

Reddit Submissions Network Analysis, Topic Modelling, and Sentiment Analysis on Collapse of Terra (LUNA) Event

Shilton Jonatan Salindeho

Jul 13th 2023

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- Problem Statement/Objectives
- Data Collection
- Methodology
 - Network Analysis
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- Timeline - Identifying key events
- Analysis/Findings
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Motivation and Problem Statement

TECH

Cryptocurrency luna crashes to \$0 as UST falls further from dollar peg

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**Arjun Kharpal**
[@ARJUNKHARPAL](#)**Ryan Browne**
[@RYAN_BROWNE_](#)

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The collapse of Terra (LUNA) blockchain protocol which consists of TerraUSD and LUNA cryptocurrencies in May 2022 was considered to be one of the biggest events in the crypto space, largely due to the magnitude of its collapse as well as the impact it brought to its holders.

Problem Statement/Objectives

- (1) To identify network structure of various Reddit communities' response (both submissions and comments) to a specific event
- (2) To identify topics discussed in various Reddit communities in response to a specific event, and how the topics are shaped in the network
- (3) To understand how the network structure and submission topics evolve over the duration of the event

Data Collection

Example Data (Submission)

Subreddit name (OP) Original Poster Awards

2.7k Terra LUNA UST: Attack explained? Submission title

Number of upvotes

Anonymous (ID: Cni+IXC7)
TERRALUNA : ATTACK EXPLAINED
05/10/22(Tue)13:39:40 No. 48625257

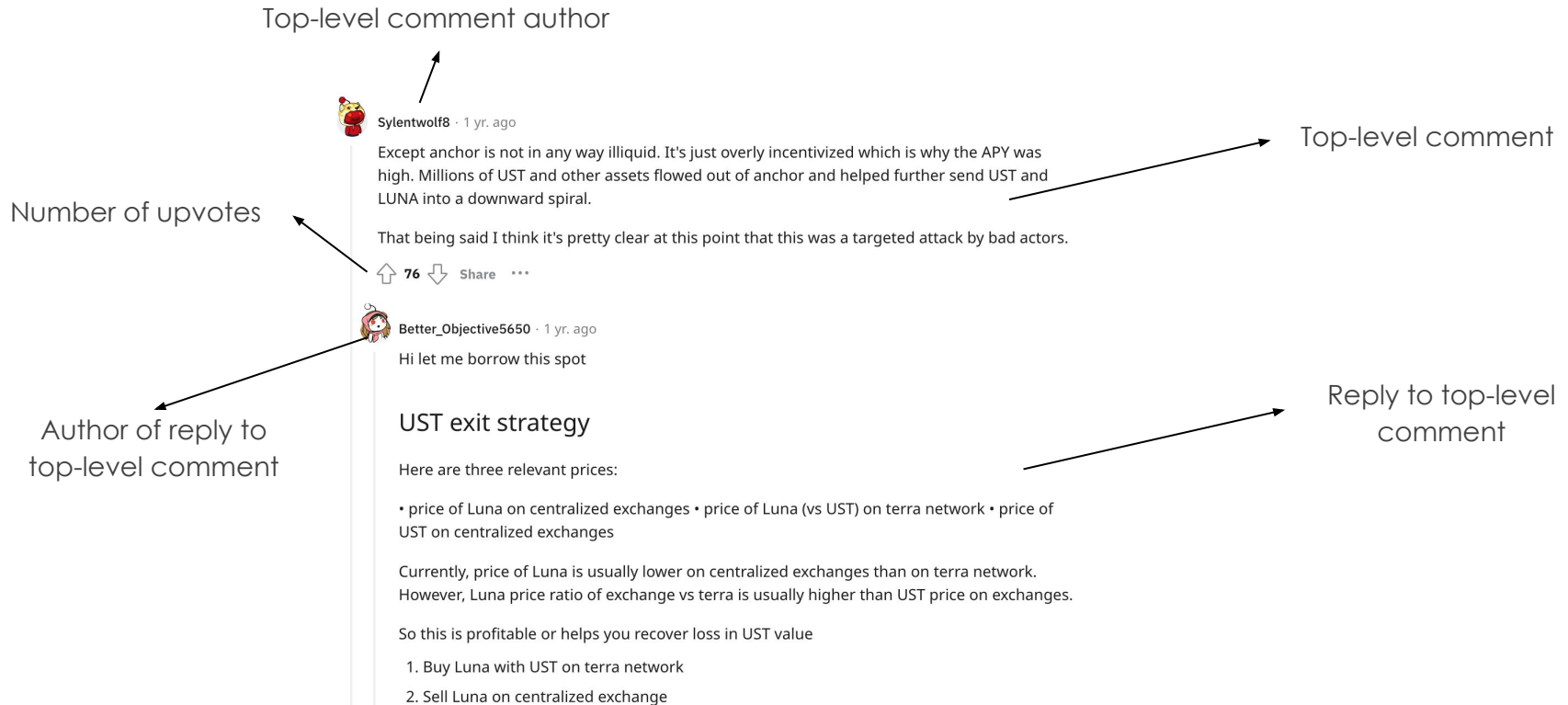
381.3KiB.png

Blackrock and Citadel borrowed 100K BTC from Gemini (it appears in their loan book). They swapped 25K of that BTC into UST; this was all done quietly in anticipation of the attack.

When the time was right, they called up Do Kwon at Terra Foundation and said they wanted to sell a lot of BTC for UST. As it was a large trade they told him they didn't want to move the market and asked if he would like to buy their large block of BTC at a discount for UST. Do Kwon took the bait. He gave them a huge chunk of UST, thus lowering the UST liquidity significantly. At that point, Blackrock/Citadel dumped all of the BTC and UST causing massive slippage and triggering a cascade of forced selling in both assets. The real problem was Blackrock/Citadel knew that Anchor, which holds a lot of LUNA, was a Ponzi scheme (they offer 20% staking APY for Christsake) and this crash would trigger more withdrawals than Anchor can repay. These forced withdrawals and selling would trigger a massive selloff in Luna, thus further breaking the \$1 peg and wrecking the

Submission content

Example Data (Comment)



Collect submissions and comments from Reddit

- Subreddits chosen:
 - r/TerraLuna (all submissions and comments)
 - r/Bitcoin (specific Terra (LUNA) related keywords only)
 - r/Cryptocurrency (specific Terra (LUNA) related keywords only)
- Period: Apr 29th to Jun 1st, 2022
- Method of data collection: PushShift API Wrapper (PSAW) ([link](#)) and apper (PRAW) ([link](#))



reddit

Number of submissions : 8,863

Number of comments : 153,446

Methodology

Network Analysis

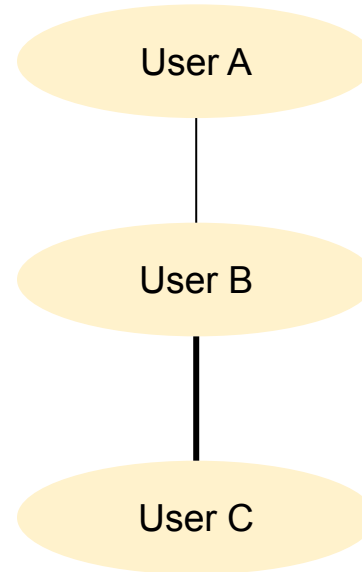
Study relationships
between entities in a
network

Users = nodes

Submissions and comments =
edges

Count of interaction between
entity-pairs = edge weights

Example



Edge (A, B): User B replied with a
comment to User A's
comment/submission post or vice
versa

Edge (B, C): User C replied with User
B's comment/submission post or vice
versa

Thicker line for B and C compared to A
and B means higher edge weight:
interaction between B and C happens
more frequently

Centrality Measures

Various Centrality
Measures

Degree Centrality

Number of links held by each
node

Closeness Centrality

Assigns each node a score
based on sum of shortest paths

Betweenness Centrality

Number of times a node lies on
the shortest path between other
nodes

Eigen Centrality

Calculate extended connections
of a node, identify nodes with
high influence

Methodology - Network Analysis (cont.)

Centrality Measures

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Calculate extended connections
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For Reddit?

Degree Centrality

How many other users a user have interacted with

Closeness Centrality

How “close”/“involved” a user is to topics being discussed

Betweenness Centrality

How aware a user is of what topics are being discussed in
multiple circles

Eigen Centrality

How good in terms of quality a user's interactions with others
are (interacting with other 'high quality' users)

Methodology - Network Analysis (cont.)

Centrality Measures

Degree Centrality

Number of links held by each node

For Reddit?

Degree Centrality

How many other users a user have interacted with

We will be using eigencentality, since it allows for connections between users to have a variable value, so that connecting to some “higher quality” users has more benefit than connecting to others.

Various Centrality Measures

Betweenness Centrality

Number of times a node lies on the shortest path between other nodes

Betweenness Centrality

How aware a user is of what topics are being discussed in multiple circles

Eigen Centrality

Calculate extended connections of a node, identify nodes with high influence

Eigen Centrality

How good in terms of quality a user's interactions with others are (interacting with other 'high quality' users)

Methodology - Network Analysis (cont.)

Eigen Centrality

How good in terms of quality a user's interactions with others are (interacting with other 'high quality' users)



Find top users with highest Eigen Centrality (overall)



Find top users with highest Eigen Centrality (per phase)

VADER (Valence Aware Dictionary and sEntiment Reasoner)

Analyze sentiment overall

Split sentiment analysis by phases

Split sentiment analysis by dates

Split sentiment analysis by subreddits

VADER (Valence Aware Dictionary and sEntiment Reasoner)

Corpus = submissions and comments from users with highest eigencentality values (both overall and per phase)



Sentiment analysis using VADER

Latent Dirichlet Allocation (LDA)

Corpus = submissions and comments from users with highest eigencentality values (both overall and per phase)



Topic identification using Latent Dirichlet Allocation

Timeline

Timeline

May 7th-9th

stablecoin terraUSD (UST), which is supposed to maintain a \$1 peg, started to wobble and fell to 35 cents

May 10-11th

More than half, 58%, of traders place futures bets on higher LUNA prices despite drop, leading to \$63 million in liquidations.

May 12th

LUNA's price fell from \$80 to a few cents.

The Terra blockchain is officially halted for the first time.

May 13th

The OKX and Binance end trading of Terra tokens.

Do Kwon submits a "Revival Plan"

May 16th

Do Kwon proposes to fork Terra without UST, calling the current chain "Terra Classic."

May 24th

South Korean authorities are reportedly looking to more closely scrutinize crypto exchanges.

May 25th

Terra validators vote to approve Do Kwon's plan to launch a new blockchain tagged "Terra 2.0" without a stablecoin.

May 28th

Terra 2.0 launches, with LUNA 2 airdrop to follow.

Timeline - Split into Phases (for analysis)

Phase 1

29 Apr - 6 May
Pre-event

Phase 2

7 - 9 May
UST peg lost

Phase 3

10 - 13 May
Further collapse,
exchanges stop
trading

Phase 4

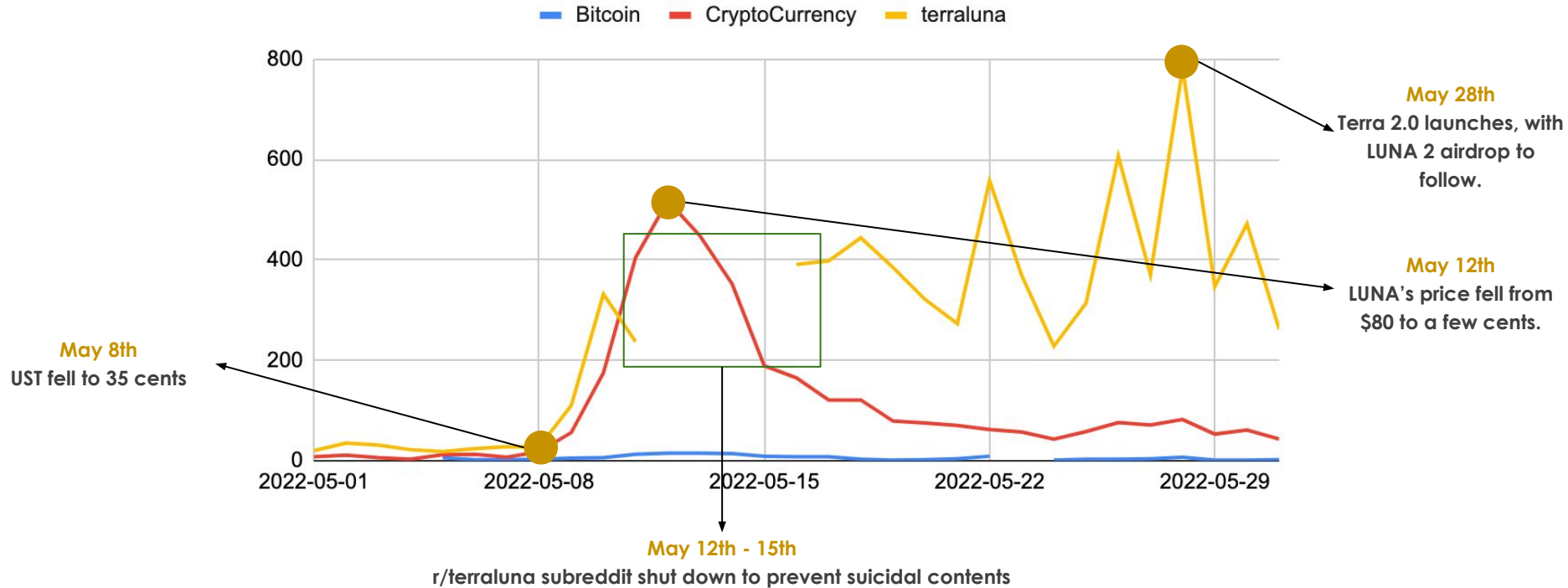
14 - 28 May
Revival plan
announced

Phase 5

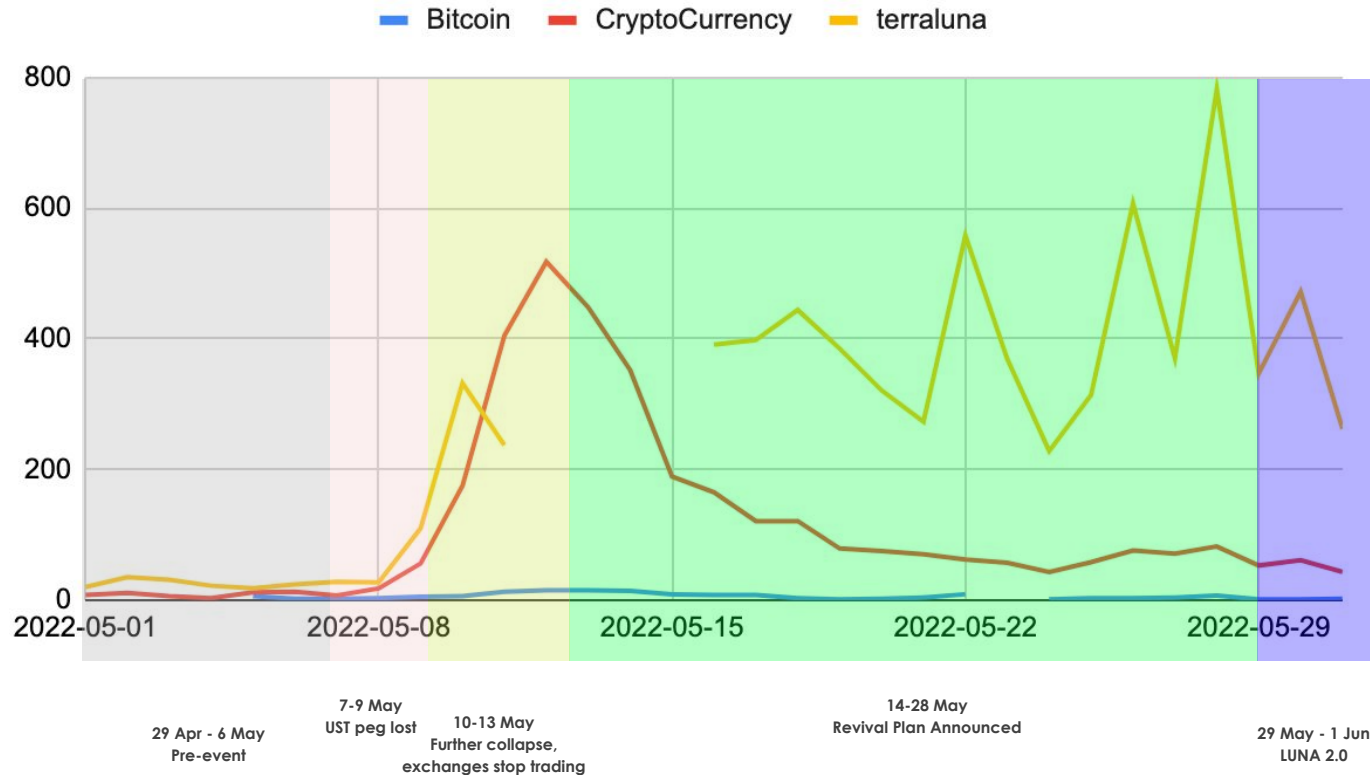
29 May - 1 Jun
LUNA 2.0

Timeline - Submissions

Volume of Submissions by Date and Subreddit

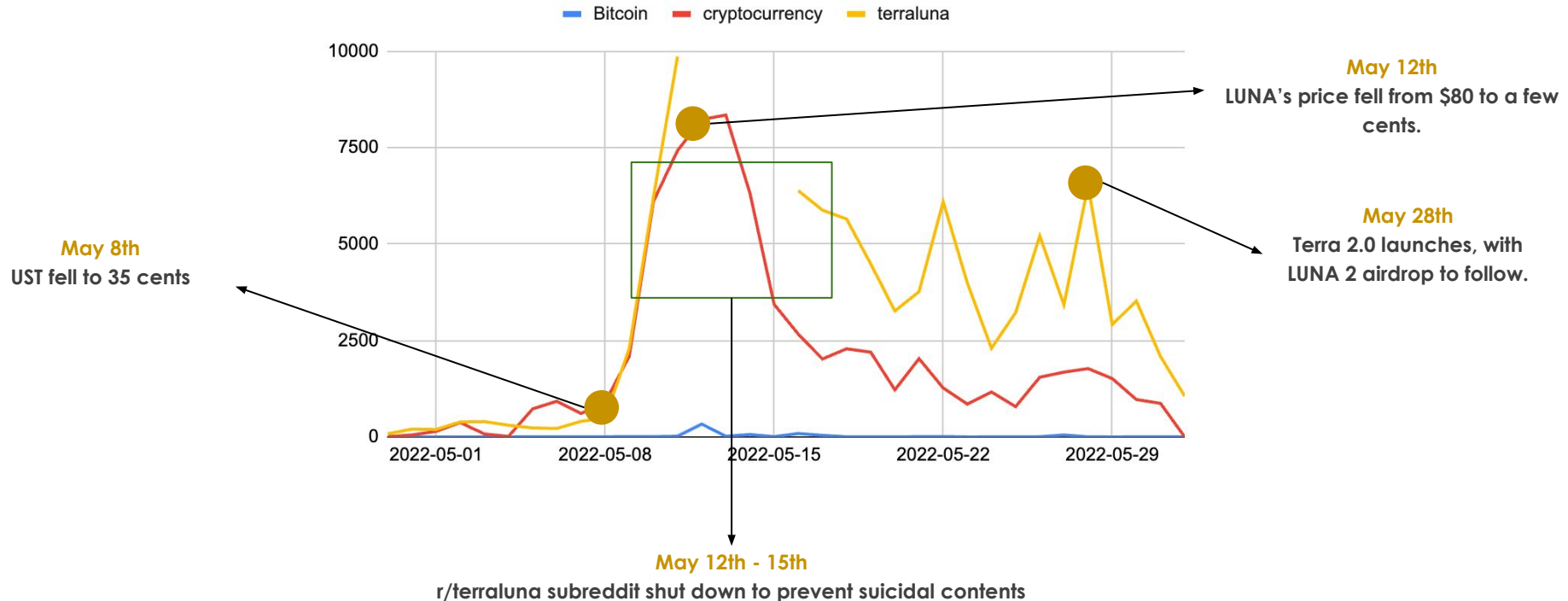


Timeline - Submission by phases

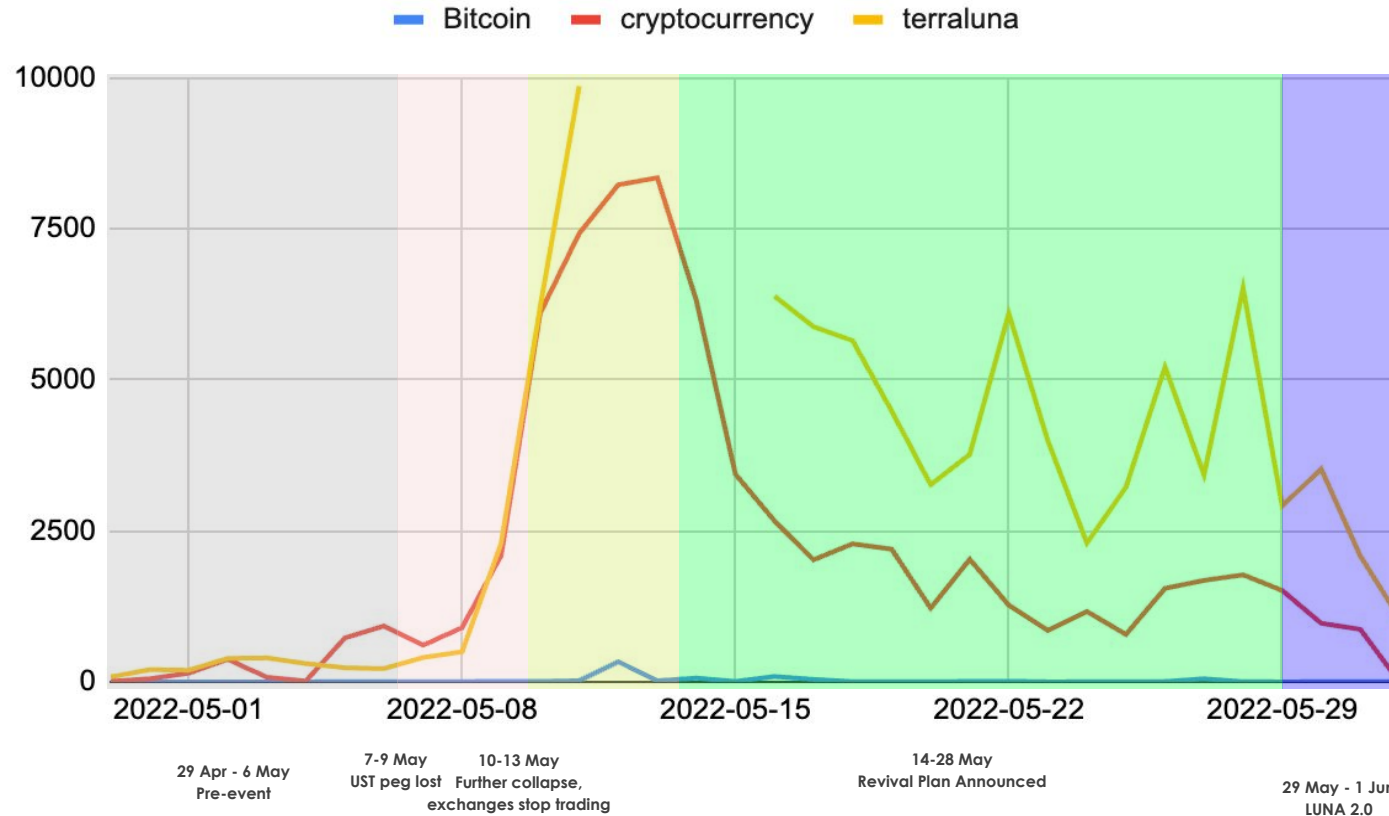


Timeline - Submissions and Comments

Volume of Submissions and Comments by Date and Subreddit

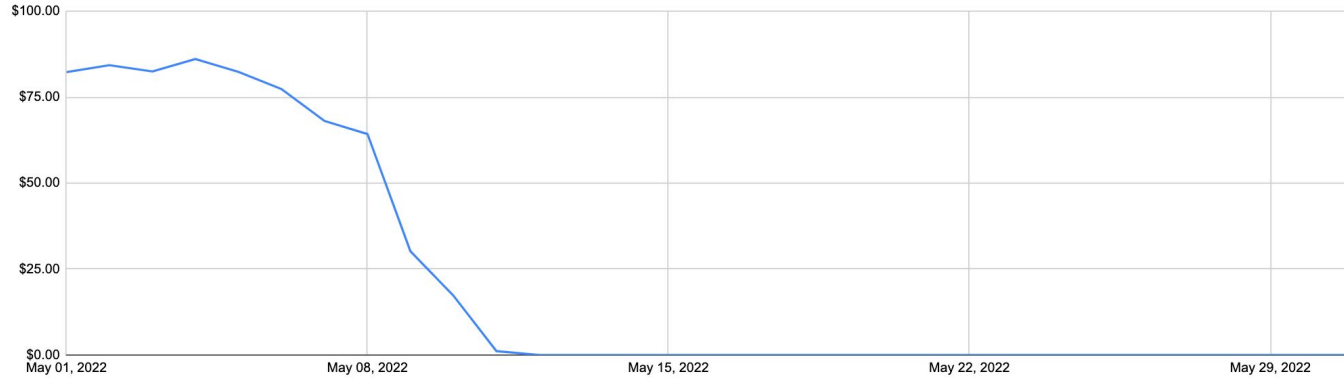


Timeline - Submissions and Comments by phases

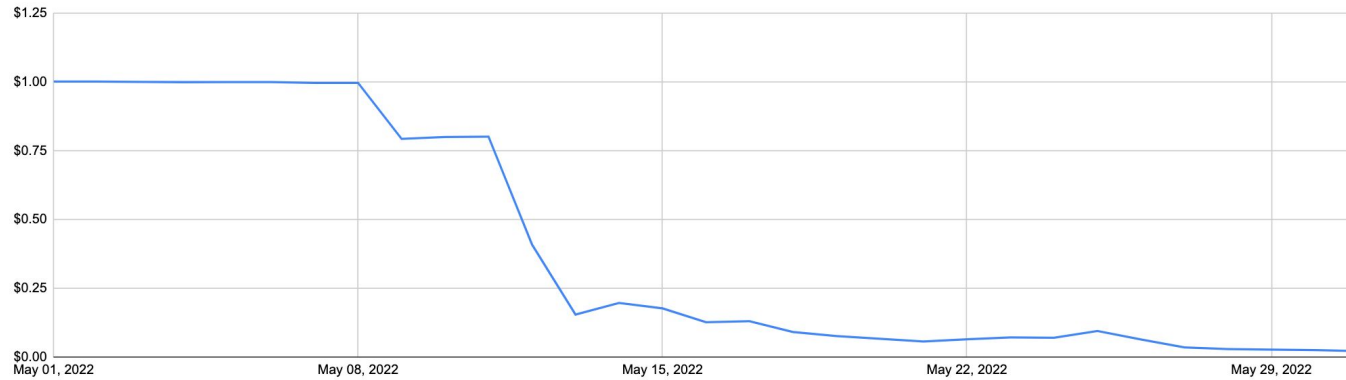


Timeline - Price

LUNA

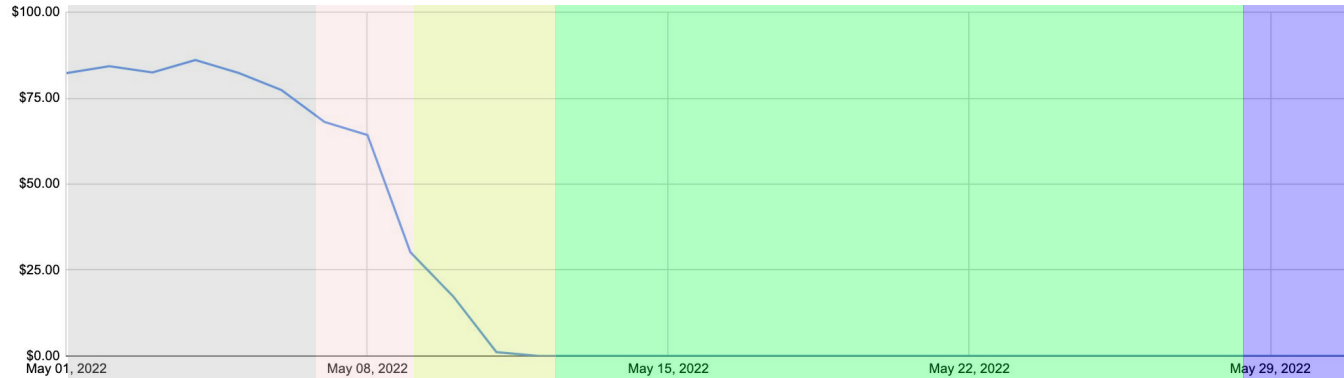


UST



Timeline - Price by Phases

LUNA



UST



29 Apr - 6 May
Pre-event

7-9 May
UST peg lost

10-13 May
Further collapse,
exchanges stop trading

14-28 May
Revival Plan Announced

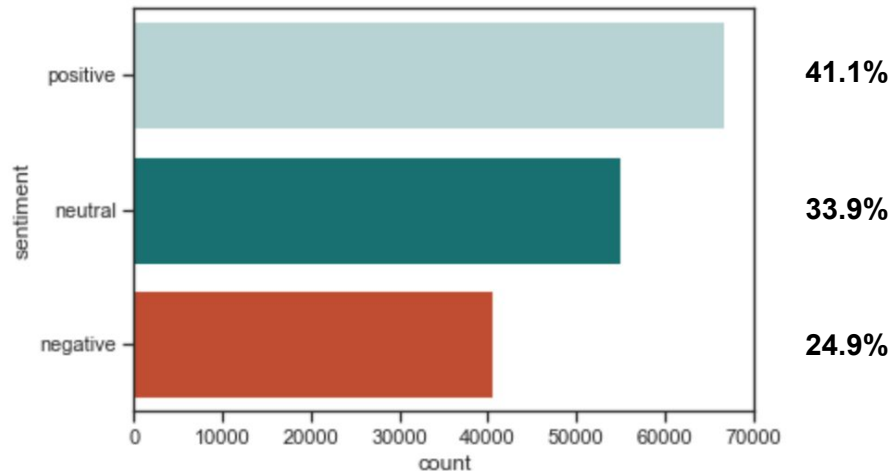
29 May - 1 Jun
LUNA 2.0

Analysis/Findings

Sentiment Analysis

Overall

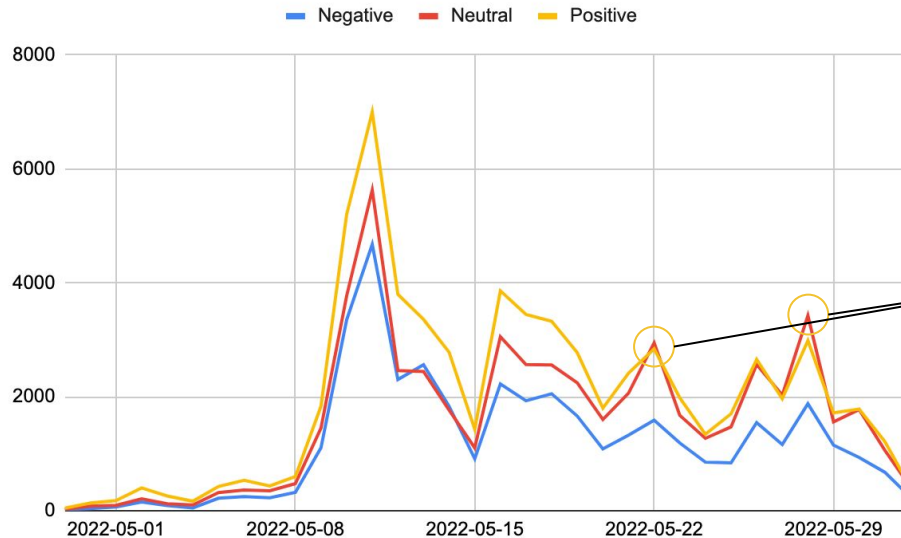
Sentiment Evolution - Overall



Submissions and comments are
mostly positive

But neutral and negative posts are not
insignificant in terms of volume

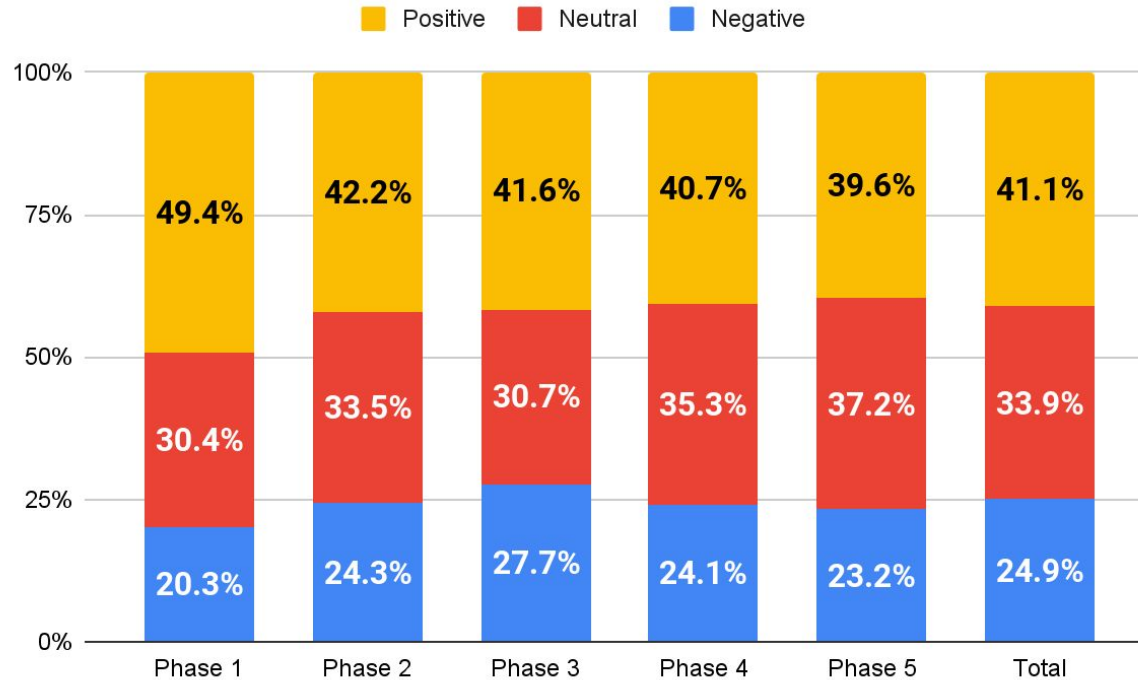
Sentiment Evolution - Day by day



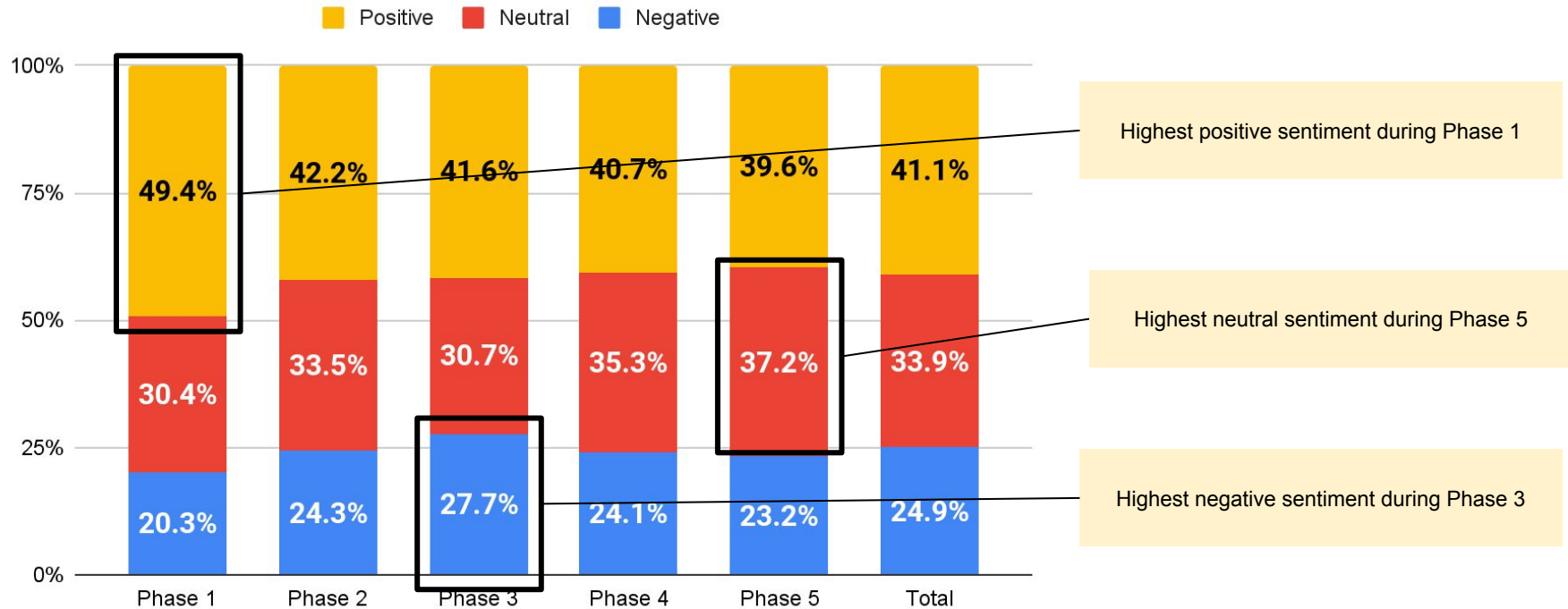
Positive posts dominate **almost throughout the analysis period**

Exceptions can be seen on some particular moments i.e. **May 22nd and May 28th** (part of Phase 4 - Revival Plan Announcement) where more neutral sentiments were seen

Sentiment Evolution - By phase



Sentiment Evolution - By phase



Analysis/Findings

Network Analysis

Overall

Network Analysis - Overall - Top Users (Eigencentrality)

User	Eigencentrality	Volume (posts/comments)	Net Sentiment	Topic Keywords	Period of peak activity
CommieFunkoPopFan	0.14	667	+4.6%	terraluna, money, people, get, like, burn, buy, coins, think, good	May 21st and 22nd
candiedassballs	0.13	483	+7.8%	terraluna, Do Kwon, money, make, like, burn, people, mod, dont, would	May 22nd
D33N5	0.12	442	+11.7%	terraluna, would, get, million, twitter, tokens, lol, wallet, burn, money	May 22nd and 25th
Atsoc1993	0.12	351	+8.9%	terraluna, wallet, post, like, even, one, would, burn, still, people	May 18th and 22nd
Bucksaway03	0.11	262	+0.8%	terraluna, people, going, shit, money, still, like, even, market, got	May 11th to 15th

Network Analysis - Overall - Top Users (Eigencentrality)

User	Eigencentrality	Volume (posts/comments)	Net Sentiment	Topic Keywords	Period of peak activity
CommieFunkoPopFan	0.14	667	+4.6%	Most top users expressed slightly positive sentiment in their submissions and comments	
candiedassballs	0.13	483	+7.8%		
D33N5	0.12	442	+11.7%		
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4 of the 5 top users are most active during Phase 4 (Revival Plan Announcement)

Network Analysis - Overall - Top Users (Eigencentality)

User	Eigencentality	Volume (posts/comments)	Net Sentiment	Topic Keywords	Period of peak activity
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				terraluna, would, get, million, twitter, tokens, lol, wallet, burn, money	May 22nd and 25th
				terraluna, wallet, post, like, even, one, would, burn, still, people	May 18th and 22nd
				terraluna, people, going, shit, money, still, like, even, market, got	May 11th to 15th

Top topics from top users revolve around the mechanics of the LUNA revival plan announced by the founder Do Kwon

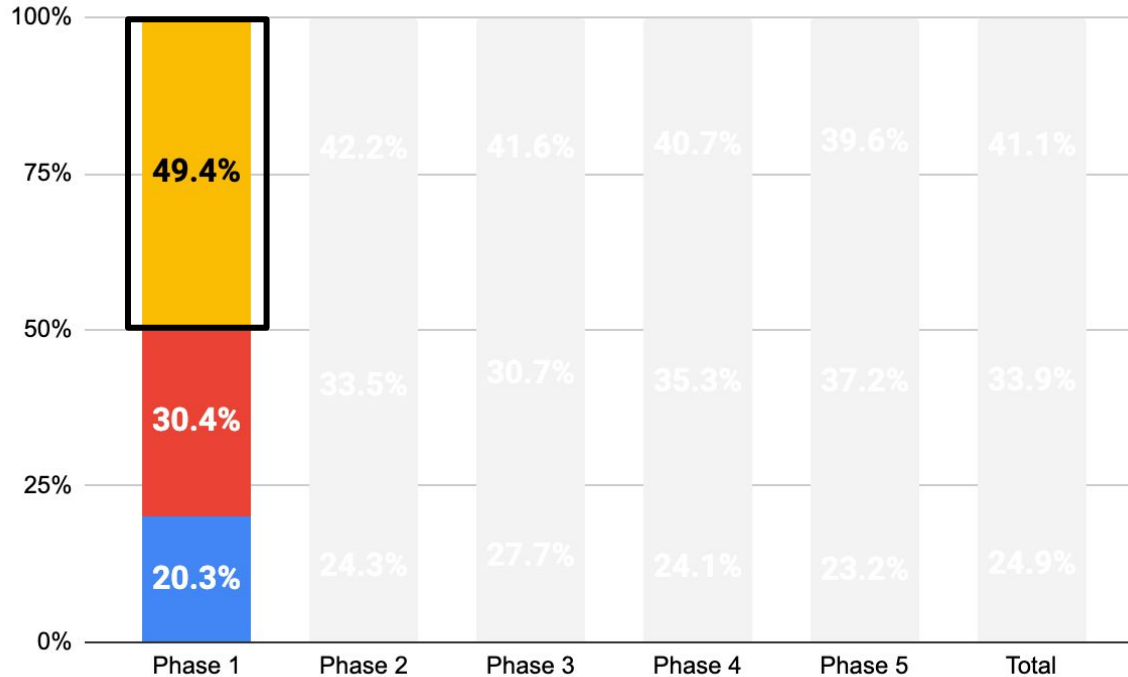
Most of them also commented and answered to posts asking questions regarding the revival plan

Analysis/Findings

Phase 1

Pre-event

Sentiment Evolution - Phase 1



Highest positive sentiment compared to other phases, likely due to the **collapse not taking place yet**

Sample Posts/Comments (Positive)

"giving a big shout out to you!!! i had given up on my tokens when i tried to bridge from terra station to metamask and with your tips i went back into the bridge and was able to find that my tokens were in the ethereum and from there i was able to copy the address and finish the transfer!!!!"

"fortune favors the rich"

"yes, terra luna, my favorite person. terra luna is a great cryptocurrency to consider."

Network Analysis - Phase 1

Top Users (based on eigencentality) - Phase 1 (Pre-event)

SilverHoard
eigencentality = 0.69

Number of posts: 28
Net sentiment: +13.6%

Topic keywords:
market, people, much, money, like, control, crypto, make, potential, see

Sample Posts/Comments from user

"first looked into it in 2015, but only really did my homework and got into it late 2017. 2018 was my baptism by fire. been here ever since."

"badly hurt for sure. although perhaps in hindsight it might be a necessary evil. hard to tell at this point in time. it sure does feel like the crypto space is at an important crossroads."

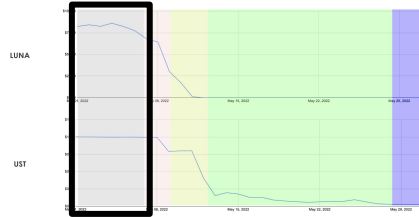
"i'd say it's both an ecosystem and a market, and both are necessary."

"luckily i learned my lesson the first time around. 2018 was a wild ride. but still, this can get pretty frustrating and tiresome."

Top user SilverHoard posted **useful and positive Crypto-related advices** and made comments of similar sentiment and context on other users' posts

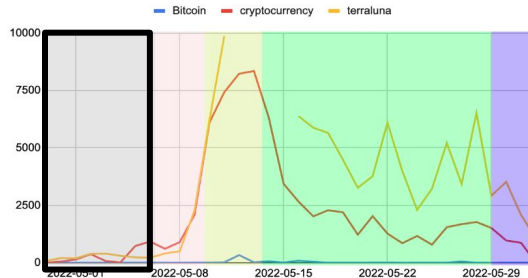
Phase 1 - Findings

Price



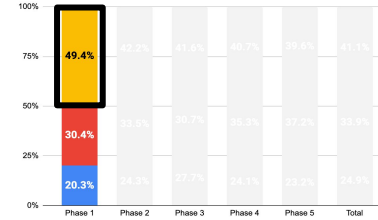
Price of UST and LUNA were still stable during this time

Volume of Posts/Comments



Volume of submissions were lower compared to the rest of the month

Sentiment



Highest positive sentiment compared to other phases, likely due to the **collapse not taking place yet**

Network Structure

One top user (SilverHoard)

useful and positive posts/comments

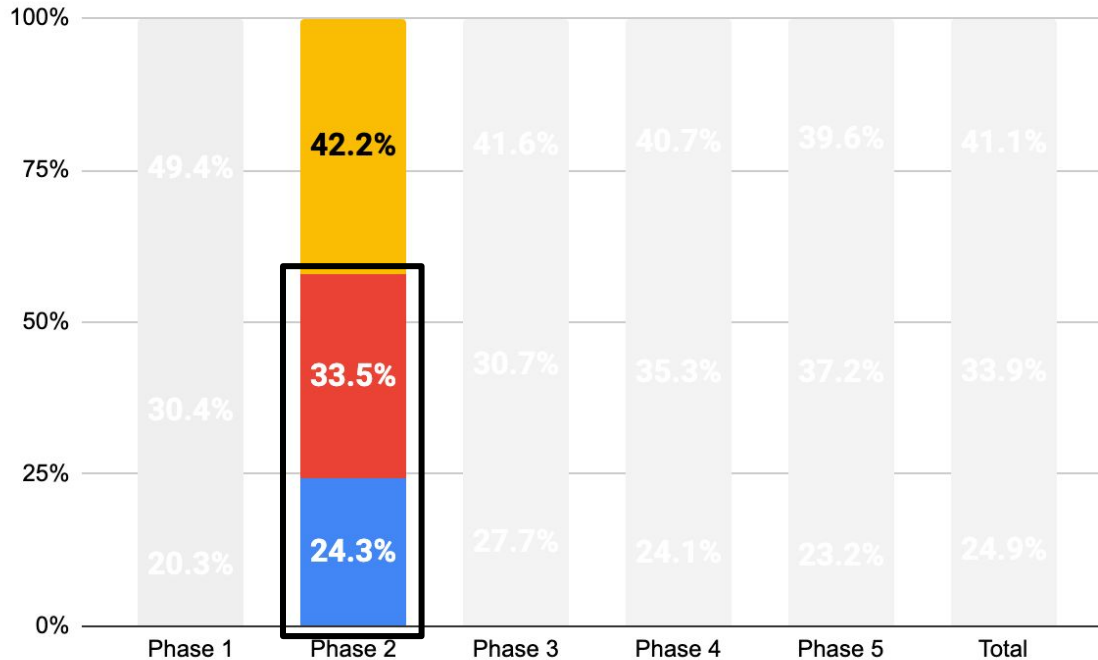
Other than SilverHoard no other users' eigencentality were significantly high enough to be looked deeper into.

Analysis/Findings

Phase 2

UST peg lost

Sentiment Evolution - Phase 2



Negative and neutral sentiment increases compared to Phase 1, due to **collapse/depeg starting to happen**

Sample Posts/Comments (Neutral)

"not invested in luna, but intrigued by the news and following."

Sample Posts/Comments (Negative)

"terra luna price crash ! should you worry?"

"aight a couple days later, ust is at 0.94. i amend my previous statement: this is in fact a serious depeg compounded by the fact that it isn't immediately correcting."

Network Analysis - Phase 2

Top Users (based on eigencentrality) - Phase 2 (UST peg lost)

gnarley_quinn
eigencentrality = 0.57

Number of posts: 33
Net sentiment: +9.6%

Topic keywords:
terraluna, btc, started, price, depeg, stables, left, peg, sold, increased

Sample Posts/Comments from user

"what were the terms again? it had to stay above \$80-ish? and the bet was like \$10m or something right?"

"well even a few hours ago has still been a better move than holding right now. haha well done. great for a laugh."

"sorry man. I'm sure it is a very bitter pill to take right now."

Odlavso
eigencentrality = 0.35

Number of posts: 14
Net sentiment: -6.9%

Topic keywords:
Terraluna, usd, gif, giphy, crypto, live, right, price, worth, supply

Sample Posts/Comments from user

"best of breed? more like shit out of luck, am i right?"

"this wouldn't be a loss, this would be the end for luna"

"have a drink and cry"

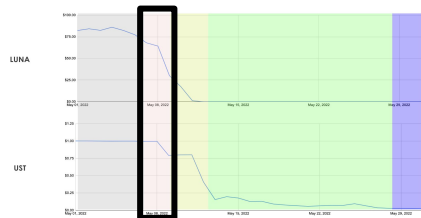
There were two users with significantly higher eigencentrality compared to others, although sentiment-wise they are quite different

gnarley_quinn's posts are mostly positive in terms of sentiment, showing concern for others and optimism. Topic discussed include **the impacts of the UST depegging and whether people should hold or sell their LUNA holdings.**

On the other hand, **Odlavso's** overall sentiment is negative and pessimistic. The user commented on **LUNA and UST's decreasing prices, and how the situation is bad for him/her and other holders.**

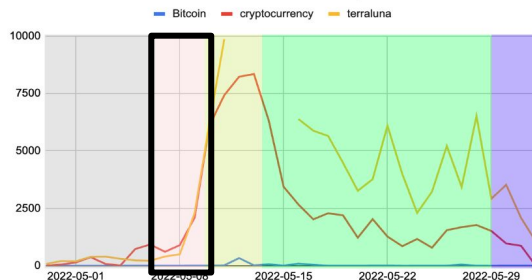
Phase 2 - Findings

Price



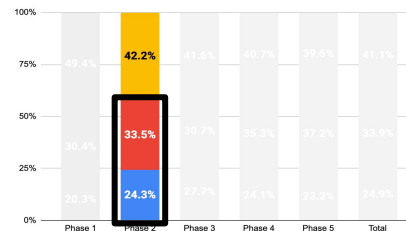
Price of UST dropped below \$1 (depeg), and LUNA price started to see significant drops

Volume of Posts/Comments



Volume of submissions started increasing slightly across all analyzed subreddits

Sentiment



Negative and neutral sentiment increases compared to Phase 1, due to **collapse/depeg starting to happen**

Network Structure

Two top users: gnarley_quinn and Odlavso

Contrasting tones between the two; one positive and optimistic while the other is more negative

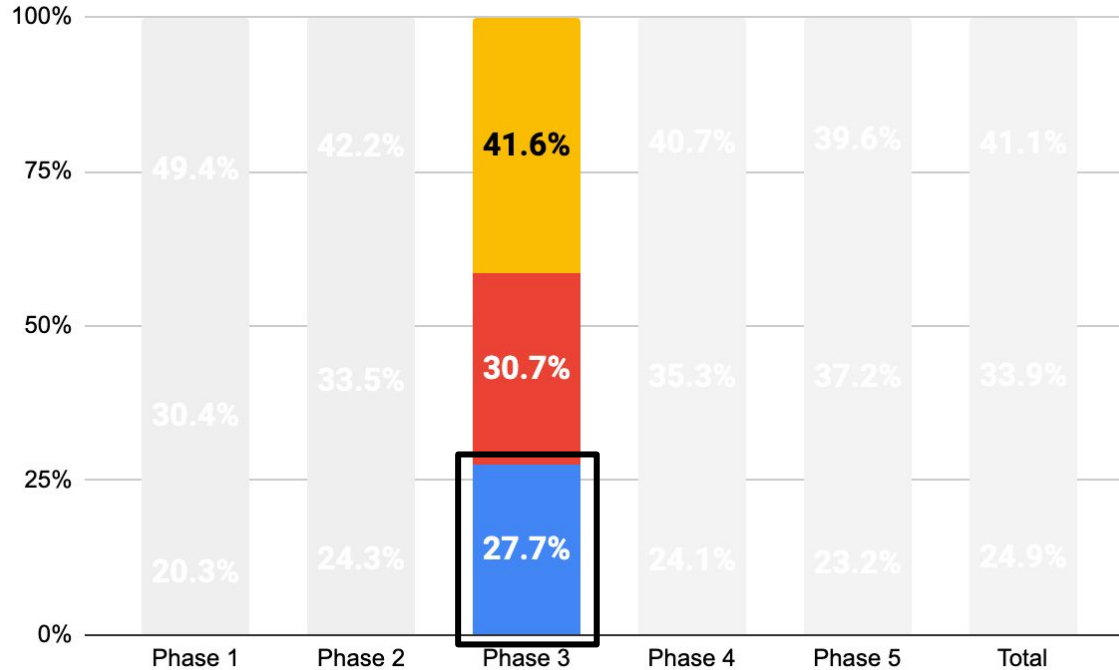
Topics revolve around their responses to the price drops and whether to hold or to sell their holdings

Analysis/Findings

Phase 3

Further collapse, exchanges stop trading

Sentiment Evolution - Phase 3



Negative sentiment increases even further, reaching its highest compared to other phases. This is due to **the peak of the collapse happening and exchanges halting LUNA and UST trades**

Sample Posts/Comments (Negative)

"i thought withdrawals were suspended on binance, not deposits? help pls"

"so fellas the last 3-4 days we all know what happened ... very sad for all those people that lost fortunes.."

"no joke. no recent posts. the reddit page r/terraluna has shut down as most posts were about suicide."

Network Analysis - Phase 3

Top Users (based on eigencentality) - Phase 3 (Further collapse)

hearsdemons
eigencentality = 0.20

Number of posts: 11
Net sentiment: +7.0%

Topic keywords:
terraluna, bitcoin, like, people, crypto,
coins, stable, coin, one, money

SkepticalCryptoDude
eigencentality = 0.18

Number of posts: 37
Net sentiment: +5.9%

Topic keywords:
Crypto, terraluna, market, think, could, term,
people, lot, nothing, crash

Underrated321
eigencentality = 0.16

Number of posts: 88
Net sentiment: -0.7%

Topic keywords:
terraluna, billion, money, people, gif,
would, leverage, hours, like, liquidated

Sample Posts/Comments from user

"guys, the fear-greed index is at 12, extreme fear. we're seeing a lot of fear, a lot of uncertainty. the luna situation has only exacerbated what was already a depressed market. but veteran investors are looking at this unmoved."

Sample Posts/Comments from user

"it was fascinating. we all complained about going sideways and wanted the market to do something. welp, it did."

"i genuinely feel for luna holders. it looked so strong and seemed as if it would be the best performing alt in the bear market, and wham. crypto is wild"

Sample Posts/Comments from user

"exactly. if they allow for such a mistake to happen, then it deserves to die and not be invested in"

*"holy f*ck the liquidations are now at \$2.75 billion"*

*"karma is a b*tch"*

There were three users with higher eigencentality.

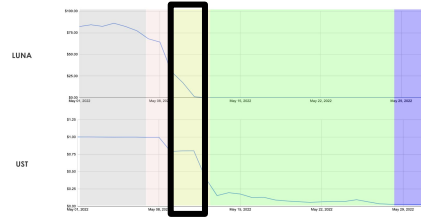
Two users posted less, but showed higher centrality and higher net sentiment.

hearsdemons and **SkepticalCryptoDude** made comments/posted submissions regarding **what they think is happening with the collapse, shared advices to others, and expressed how they sympathize with those who lost a lot.**

Another top user **Underrated321** took a more pessimistic approach by focusing on the negative side of the collapse i.e. **liquidation volume and the Terra LUNA project being fundamentally flawed.**

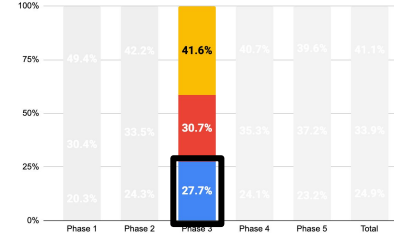
Phase 3 - Findings

Price



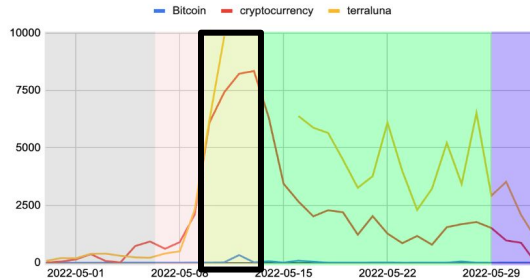
Biggest drops in terms of price for both LUNA and UST

Sentiment



Highest negative sentiment proportion compared to other phases

Volume of Posts/Comments



Volume of submissions peaked for non-TerraLUNA subreddits, and partially for TerraLUNA subreddit up until May 11th before it was shut down due to suicidal topics from May 12th to 15th.

Network Structure

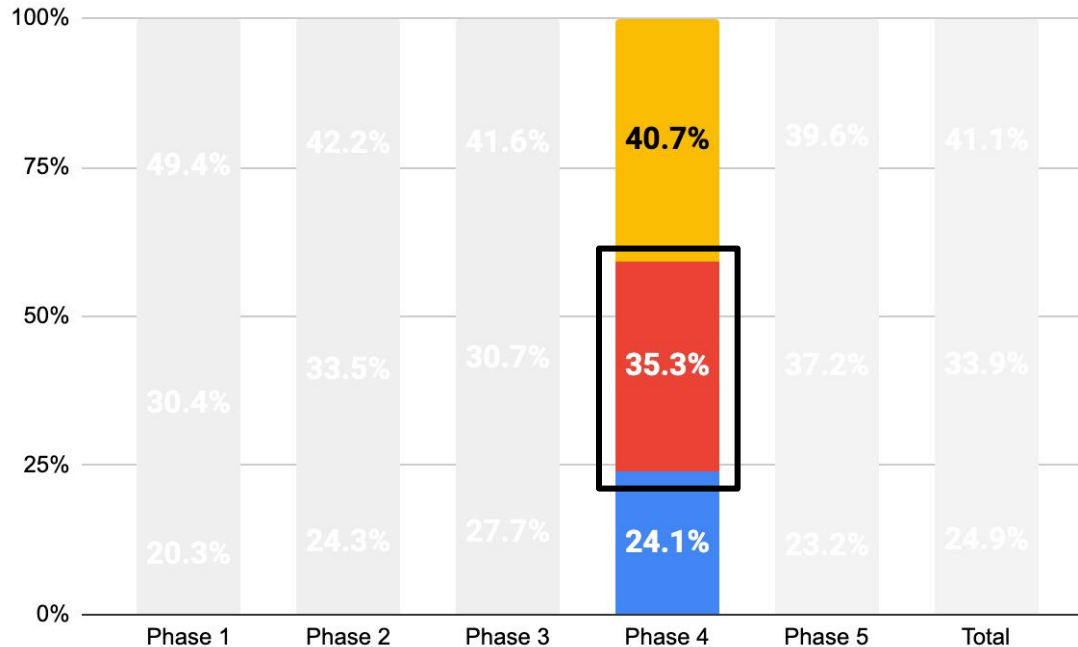
Three top users: hearsdemons, SkepticalCryptoDude, and Underrated321

First two users shared positive messages, while Underrated321 posted more negative comments

Topics revolve around the details of the collapse, what they predict will happen next, and advices to others

Analysis/Findings Phase 4 Revival Plan

Sentiment Evolution - Phase 4



Neutral sentiment increases and positive/negative sentiment decreases from the previous phase. This is likely caused by **submissions/comments posted are related to the revival plan; either in the form of questions or updates.**

Sample Posts/Comments (Neutral)

"can someone that knows the luna situation shed some light on what this may mean"

"anyone know what will happen to wluna coins before or after any potential fork?"

"dokwon maybe already on the process of burning lunas with his own money or funded from outside partners but just acting opposed to his plan in order to keep the price of luna low until he acquires above certain percentage of ownership of supply. then no reason to excite investors just yet. dokwon may be is already on his plan of burning lunas"

Network Analysis - Phase 4

Top Users (based on eigencentality) - Phase 4 (Revival Plan Announced)

CommieFunkoPopFan
eigencentality = 0.21

Number of posts: 604
Net sentiment: +4.2%

Topic keywords:
terraluna, money, people, get, like,
burn, buy, coins, think, good

Sample Posts/Comments from user

"if your intention is to swing trade it, you should probably wait for a lower entry point. but you do you"

"you can still buy lunc on cryptocom, hitbtc and a few other places for the right price if you want to. as long as it enables withdrawals you're good."

candiedassballs
eigencentality = 0.20

Number of posts: 482
Net sentiment: +7.7%

Topic keywords:
terraluna, Do Kwon, money, make,
like, burn, people, mod, dont, would

Sample Posts/Comments from user

"dokwon tweeted, deploying capital, steady lads luna is going down a lot even after the burn, dont worry though its all according to plan, no one panic, its okay!"

"make luna great again! first excutive order will be luna stimulus for everyone, second step is make dokwon financial prez advisor."

D33N5
eigencentality = 0.17

Number of posts: 355
Net sentiment: +11.1%

Topic keywords:
terraluna, twitter, million, lol, tokens,
would, get, money, people, status

Sample Posts/Comments from user

"i would expect an announcement after the vote closes later, basically any exchange that trades in luna will get an airdrop of luna 2 which they will have to distribute among their holders"

"yes, in time, i'm going to hold my bag for the next few years and see how it develops, looks like i have a vested interest in the luna chains for the next couple of years now anyway lol"

The three top users with highest eigencentality are the **same users who tops the centrality across all phases.**

Top topics from top users revolve around the **the LUNA revival plan announced by the founder Do Kwon.**

Most of them also **commented and answered to posts asking questions regarding the revival plan.**

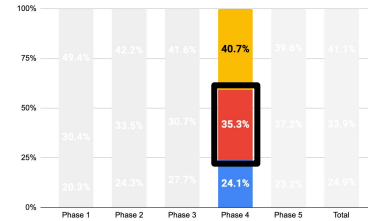
Phase 4 - Findings

Price



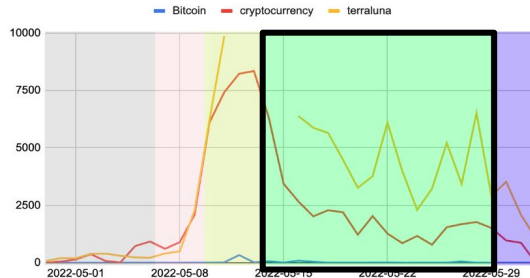
Prices stagnated at the low levels post-collapse

Sentiment



Positive sentiments recovered, mostly from posts in r/TerraLuna from hopeful bagholders responding to the revival plan

Volume of Posts/Comments



Volume of submissions tapered down for non-TerraLUNA subreddits, but increased very significantly in r/TerraLuna

Network Structure

Three top users who are also the overall top 3 users: CommieFunkoPopFan, candiedassballs, and D33N5

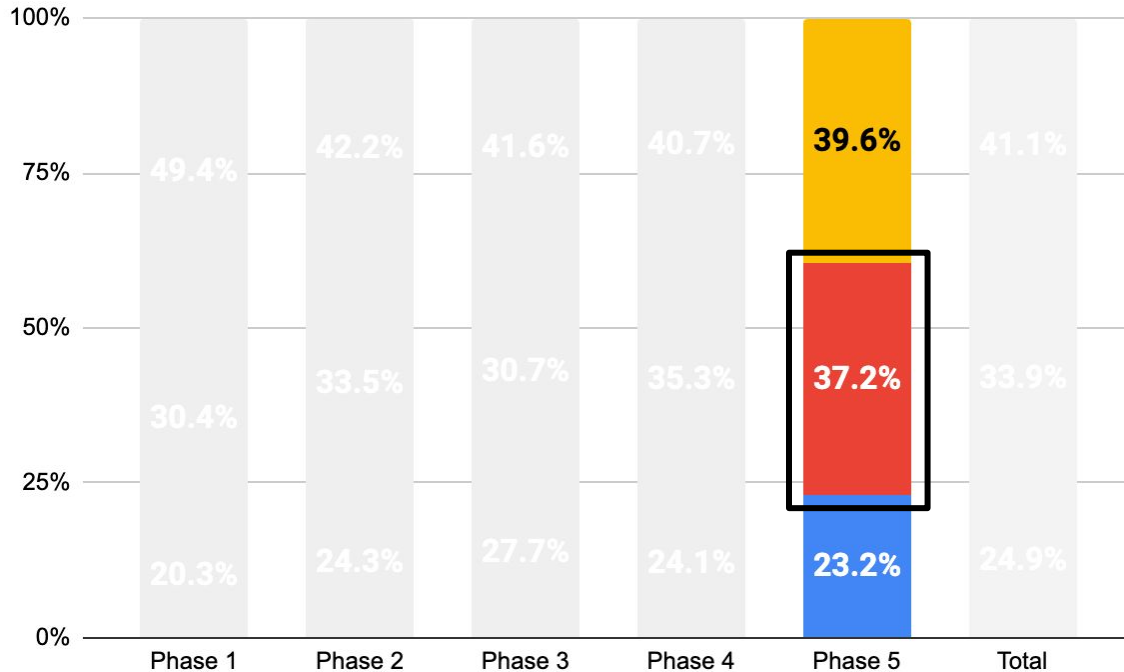
All users showed net positive sentiments, with topics include details on the revival plan and responses to questions posted by other users

Analysis/Findings

Phase 5

LUNA 2.0

Sentiment Evolution - Phase 5



Phase 5 has the highest proportion of neutral sentiment posts. Most of posts were **questions asked by users on the plan and the new LUNA token.**

Sample Posts/Comments (Neutral)

"weekly recap: major crypto developments go live with terra 2.0"

"can i have pros and cons of investing into luna classic. why will it go up and does it have any real usability?"

"how many luna tokens are currently needed to become a validator? how many luna tokens are currently needed to become a validator?"

Network Analysis - Phase 5

Top Users (based on eigencentrality) - Phase 5 (LUNA 2.0)

Best_Satisfaction308
eigencentrality = 0.36

Number of posts: 138
Net sentiment: +10.8%

Topic keywords:
terraluna, binance, new, think,
money, trading, know, time, open

Sample Posts/Comments from user

"I'm curious what people think. I think there is a reason binance support it and will re list it and also list the new luna. yes i will buy lunc."

"That's true. then just hope they have a plan. I guess there is a reason that most of the exchange supported luna 2"

Jabulon
eigencentrality = 0.20

Number of posts: 80
Net sentiment: +10.9%

Topic keywords:
burn, terraluna, like, dokwon, even,
supply, would, could, think, transaction

Sample Posts/Comments from user

"the website for the project changed to talk about luna2 not luna1, i'm not sure you can make proposals for lunac"

"someone make a good burn proposal for luna1 pls. just double the tx fees and send those straight to burn, and let all validation burn from now on."

Historical-Camel-168
eigencentrality = 0.20

Number of posts: 23
Net sentiment: +5.8%

Topic keywords:
terraluna, people, dokwon, money,
community, png, buy, crypto, new, get

Sample Posts/Comments from user

"we are making the comeback of the century! luna 2.0 will not get anyones money back as evidence by the failed launch because the trust is gone but as a community we can make luna classic succeed!! sold my luna 2.0 at 8 dollars to buy lunc at 0.00008 and burned it!"

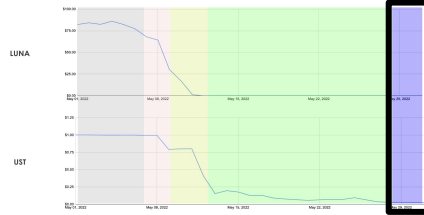
"just a healthy correction. 100x soon easy"

In phase 5, there were three top users with considerably highest eigencentrality compared to others; these users are:
Best_Satisfaction308, Jabulon, and Historical-Camel-168.

Top topics from top users revolve around **optimism with LUNA 2.0 and their plans regarding it.**

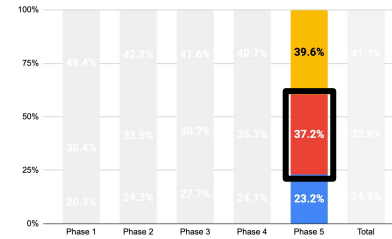
Phase 5 - Findings

Price



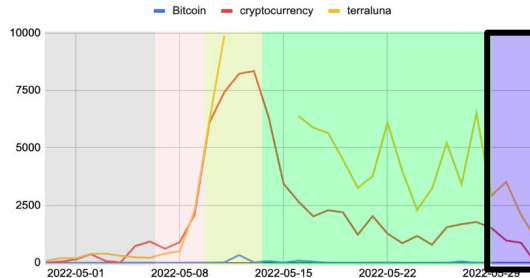
Prices improved very slightly post LUNA 2.0 launch, but fell back down

Sentiment



More posts with neutral sentiments compared to other phases

Volume of Posts/Comments



Volume of submissions decreased from phase 4

Network Structure

We identified three top users in phase 5

Top topics from these top users revolve around optimism with LUNA 2.0 and their plans regarding it

Conclusion

Key learning points

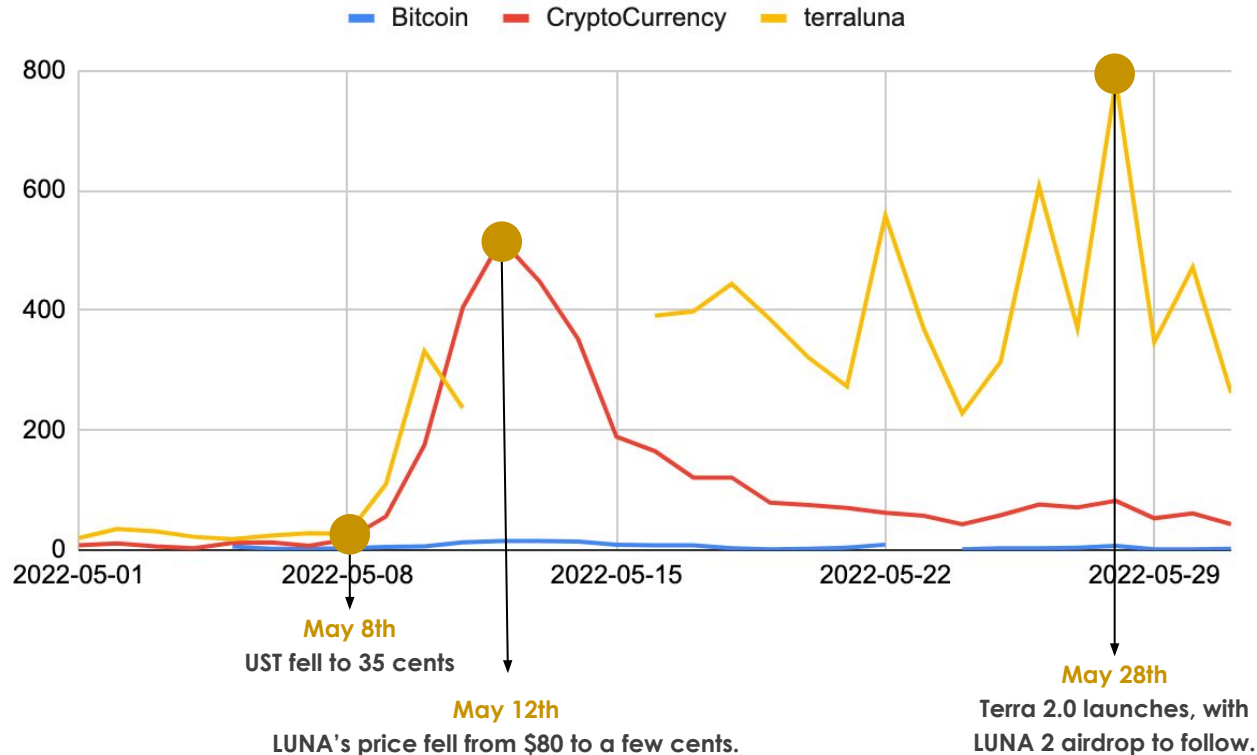
- Evolution of network structure, rise of influential/top users, and how topics shape during the course of event
- Generally, as **volume of discussion grows, more points of centrality appear, but this is not always the case**
 - **Phase 4 contains the top users on overall timeline**, despite daily volume being highest during Phase 3
- Top users **do not tend to be very polarizing** (i.e. extremely positive or extremely negative) in terms of sentiment, and are the ones who **express their opinion, knowledge, and information in a more clear and verbose manner**
 - As seen in the analysis for all phases, the net sentiments for these top users are **at most slightly skewed to positive**
 - Additionally, language-wise, the verbatims we see for these users tend to be **well-constructed and thorough**

Q&A

Appendix

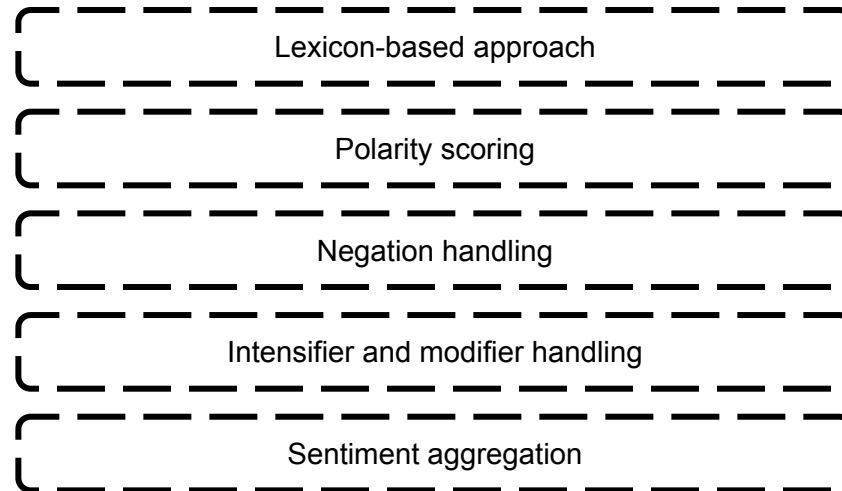
Timeline - Submissions

Volume of Submissions by Date and Subreddit



VADER (Valence Aware Dictionary and sEntiment Reasoner)

- Combination of...
 - Sentiment lexicon (a dictionary of words and their associated sentiment scores) + grammatical rules



Network Analysis

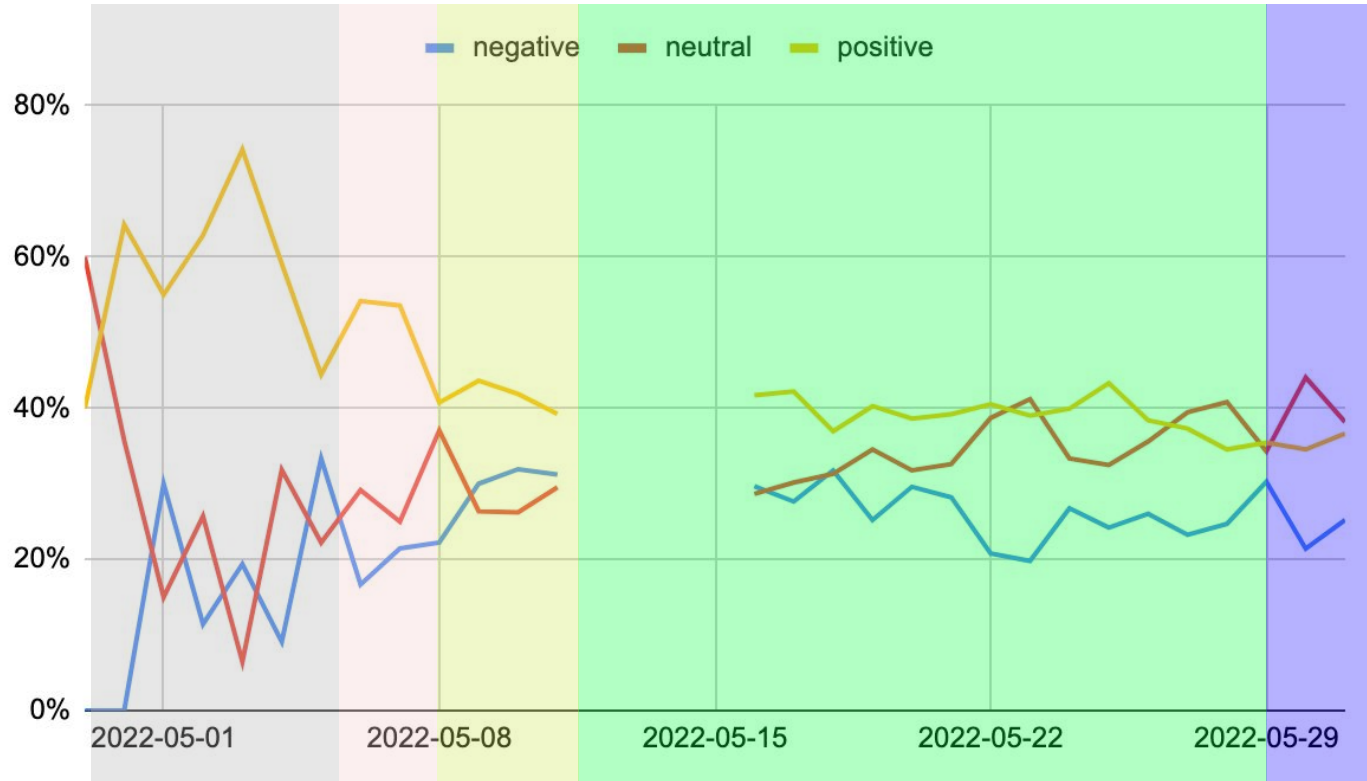
Corpus

Create graph where words
are the nodes and word
bigram combinations are the
edges

Create separate graph for
different periods

Topic Evolution - Network Analysis (1)

Sentiment Evolution - LUNA Subreddit



sentiment

29 Apr - 6 May
Pre-event

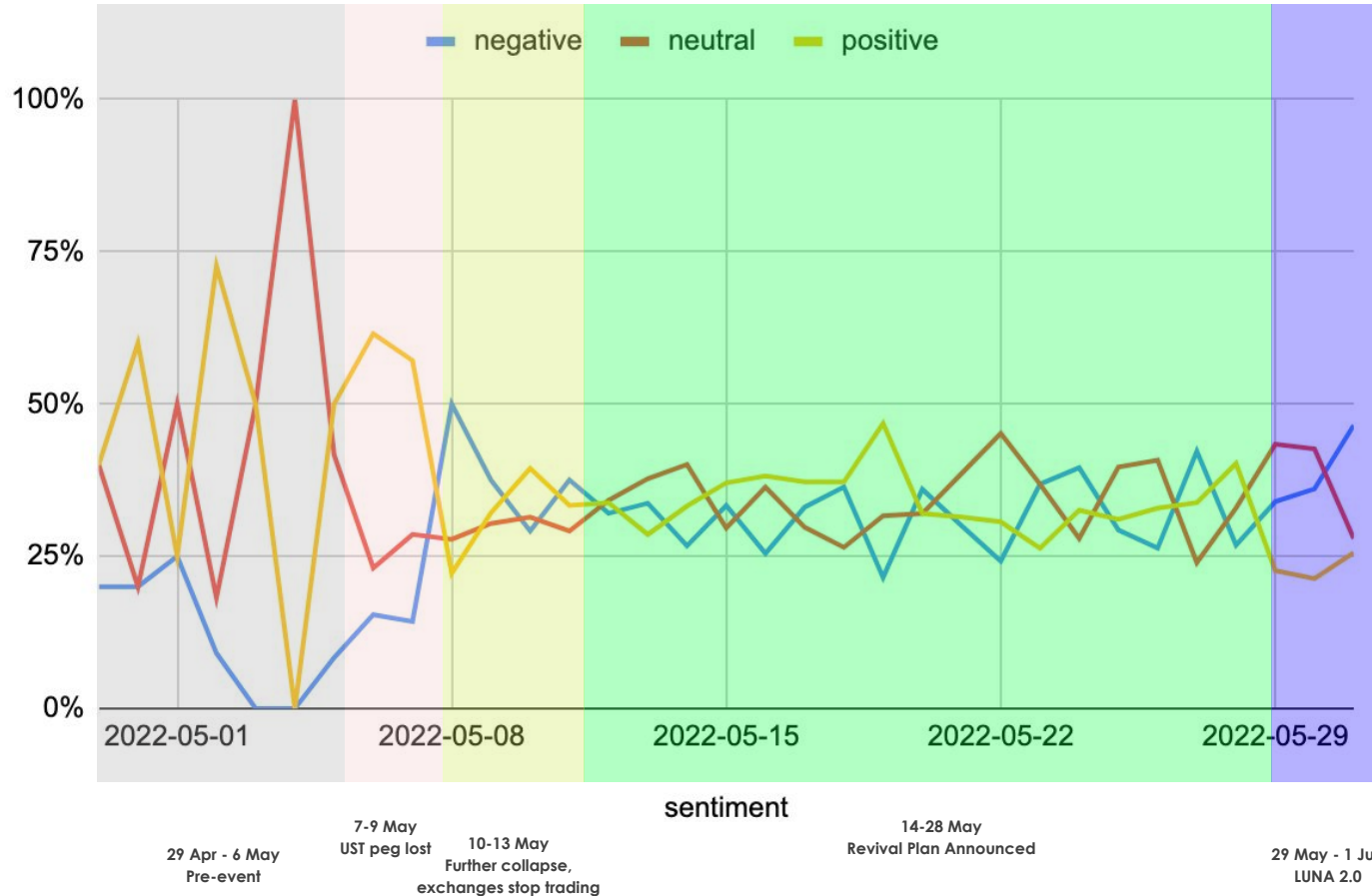
7-9 May
UST peg lost

10-13 May
Further collapse,
exchanges stop trading

14-28 May
Revival Plan Announced

29 May - 1 Jun
LUNA 2.0

Sentiment Evolution - Other Crypto Subreddits



Topic Evolution - LDA (1)

29 Apr - 6 May
Pre-event

changed
terraluna
one
crypto
like
cro
market
wallet
see
right

terraluna
png
crypto
var
like
twitter
coin
price
exchange
format

terraluna
twitter
status
alice
wallet
code
protocol
would
anyone
station

7-9 May
UST peg lost

2020
week
terraluna
update
last
alice
weeks
see
experiment
going

terraluna
iron
suicide
bridge
tried
metamask
going
stablecoin
message
international

changed
terraluna
price
btc
usdc
ltc
minutes
order
wallet
oracle

terraluna
crypto
twitter
status
price
like
protocol
get
rate

terraluna
twitter
wallet
app
fina
google
macedo
one
help
cash

terraluna
billion
bitcoin
one
price
coins
foundation
auto
time
astro

terraluna
peg
btc
price
market
terrausd
stablecoin
bitcoin
crypto
binance

terraluna
btc
token
2020
new
bitcoin
money
get
market
see

Topic Evolution - LDA (2)

10-13 May
Further collapse,
exchanges stop
trading

auto
redd
preview
width
webp
format
jpg
pjpg
scammers
bybit

people
money
like
know
make
even
think
lost
get
going

terraluna
burn
proposal
community
twitter
kwon
money
fork
vote
plan

terraluna
kwon
binance
crash
crypto
collapse
founder
ceo
says
korean

terraluna
crypto
market
bitcoin
btc
would
people
like
coin
one

terraluna
airdrop
new
wallet
get
station
anyone
binance
buy
tokens

terraluna
png
price
poll
supply
market
reddit
top
format
cap

pump
tether
dump
going
usdt
guys
like
watch
big
got

14-28 May
Revival Plan
Announced

terraluna
crypto
kwon
btc
bitcoin
crash
people
like
one
png

terraluna
market
price
people
would
could
like
crypto
money
usdt

terraluna
airdrop
wallet
new
station
get
binance
anyone
holders
tokens

terraluna
burn
new
people
money
like
get
buy
would
coin

Topic Evolution - LDA (3)

29 May - 1 Jun
LUNA 2.0

terraluna
binance
wallet
new
trading
lunac
pump
investors
going
dump

terraluna
airdrop
wallet
anyone
get
money
post
validator
station
sure

terraluna
crypto
poll
airdrop
luna2
got
binance
view
reddit
get

terraluna
kwon
burn
new
like
get
people
still
holders
airdrop

terraluna
wallet
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airdrop
binance
new
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