symbols: "RT" for Retweet, "#" for Hash Tag, "@" for Handle, and "!.? = Punctuation" and "<3 = Emoji's/Emotion".

RT = Retweet **#** = Hash Tag **@** = Handle **! . ?** = Punctuation
<3 = Emoji's/Emotion



"Is About Bringing People From A Wide Array Of Business And Creative Disciplines Together To Figure Out The Future..."

It's A Forward-Thinking Event." -Wired.Com

Model Results

86% Accuracy



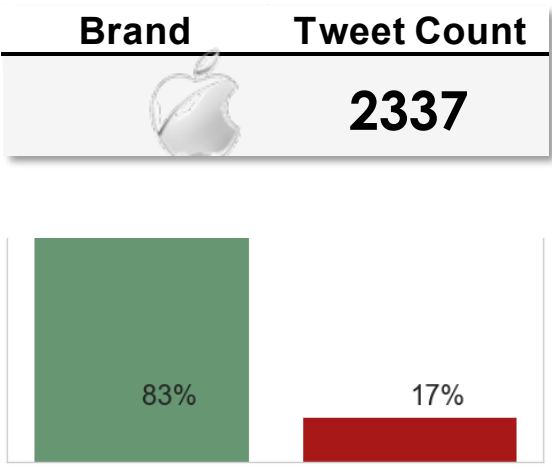
Classifying
- Positive or Negative Tweets

#1 Summary of Feelings ~ 9k Tweets

Buzz

| Frequency | | Count | |
|------------|-----|----------|-----|
| Other/None | 64% | #apple | 413 |
| Apple | 27% | #google | 317 |
| Google | 8% | #sxswi | 312 |
| | | #ipad2 | 294 |
| | | #iphone | 261 |
| | | #ipad | 260 |
| | | #austin | 108 |
| | | #circles | 97 |
| | | #android | 93 |

Sentiment Splits



- "Apple out-markets all comers at #sxsw"
- "The apple popup store was off the hook last night at sxsw"
- "Wow. Just saw someone using a computing device other than a Mac or Ipad here at sxsw" A rare sighting indeed
- "Apple takes bruises from panelists. Not well regarded in sustainability space. Corporate Sustainability Reporting and Transparency. #SXSW"
- Kara Swisher: Apple is the most stylish fascist company in America #sxsw
- First talk of the day : Ipad design headaches. #SXSW

#2 The Launching of Ipad2 & Reaction Mobile/ Launch Store

Tweet Contains - "iPad 2" or "Store"

90%



Positive



Before It Even Begins, Apple Wins! #SxSW, {link}-> gonna get sum! via @mention

Long line at Apple Pop up store for iPad 2. Great marketing, Apple. #SXSW

IPad 2 is better..they have had time to improve #sxsw

10%



Negative

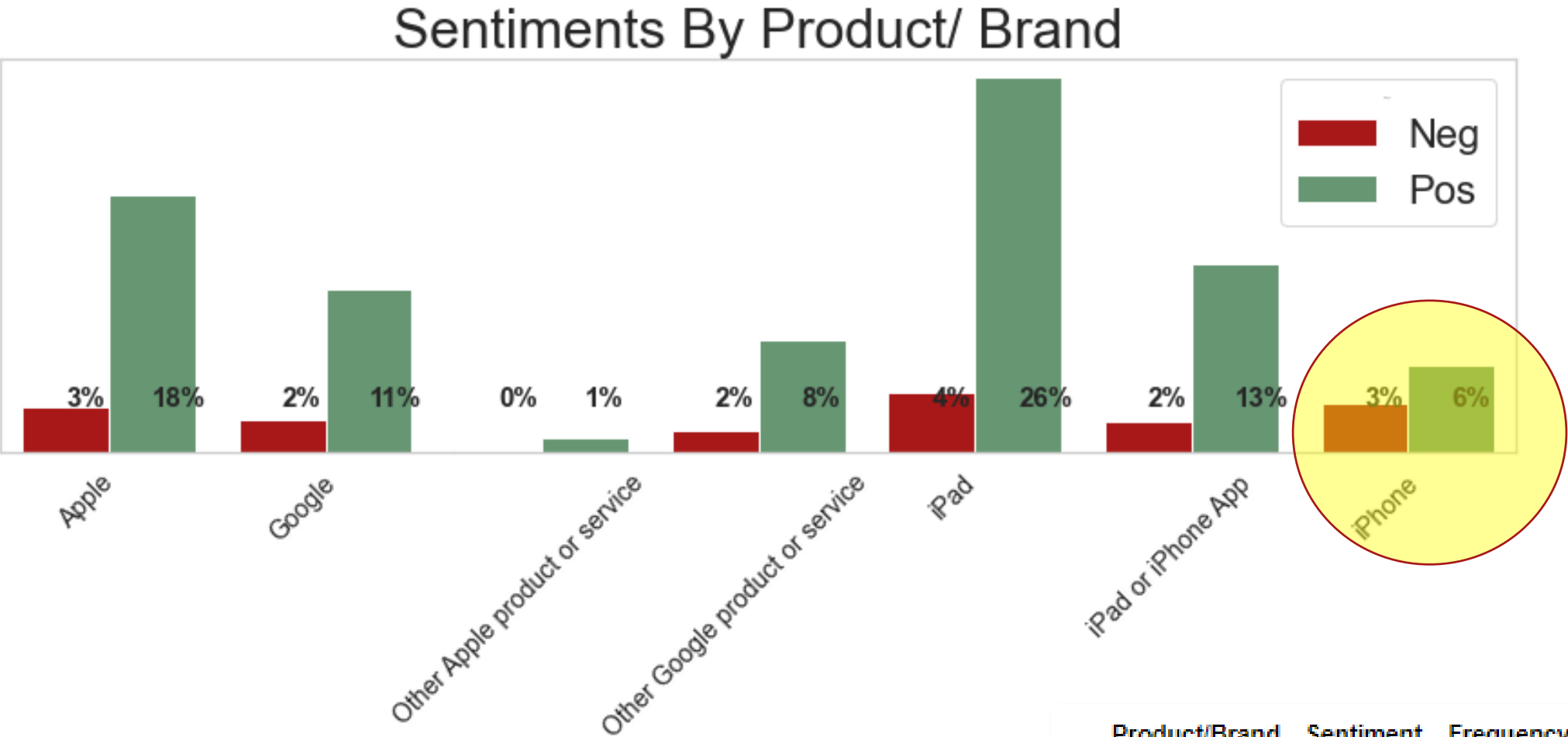


Summary:

- Launch Store:
 - Long Lines
 - Ran out of Inventory
- Ipad 2
 - Camera/ odd/ quality
 - Held back feature on #1

RT @mention #sxsw #csr reporting: Janeczek: Microsoft gives \$ to charity. Apple gives nothing. Everyone in room has iPhone. What drives that decision?

3 Consumer Feedback Apple Products



| Product/Brand | Sentiment | Frequency |
|--------------------|-----------|-----------|
| iPhone | Neg | 36% |
| iPad or iPhone App | Neg | 14% |
| iPad | Neg | 14% |

#3 Consumer Feedback Apple Products

Negative Sentiment Tweets Containing the word "iPhone"



Summary: Battery Life

"The iPhone battery was not made for #SXSW"

"I never realized how shitty my iPhone battery was until #SXSW". I am charging every few hours

"The Hannukah miracle of the morning: uncharged iPhone still at 55%. #SXSW"

Summary

- a) Brand In Good Health!
- b) Launch @ SXSW SUCCESS!
- c) Product Reviews Mostly Good!

Future Work/ Next Steps

- a) Broaden Dataset
- b) Examine additional classifiers/
stacking classifiers
- c) Finer Classification
 - 1. Negative, Neutral, Positive
 - 2. Topic Modeling



Thanks For Your Time and
Consideration!



Appendix

#3 Consumer Feedback Apple Products

Negative Sentiment Tweets Containing iPhone



Summary: Battery Life

The iPhone battery was not made for @mention #sxsw
I never realized how shitty my iPhone battery was until #sxsw I'm charging every few hours
#sxsw is exposing my iPhone's horrendous battery life.
Regretting that I didn't bring my iPad to #sxsw. Seeing lots of times it would be useful, especially for its battery life. #woops
@mention glad I've not got a faulty iPhone then. That'll go down well for #sxsw everyone's battery dies 5 times quicker. Hope @mention knows.
The hannukah miracle of the morning: uncharged iPhone still at 55% battery #sxsw
Just got my Mophie Juice Pack plus for my iPhone 4! Now I'm ready for #sxsw. More than double the battery life #FTW
RT @mention I feel like my iPhone: Always on, always doing something, running out of battery fast. #sxsw

Misc Concerning Themes iPad 1

1. Feeling Obsolete/ Cheated

I'm a bit jealous seeing #SXSW attendees with #ipad2. My iPad seems so obsolete...

It's not all Apple love here at #sxsw. Heard quite a bit of grumbling about holding back features on iPad 1 so people would have to buy v2.

the first iPad didn't even exist here last year and I already feel like I'm pulling out an antique everytime I use my iPad #sxsw #ipad2

2. App Functionality

Major iPad design flaw: the SXSW Go iPad app. It doesn't stay open when you switch apps! #ipad design headaches #sxsw

So I went the whole day w/out my laptop & just used my iPad 1. Things I missed: FTP, cloudapp, fast typing, & skype. #iPad #sxsw

3. Back Button/ Typing

iPad design malady: iPad Elbow - I hate the iPad's back button with the heat of a million suns. #tapworthy #sxsw

Josh Clark: I hate the iPad's back button with the heat of a million suns. #tapworthy #SXSW

@mention I hate typing on an iPad. So, yeah, THE Ken Calhoun is this man, the real deal! And I am bringing my laptop to #sxsw Sun.