

# TOPIC MODELLING OF CRYPTOCURRENCY TWEETS

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# BACKGROUND

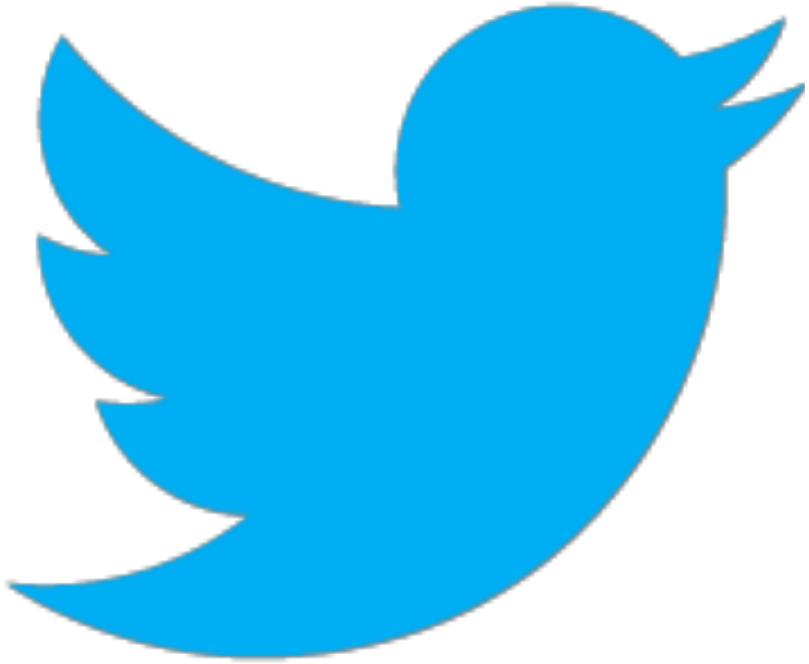
- Digital Assets:
  - Medium of Exchange
  - Cryptography for Secure Financial Transactions
  - Decentralized Control
- Distributed Ledger Technology:
  - Blockchain
  - Public Financial Transaction Database



# BACKGROUND

- Bitcoin (BTC):
  - Released as Open-Source Software in 2009
  - Considered the First Decentralized Cryptocurrency
- Over 4,000 Altcoins:
  - Ethereum (ETH), Ripple (XRT), Bitcoin Cash (BCH), Litecoin (LTC), EOS (EOS)





## CRYPTOCURRENCY TWITTER DATA

Twitter Data Streamed with Tweepy

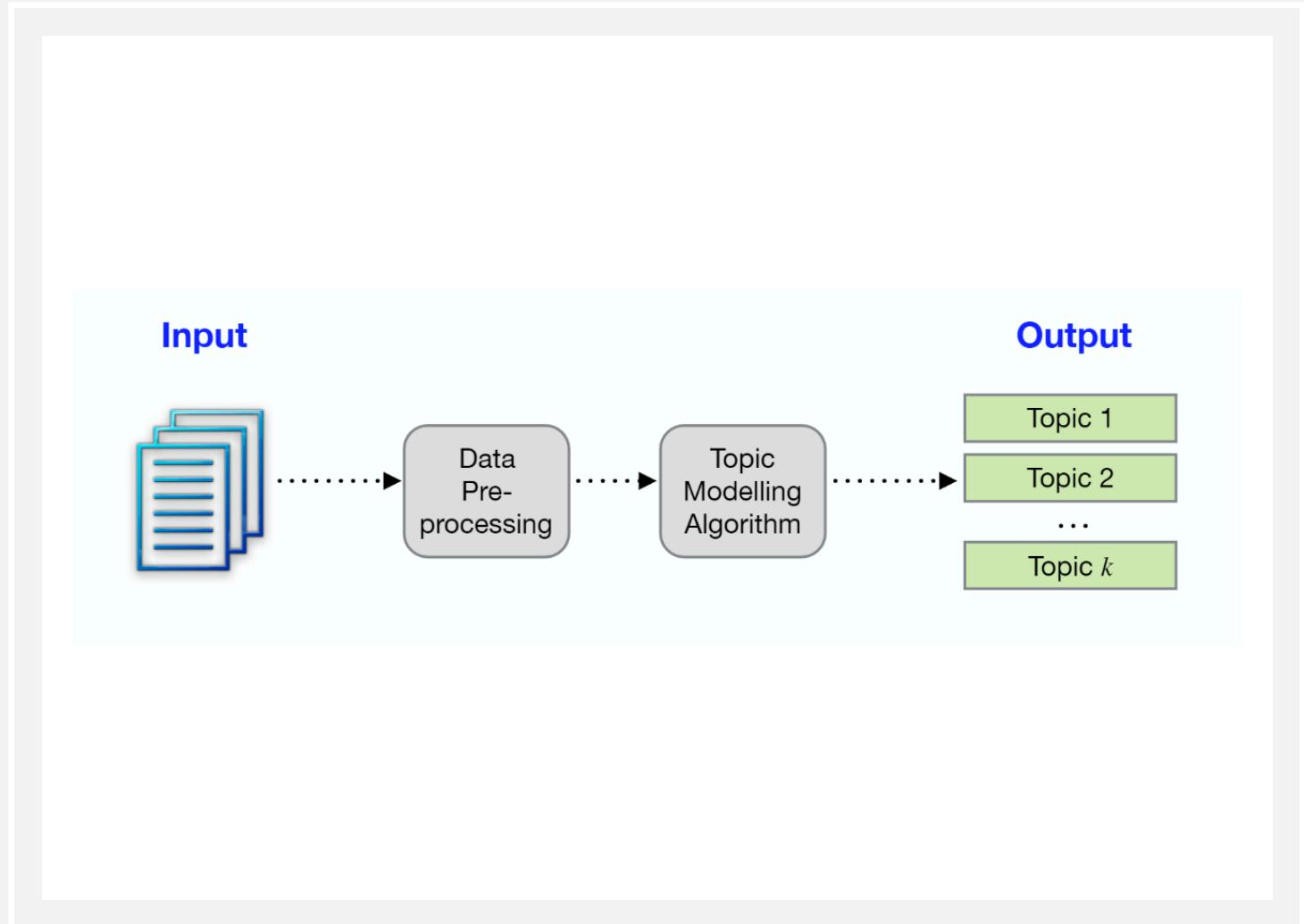
Filtered for Terms Relating to  
Cryptocurrency:

Blockchain, Bitcoin, Ethereum,  
Binance, HODL, etc.

Data Stored in MongoDB

## TOPIC MODELLING TWITTER DATA

- 30,000 Tweets:
  - Latent Semantic Analysis (LSA)
  - Non-Negative Matrix Factorization (NMF)
  - Latent Dirichlet Allocation (LDA)



# CRYPTOCURRENCY TOPICS

Blockchain  
Technology:

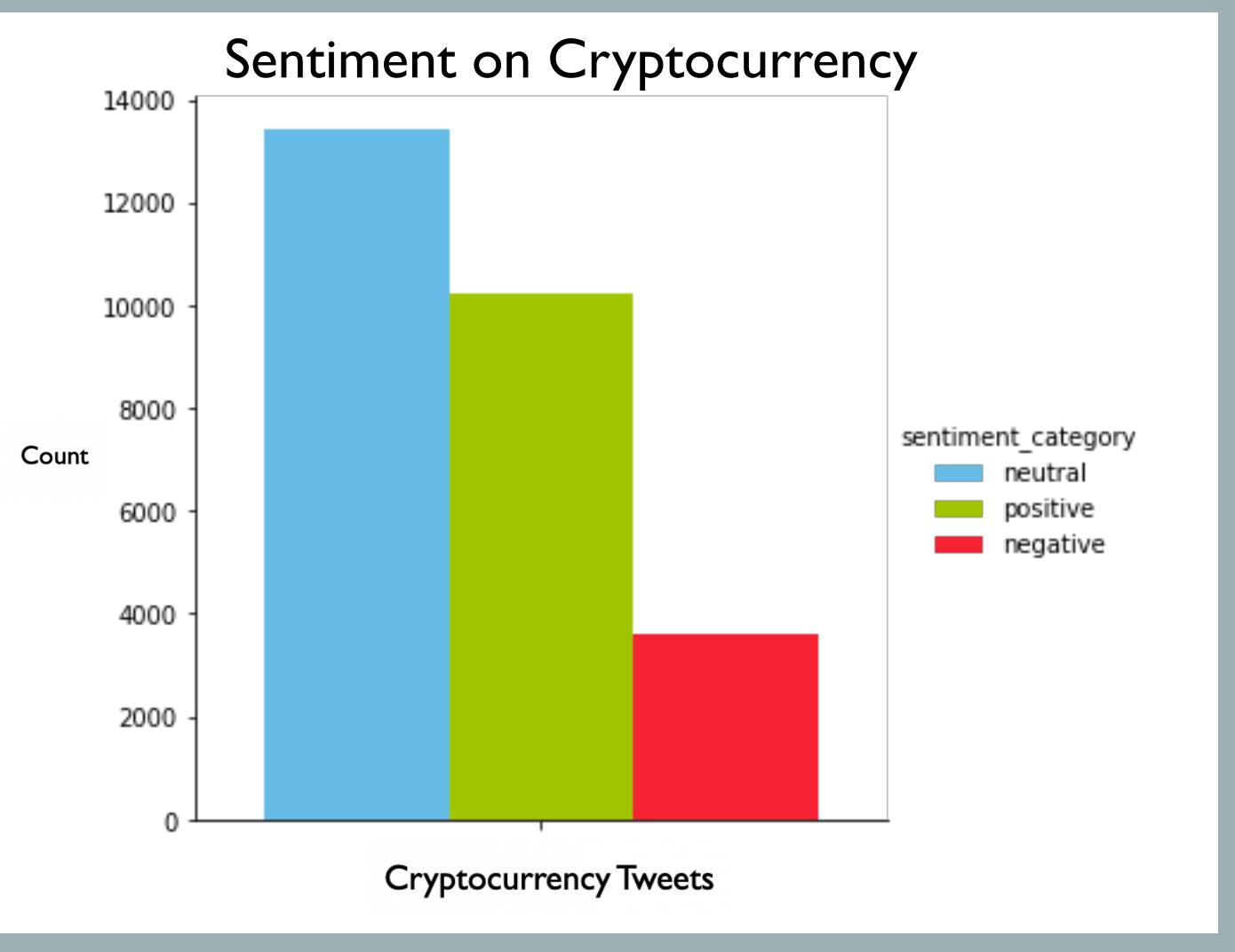
- Market, blockchain, satoshi, sharding, fork, key, wallet, stablecoin, smart contract, new

Trading/Investing:

- Binance, buy, sell, buy stop, usd, price, gold, trading, exchange, bitfinex

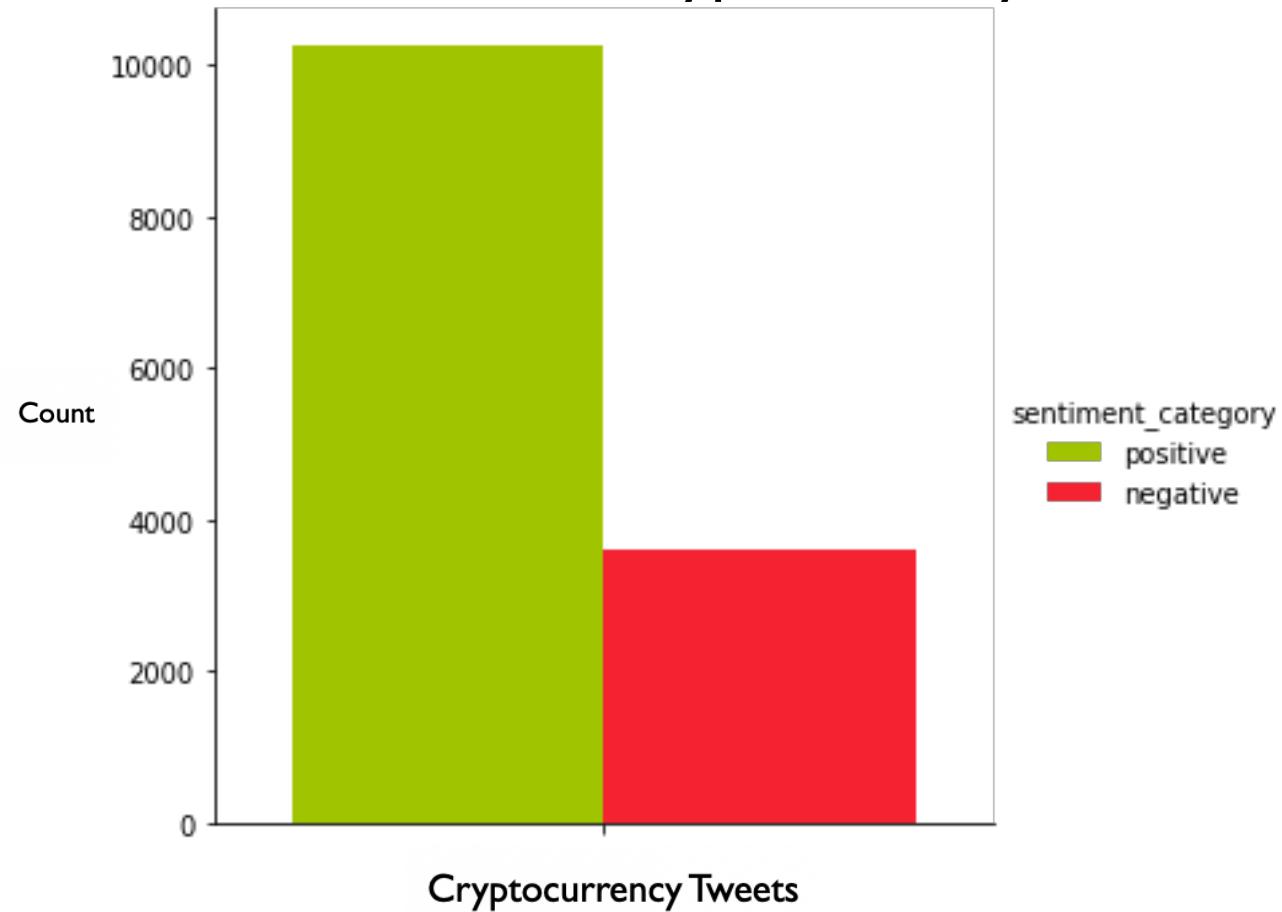
Free Distribution:

- Airdrop, free, get, tokens, virtual, new, coin, droppings, free droppings, reward



TWITTER  
SENTIMENT ON  
CRYPTOCURRENCY

## Sentiment on Cryptocurrency



TWITTER  
SENTIMENT ON  
CRYPTOCURRENCY



OneDigitalArtist  
@1DigitalArtist

Follow

This is the last year cryptocurrency will turn the average 9-5 millennial with minimal investments into millionaires or grant them financial stability for DECADES.

Dont miss this train...

\$BTC #bitcoin #altcoin #ALTSEASON

9:19 PM - 17 May 2019



@cryptoAK  
 @\_cryptoAK

Follow

Ever since I've spent less time off of twitter, #hodl ing my crypto has been exponentially easier!

Stop listening to the noise and realize we have the greatest investment opportunity of all time! Invest in #xrp \$xrp and sit back and cash in!

THIS IS FINANCIAL ADVICE! #btc \$btc

6:57 AM - 23 May 2019



BitcoinAgile  
@bitcoinagile

Follow

Mr. Wonderful Kevin OLeary calls #bitcoin garbage in a takedown of the whole cryptocurrency industry #Investmentstrategy #Markets #Cryptocurrency #Bitcoin/USDollarFXSpotRate @CNBC cnbc.com/2019/05/14/mr- ...



2:34 PM - 14 May 2019



The Biggest BTC Short  
@BiggestBTCShort

Follow

Bitcoin is the biggest fraud and scam in history and people will get hit. #bitcoin \$BTC

10:04 PM - 18 May 2019



Stark Payments Ltd  
@StarkPayments

Follow

"I have invested in #bitcoin because I believe in its' potential, the capacity it has to transform global #payments is very exciting"  
@richardbranson

#cryptocurrency #quoteoftheday  
#bitcoinQuotes #acceptCryptoPayments



"I have invested in Bitcoin because I believe in its' potential, the capacity it has to transform global payments is very exciting"

Richard Branson

3:29 AM - 21 May 2019



## CONCLUSION & KEY TAKEAWAYS

- Current Topics Relating to Cryptocurrency:
  - Blockchain Technology
  - Trading/Investing
  - Free Distribution of Virtual Coins
- Relatively Early Adoption Phase
  - Specific Legislation Regulating Cryptocurrency
  - Relatively Few Businesses Accept Payment in the Form of Cryptocurrency
- Largely Speculative

# **THANK YOU!**