

Brandwatch

Beyond Search

The Journey to Measuring and Predicting Consumer Behavior

Hamish Morgan | VPE Data Science hamish@brandwatch.com

• Who is Brandwatch?

Brandwatch named a Leader in Forrester Wave™

Social Listening Platforms 2020

Read the full report <u>HERE</u>



Source | Forrester Social Listening Platforms Wave (2020)

The Forrester WaveTM is copyrighted by Forrester Research, Inc. Forrester and Forrester Wave are trademarks of Forrester Research, Inc. The Forrester Wave is a graphical representation of Forrester's call on a market and is plotted using a detailed spreadsheet with exposed scores, weightings, and comments. Forrester does not endorse any vendor, product, or service depicted in the Forrester Wave. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change.









Consumer Insights

Optimised ice cream ads when rainy, after social insight showed people bought more ice cream when it rains.

Product Development

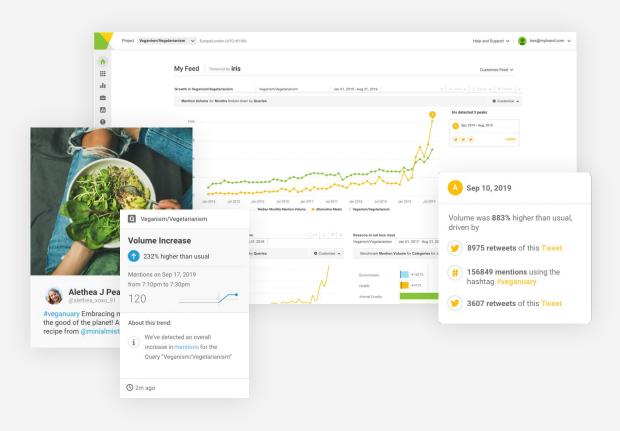
Discovered the most common complaint was missed deliveries, resolved by changing the packaging to fit through the letterbox.

Trend Spotting

Identify and analyze emerging trends first, and spot opportunities before competitors.

Brandwatch Consumer Research

The world's leading social listening platform. Helping you understand millions of conversations, every day.



The Analytical Journey

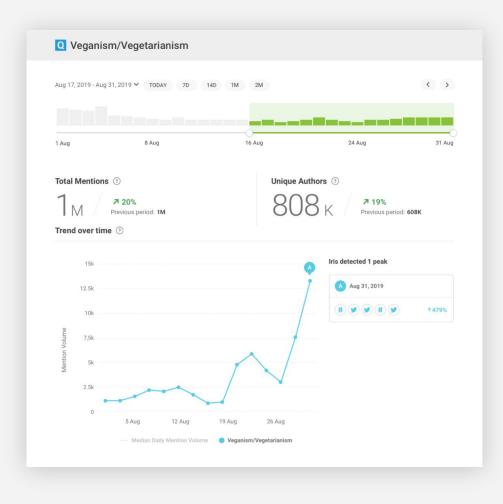
1. Data

We collect "voice of the consumer" data from a wide variety of sources



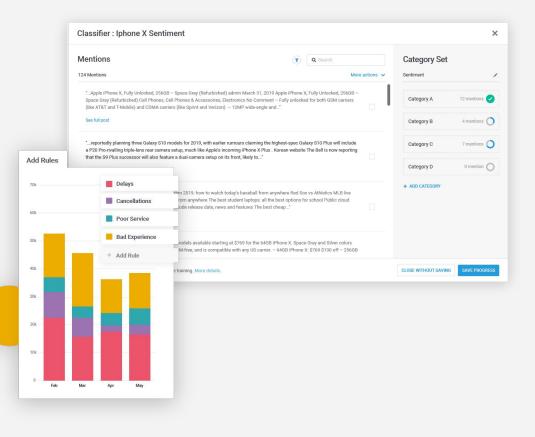
2. Search

Search the public web and collect all of the posts, comments and conversations relevant to you.



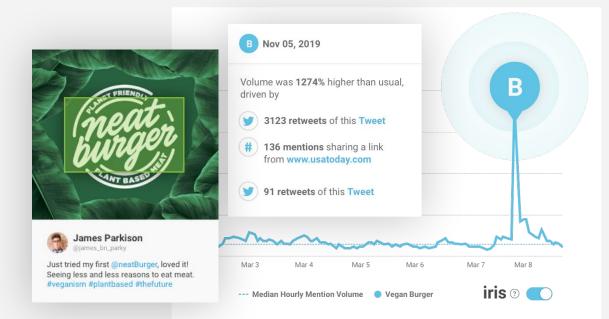
3. Segment

Automatically segment the data into categories that are relevant to your business, topic or research.



4. Insight

Automated discovery and explanation.

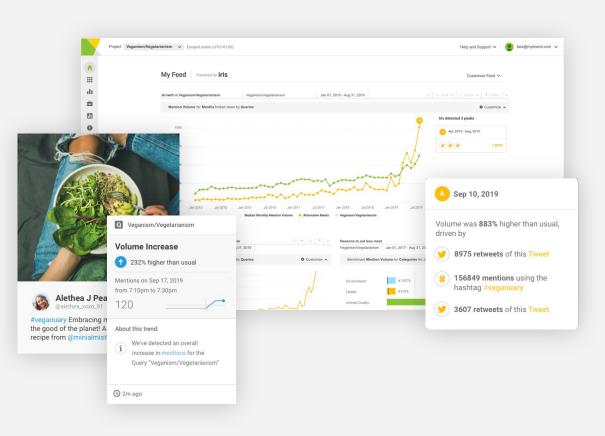


5. Action

Action your discovery reports and email alerts.

Brandwatch Signal @elonmusk trending for Tesla An increase in the mentions of the author @elonmusk for the Query "Tesla". Open Query in a Dashboard 1219 Mentions in the last 54 minutes 00 PM 10:00 PM 12:00 AM 2:00 \equiv Inbox Brandwatch Signal Delayed Trending for Jet Airways.. We Identified 6 Main Drivers Lunch Tuesday 155 retweets of this tweet Report Launch R Report Final Draft # K 40 mentions using the hashtag #takemetomars Jet Airways Q1 Strategy O 15 mentions sharing a link from tesla.com T RE: Hiring

- 1. Data
- 2. Search
- 3. Segment
- 4. Insight
- 5. Action





Search

Apple	Inc. 🖊			
FILTER	Language: English		Mentions	C [•] REFRESH RESULTS
Wr	ite your query apple		An estimated 12,022,610 mentions posted in the Sc last 30 days .(?)	ort by: Randomize order 🗸
			•TWICE - BR (@) RT @JYPETWICE Hi, ONCE! listening party will be held on us on Friday! Log in with Spo https://t.co/qGbWYicMoE #/ #TWICEListeningParty https https://TWICE.lnk.to/Weekly • 11 Oct	:) ONLY this week, TWICE n Friday! Don't forget to join tify or Apple Music here: TWICE #트와이스 ://t.co/gR4qZPwYLC
		,	Dan Rather Explains How Ac Trump-Supporting Republica https://t.co/u4BeZ9r9hX https://apple.news/AznxgT3	tual Rats Are Better Than ans #GOPRats
Find	location codes Keyboard shortcuts	99995 characters left	• 18 Oct	sbc150VQ1X8jtL0Wg ඊ

Search

Wr	ite your query
1	(apple NEAR/10) (phone OR cellphone OR mac OR macs OR laptop* OR computer* OR desktop* OR watch OR watches tv OR homepod* OR "home pod" OR headphone* OR "steve jobs" OR "tim cook" OR app OR apps OR geniusbar* OR "genius bar" OR "genius bars"))
2	gentus par uk gentus pars))
23	OR (apple NEAR/Of (music OR musics OR news OR support OR store OR stores))
4	or (uppre weak of) (musics or musics or news or support or score or scores))
5	OR iphone* OR ipad* OR macbook* OR appletv* OR applewatch* OR airpod* OR "air pod" OR "air pods" OR
	applemusic* OR itunes* OR applenews*
6	
7	OR @Apple OR @AppleMusic OR @itunes OR @appleedu OR @appletv OR @applenews OR @applesupport OR @applepodca OR @applenewsuk OR @applebooks
8	on cappenensus on cappeebooks
9	OR author: (apple OR applemusic OR itunes OR appleedu OR appletv OR applenews OR applesupport OR applepode
	OR applenewsuk OR applebooks)
10	
11	OR #iphone* OR #ipad* OR #macbook* OR #appletv* OR #applewatch* OR #airpod* OR #applemusic* OR #itunes* OF #applenews*
12	
13	watches OR tv OR homepod* OR "home pod" OR headphone* OR "steve jobs" OR "tim cook" OR app OR apps OR
	geniusbar* OR "genius bar" OR "genius bars"))
14	OR (apple NEAR/Of (music OR musics OR news OR support OR store OR stores))
15	OR iphone* OR ipad* OR macbook* OR appletv* OR applewatch* OR airpod* OR "air pod" OR "air pods" OR
	applemusic* OR itunes* OR applenews*)
16	
17	OR links:apple.com
18	
19	OR site:apple.com

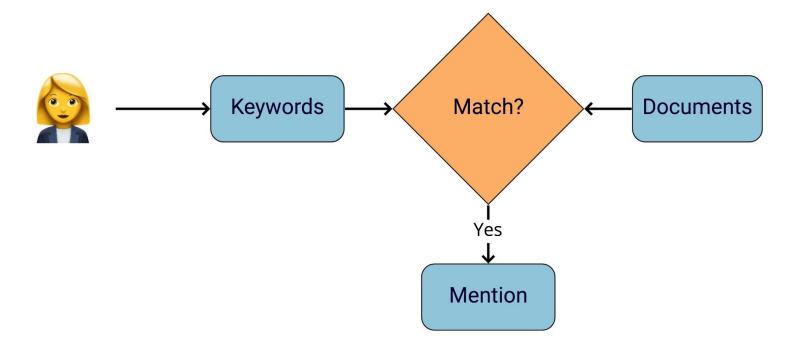
Brandwatch Search

Brandwatch Search

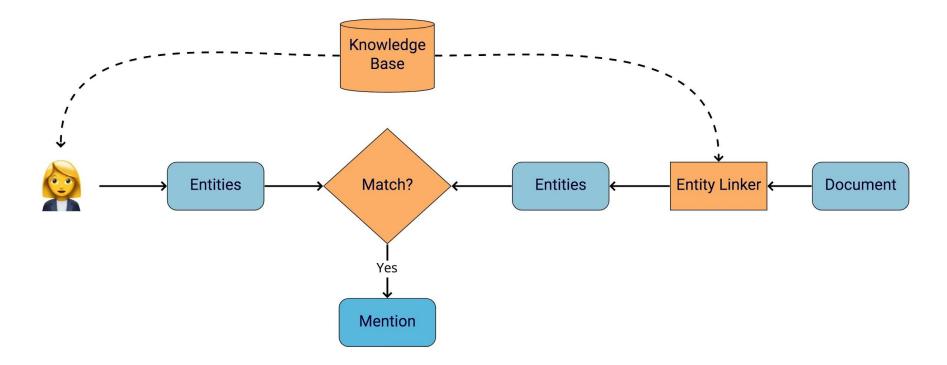
~

	Q apple	
	Q apple – keyword search	
	Apple Inc. American producer of hardware, software, and service	
red by	apple fruit of the apple tree	
	Apple UK international record label; imprint of Apple Corps Ltd.	-
	Apple II first computer model in the Apple II series	
	App Store digital application distribution platform for iOS	
nent {	Malus genus of plants	
from -	Apple II series series of computers made by Apple	
e on Ar	Apple Store Retail store chain of Apple products and canhbhui	ion
7pm	Apple Corps company formed by The Beatles	
_	apple juice fruit juice made by the maceration and pressing of apples	ear whe





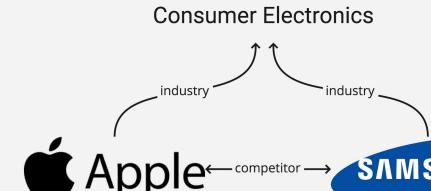




Knowledge Base

Knowledge Base

A graph of facts about worlds. Points are the entities of interest, and lines are relationships between those entities.





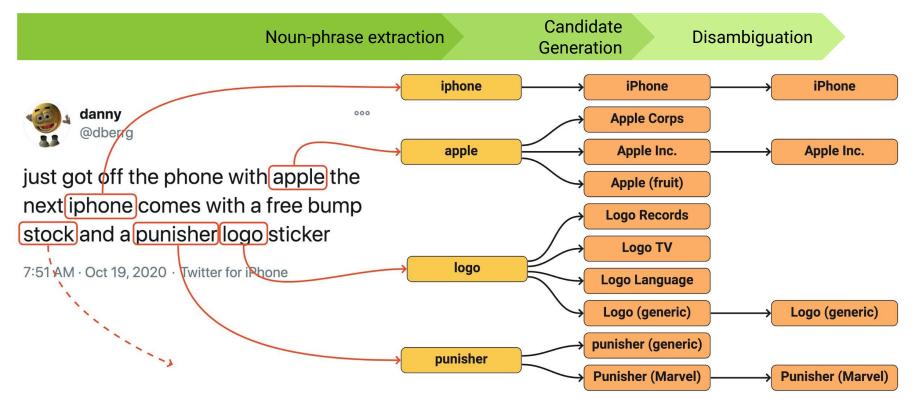
Entity Linking

Mapping from phrases in text to our Knowledge Base



Entity Linking

How does the Entity Linker work?



How does the Disambiguation work?

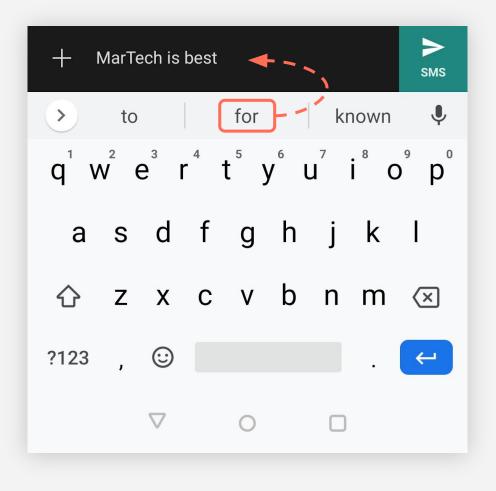
By matching contexts.

danny 000 @dberra just got off the phone with apple the next iphone comes with a free bump stock and a punisher logo sticker 7:51 AM · Oct 19, 2020 · Twitter for iPhone WIKIPEDIA Q \equiv WIKIPEDIA Q \equiv Apple Inc. Apple 文Δ ŻΑ "Apple (company)" redirects here. For other companies, see Apple This article is about the fruit and tree. For the technology company, see Apple nc. For other uses, see Apple (disambiguation), Apple blossom (disa nbiguation) § Businesses and organisations. (disan biguation), and Apple tree (disambiguation). Apple Inc. is an American multinational technology company An **apple** is an edible fruit produced by an **apple tree** (*Malus* headquartered in Cupertino, California, that designs, develops domestica). Apple trees are cultivated worldwide and are the and sells consumer electronics, computer software, and online most widely grown species in the genus Malus. The tree services. It is considered one of the Big Tech technology originated in Central Asia, where its wild ancestor, Malus companies, alongside Amazon, Google, Microsoft, and sieversii, is still found today. Apples have been grown for Facebook [8][9][10] thousands of years in Asia and Europe and were brought to

Language Models

What is a Language Model?

It's a bit like how autocomplete works.



Our Language Model

"just got off the phone with apple the next iphone comes with a free bump stock and a punisher logo sticker"

they havent even came out with it yet. they are working on it right now and will make a official announcement soon.

thats the update from the phone repair guy.

2 weeks ago we couldnt do much but just fix it and the phone would still continue to do all it was supposed to do, but now we can change out things and make it better and better.

Applying LMs to entity disambiguation

≡ WikipediA

Q

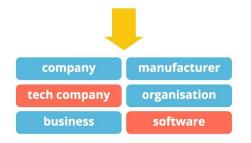
Apple Inc.

文A

।

"Apple (company)" redirects here. For other companies, see Apple (disambiguation) § Businesses and organisations.

Apple Inc. is an American multinational technology company headquartered in Cupertino, California, that designs, develops and sells consumer electronics, computer software, and online services. It is considered one of the Big Tech technology companies, alongside Amazon, Google, Microsoft, and Facebook.^{[8][9][10]}

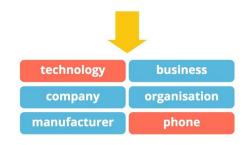




just got off the phone with apple the next iphone comes with a free bump stock and a punisher logo sticker

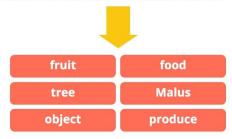
000

7:51 AM · Oct 19, 2020 · Twitter for iPhone



≡ WikipediA			Q
Apple			
×̈́Α	4	☆	A B
This article is about the fruit and tre Apple Inc. For other uses, see Apple (disambiguation), and Apple tree (d	e (disambiguation), Apple b		e

An **apple** is an edible fruit produced by an **apple tree** (*Malus domestica*). Apple trees are cultivated worldwide and are the most widely grown species in the genus *Malus*. The tree originated in Central Asia, where its wild ancestor, *Malus sieversii*, is still found today. Apples have been grown for thousands of years in Asia and Europe and were brought to



Backing Out

Backing out of the rabbit hole.

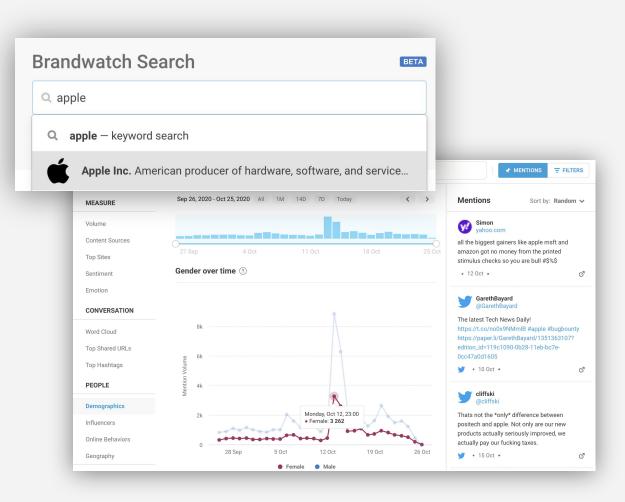
Language Models allow us to disambiguate.

Disambiguation supports linking.

Linking is how we map to our knowledge base.

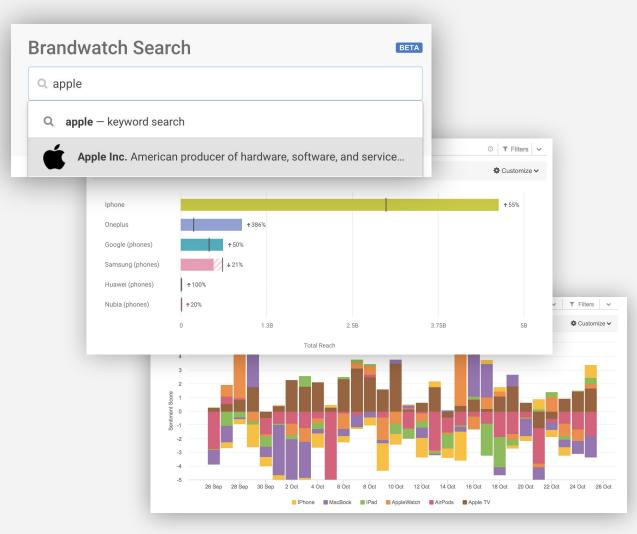


Brandwatch Search



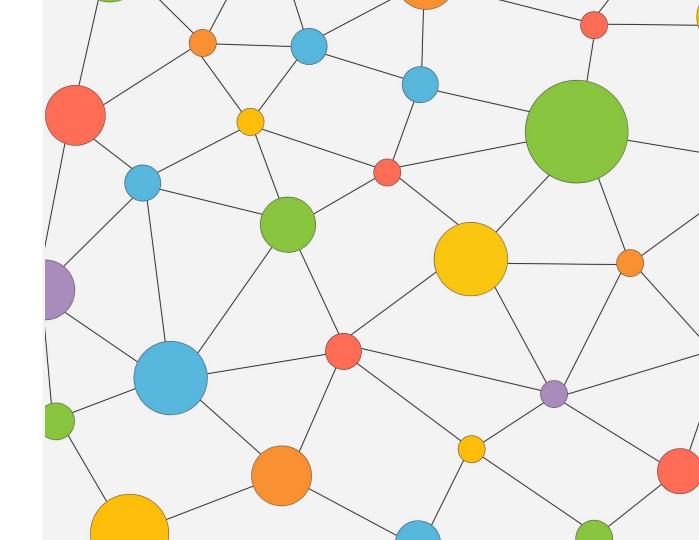
Beyond Search

Automated Comparison



There's still a long road to get there.

How do we build the knowledge graph?





Now You Know

Hamish Morgan | VPE Data Science hamish@brandwatch.com