

DS 501- CASE STUDY 1

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OUR INTEREST IN THIS TOPIC

- Our topic – “iPad Pro”

Motivation:

1. Apple recently introduced its new iPad line: “iPad Pro” in its latest September special event.
2. Twitter - popular social media site:
 - over 300 million active monthly users
 - over 500 million tweets per day
3. Purpose: To examine the future of iPad Pro & consider use of the data from a marketing perspective

iPad Pro

The top 30 words with their counts:

Word	Count
iPad	3040
Pro	1735
	1316
Apple	950
RT	641
Sleeve	433
#iPadProSleeve	428
#iPadProCase	428
#iPadProCover	428
-	412
PRO	401
#ipadPro	396
#iPadProLeather	387
Pro,	377
Leather	303
Mini	295
iPhone	292
en	271
MacBook	270
Retina	252
3,	244
Guide:	242
Discounts	242
Accessories	237
Buyer's	231
pro	189
4	186
de	181
se	178
mini	178

Tweets:
3552

Total
words:
52,702

Unique
words:
10,629

Lexical
Diversity
0.202

A closer look at the top words

- Apple
- iPhone
- Macbook
- Mini

Brand



- Accessories
- Sleeve
- #iPadProSleeve
- #iPadProCase
- #iPadProCover
- #iPadProLeather
- Leather
- Guide

Accessories



- iPad
- Pro
- #iPadPro
- Discounts

Product



Top 10 retweets are:		
Count	Screen Name	Text
ID		
2083	ibisPaint	RT @ibisPaint: ありがとう！アイビスペイント330万DL突破記念キャンペーン！i bisPaint公式アカウントをフォ っちゃんおう！詳細はこちら http://t.co/005GLx..
1253	MKBHD	RT @MKBHD: iPad Pro pricing. Starts at \$799. Pencil is \$99. Keyboard \$169. Starts in November. http://t.co/LU1TbbbBvZt
1043	anasyacharm	RT @anasyacharm: Сегодня ночью сломала свой iPad, он упал под кровать и видимо что то внутри повредилось, у меня много белых полосок на диспл..
1016	MKBHD	RT @MKBHD: This is your iPad. Now this is your iPad on steroids. (12.9" iPad Pro) http://t.co/wmt2NfqQES
921	smartfon_kupit	RT @smartfon_kupit: Тим Кук назвал дисплей 3D Touch революцией и заявил, что iPad Pro может полностью заменить компьютер Тим Кук назвал ...
919	smartfon_kupit	RT @smartfon_kupit: Будущие характеристики Apple iPad Air 3 Уже немножко утихли новости про Apple iPad Pro, который появился неделю назад ...
904	hamzasood	RT @hamzasood: Not much of a surprise but Xcode confirms 2GB of RAM for the 6s (and 6s plus), and 4GB for the iPad Pro http://t.co/X8Ym4Dt..
896	yoware	RT @yoware: ພັນໄກທ໌ເວົ້າແລ້ວໃນຈຸບັນພື້ນອາຍາ ອາວກົມໄດ້ມາໃນການ #iOS9 ພັນໄກ iOS ເວົ້າຢັ້ງ 9.1 ທີ່ເວົ້າວິຊາ iPad Pro ເພີ້ມໂຄຣຈິກາຍ http://t...
884	pokerbitchnoel	RT @pokerbitchnoel: ໄດ້ເຫັນ iPad pro ໃນຂະບວນໄຈທີ່ສົມຜະເພີ້ມມາດັບ, copy writer ໃຊ ໃນຈຳນວນຕະຫຼາງໄປດ້ານເນັດແລ້ວການໃຫ້ເນັດ
563	atvechayu	RT @atvechayu: Все эти iPhone 6S и iPad Pro конечно очень хороши но черт возьми, Apple, когда ты уже решишь настоящую проблему? http://t...

Top Ten Tweets in our Data

What can we see here?

- Widespread and diverse interest
- Discussion of connected products
- Brand recognition

What does this mean for Apple?

Top Ten Screen Names

Top 10 Screen_names:

Screen_name	Count
ibisPaint	76
YouTube	59
smoothblink_awe	24
smoothblink_us	20
goetter	18
surface	17
MacRumors	16
PrimePropManage	16
thurrott	15
necojita	15

Commercial Twitter
Accounts

Personal Twitter
accounts

Specialty Twitter
accounts

Top Ten Hashtags

Top 10 Hashtags:

Hashtag	Count
iPadProSleeve	423
iPadProCase	428
iPadProCover	428
ipadPro	396
iPadProLeather	387
organic	132
iPadPro	113
iPad	104
Apple	102
iPadProEtui	79

iPad Pro Accessories

Product references

Brand Recognition

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Apple	102
iPadProEtui	79

iPad Pro Accessories

Product references

Brand Recognition

Further Investigation reveals...

knowhere @a_nichka · Sep 9
organic, non-GMO, pesticide-free iPad Pro #AppleEvent

kat calvin @KatCalvinDC · Sep 9
It's a local, organic, sustainable, free-range iPad! #AppleEvent #iPadPro

Shane Lynch @iequalshane · Sep 9
iPad Pro - Organic and Gluten Free.

Victor Hurdugaci @VictorHurdugaci · Sep 9
Oh look, the iPad Pro is organic

Twitter user AnalyticBridge

20 Friends list:	
ID	Screen Name
3434847357	LudovicLag
3432782331	DataPlough
3416176299	DanaKha32536168
3412588197	DataVisi0n
3346508445	G_R_Maranda
3310879135	ROIdoctor
3307055528	louiskitlung
3281655272	GarrettLeeH
3280000477	ChannelioSecret
3274888813	MSAdvAnalytics
3257050133	BigDataShift
3254815362	SociativeBigDat
3247116547	PeterIsDown
3245339241	DPIllingsworth
3241729577	kenwilliams9000
3228543147	eswarvramesh2
3225789458	TheNutellaMan
3225388774	JvCode
3223169658	ecruzreyes
3222850370	AI_Scientist

Mutual friends list:	
ID	Screen Name
2445802928	pythontrending
2241428113	brytlytUK
317005063	AlexanderD_Beck

20 Followers list:	
ID	Screen Name
3701159601	haydencod2
3697797016	monobrain
3697107509	NicolyWoly
3696705797	cloudmater
3696646996	SocSci2030
3695438362	VAASharma
3695115855	jrcodevoyeur
3694796295	LekaunyaneThato
3694794321	zhiguoais
3694258883	AnalyticsGurus
3691635796	rodrigogiungi
3690050303	SubhroDas11
3689888061	DataDoran
3687705316	maurysoch11
3687395057	ontleden
3687285981	nikita_karimoff
3686943615	Berenguer4s
3686017821	1hrstrategy
3684274455	SamLine_SAS
3683821515	SimonaB87

Sentimental Analysis

- Text Cleaning:
 - Nltk package: Stopwords for English
 - Before Lexical Diversity: 0.202
 - After Lexical Diversity: 0.223

What is Sentiment Analysis

- Identify the orientation of opinion in a piece of text

The movie
was fabulous!

[Positive]



The movie
stars Mr. X

[Factual]



The movie
was horrible!

[Negative]



- Can be generalized to a wider set of emotions

Data Process

Tweets

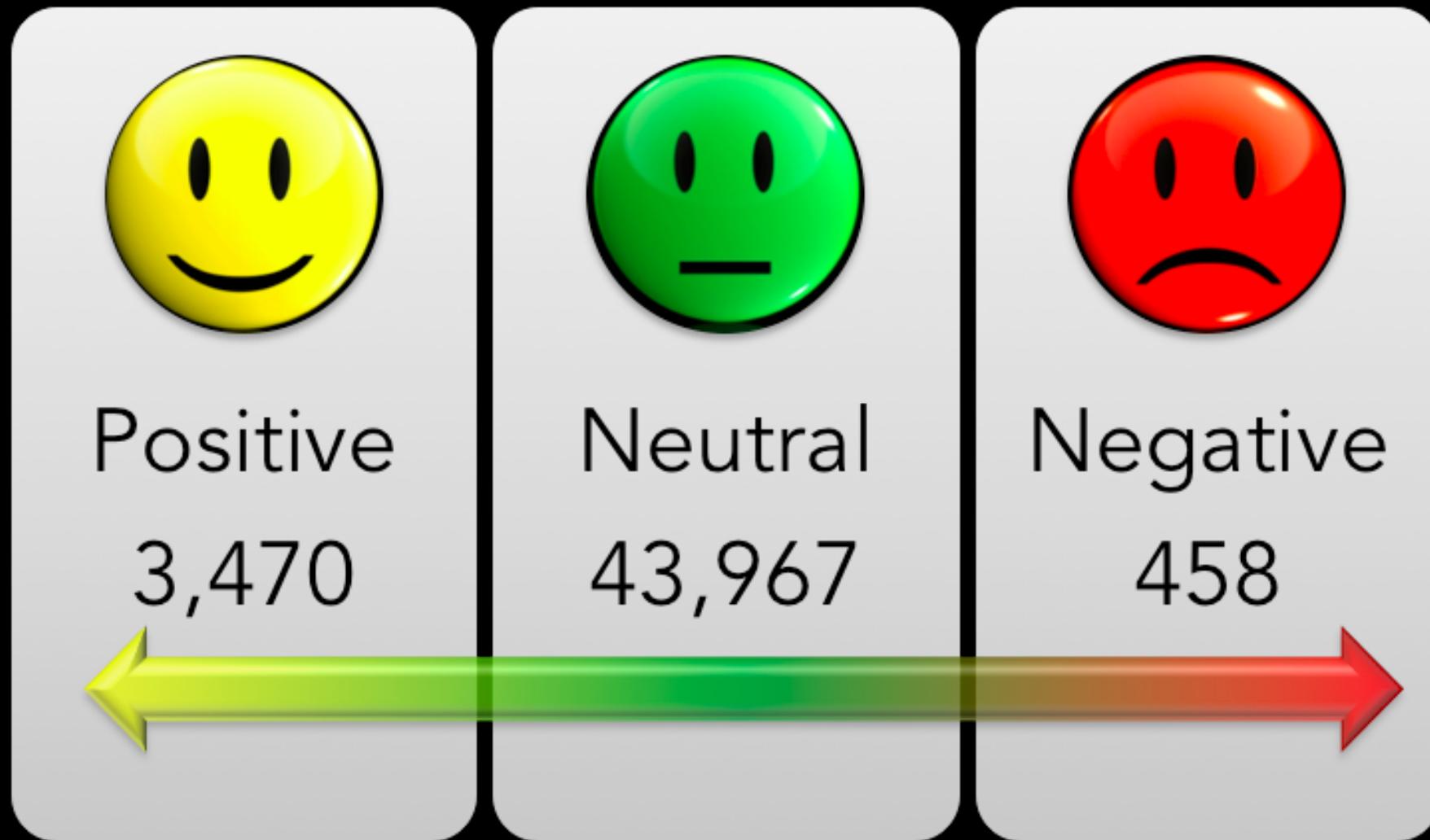
Sentences

Words

Join on
Sentimental
Dictionary

Sum the
value

Sentimental Analysis Results



Sentimental Analysis



- Track effectiveness & efficiency of marketing campaigns.
- Identify influential users for product promotion.



Sentiment Analysis of Twitter Feeds for the Prediction of Stock Market Movement

Ray Chen, Marius Lazer

Abstract

In this paper, we investigate the relationship between Twitter feed content and stock market movement. Specifically, we wish to see if, and how well, sentiment information extracted from these feeds can be used to predict future shifts in prices. To answer this question, we construct a model, estimate its accuracy, and put it to the test on real market data using a mock portfolio. Our results indicate that the model is successful in generating additional profit.

1. Introduction

As unpredictable. With the advent of technological

The Investopedia page features a navigation bar with links like Dictionary, Investing, Trading, Markets, Personal Finance, Wealth Management, Financial Advisors, Exam Prep, Tutorials, Video, and Stock Simulator. A search bar and user account links are also present. The main article headline is "Can Tweets And Facebook Posts Predict Stock Behavior?" by Brian O'Connell, updated March 27, 2014. The article discusses how news about Blackberry's \$4.7 billion buyout was leaked via social media, causing a price drop. It also mentions Dataminr, a firm that uses social media data to predict market movements.