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MASTER OF MANAGEMENT  
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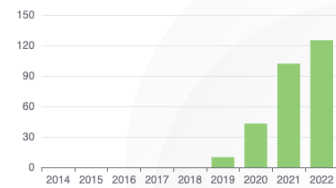
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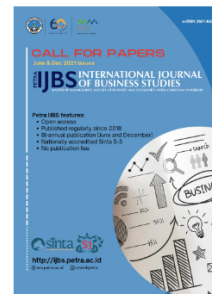
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## Crisis Response Strategies During Cryptocurrency Crash: A Netnographic Studies of Lunatics Community

Lady Joanne Tjahyana  
Petra Christian University

DOI: <https://doi.org/10.9744/ijbs.5.2.145-154>

**Keywords:** Crisis response strategies, cryptocurrency, community, Lunatics, sentiment

### ABSTRACT

Cryptocurrency is a speculative investment due to its volatility which could result in significant returns but also could end in crashes. Terra blockchain collapsed when its stable coin UST failed to maintain its peg to 1 USD and caused its sister coin LUNA to drop by more than 90% only in a few days. Terra LUNA itself has gained success and attracted many investors that became a strong community called Lunatics. Using Netnography; this study tried to observe crisis response strategies from Do Kwon, founder and CEO of Terraform Labs, and from Terra LUNA official Twitter account during the crash. Also, this study used community sentiment as an indicator to measure the success of the strategies. In addition, this study observed the interaction of the community during the crash period and how they overcome the crisis together. The results show that mortification and corrective action are the most effective strategy to generate positive sentiment. However, denials toward rumors cause more negative sentiment within the community. Despite the recovery plan from the Terra network, the Lunatics community also has its ways of recovering from the crisis. This study also revealed that community influencers' roles are crucial in controlling rumors during the crisis.

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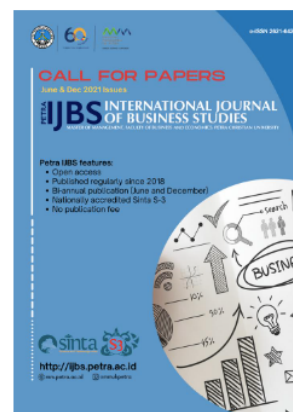
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## Crisis Response Strategies During Cryptocurrency Crash: A Netnographic Studies of Lunatics Community

Lady Joanne Tjahyana

Communication Studies Department, Petra Christian University  
Jl. Siwalankerto 121-131, Surabaya, Indonesia  
Email: joanne@petra.ac.id

### Abstract

Cryptocurrency is a speculative investment due to its volatility which could result in significant returns but also could end in crashes. Terra blockchain collapsed when its stable coin UST failed to maintain its peg to 1 USD and caused its sister coin LUNA to drop by more than 90% only in a few days. Terra LUNA itself has gained success and attracted many investors that became a strong community called Lunatics. Using Netnography; this study tried to observe crisis response strategies from Do Kwon, founder and CEO of Terraform Labs, and from Terra LUNA official Twitter account during the crash. Also, this study used community sentiment as an indicator to measure the success of the strategies. In addition, this study observed the interaction of the community during the crash period and how they overcome the crisis together. The results show that mortification and corrective action are the most effective strategy to generate positive sentiment. However, denials toward rumors cause more negative sentiment within the community. Despite the recovery plan from the Terra network, the Lunatics community also has its ways of recovering from the crisis. This study also revealed that community influencers' roles are crucial in controlling rumors during the crisis.

**Keywords:** Crisis response strategies; cryptocurrency; community; Lunatics; sentiment.

### 1. Introduction

Cryptocurrency has gained more popularity because of its decentralized blockchain technology system which is considered to be more secure and transparent as a digital form of payment (Koroma et al., 2022). As an investment, cryptocurrency's high volatility could result in large returns and cause market price bubbles (Grobys & Junttila, 2021). A price bubble is a condition where the price slowly rises and then increases faster due to the rising demand and excitement of the investors (Phillips & Gorse, 2017). However, price bubbles could end with market crashes and other extreme conditions (Sebastião & Godinho, 2021). Cryptocurrency crash happened several times, such as on March 11, 2020, when the Covid-19 outbreak was declared a worldwide pandemic by the World Health Organization (WHO). This crash caused cryptocurrency market capitalization to drop nearly half its value (Umar, Jareño, & González, 2021).

Another dramatic crash happened in May 2022, when the Terra blockchain with its main coins Terra UST and Terra LUNA collapsed (Kim et al., 2022). Terraform Labs, based in South Korea, was founded by Daniel Shin and Do Kwon in January 2018 and has attracted many investors worldwide ("Terra Price Today, LUNA to USD Live, Marketcap and Chart," 2022). Kim et al. (2022) reported that the Terra crash happened when the stablecoin algorithm failed to keep the UST price pegged to 1 USD. It started when over 2

billion USD worth of UST was drawn from Anchor Protocol on May 7, 2022, and immediately triggered the selling of other millions of UST (Boom, 2022). Traders tried to profit from this situation by swapping UST for LUNA, which automatically caused more LUNA to be added to the circulation and made the price collapse (Shen, 2022). LUNA price drastically dropped from almost 120 USD in April 2022 to 0,01 USD on May 13, 2022 (Boom, 2022). Despite the devastating event, Terra LUNA has strong support from its community (Melinek, 2022). The community members called themselves Lunatics and still showed loyal support during and after the crash (Melinek, 2022). Terra's official website mentions that the community use hashtag #LUNAtics as their identity on social media, particularly on Discord, Twitter, Telegram, and Reddit ("Terra Money - Community," n.d.).

There are previous studies on virtual communities, such as a research on a Facebook leisured - based virtual community by Lizzo and Liechty (2020). Using netnography method, they discovered that the virtual community sense of belonging was experienced through sharing both negative and positive experiences and by supporting each other during several virtual events (Lizzo & Liechty, 2020). Another ethnography study was conducted by Tjahyana (2021) on the Dogecoin cryptocurrency community on Twitter. The study found that the members support each other by replying and reacting to the tweets (Tjahyana, 2021). Furthermore, Ballinari & Behrendt (2021) stated that it

is essential to keep community sentiment positive on social media, as it could make investors feel optimistic and tend to hold their investments. Therefore, as described by Agarwal, Aziz, & Zhuang (2022), it is crucial to give verified clarification on social media during a crisis to reduce uncertainties and doubts, especially when many rumors have spread. Also, as described by Zhao & Chen (2022) and Setyawan et al. (2020) to maintain positive sentiment toward a brand, an online community manager should have a strong relationship with the community and give special privileges to active participants.

The purpose of this study was to observe crisis response strategies that Do Kwon, Terraform Labs, and other Terra LUNA influencers tried to implement during the crash. Also, this study monitored and analyzed Lunatics community sentiment as a success indicator of the crisis communication strategy. Netnography was used to participate in and discover the communication and interaction patterns during the crash. This study focused on the Lunatics community on Twitter as one of the main public channels for the community.

## 2. Literature Review

### 2.1. Crisis Response Strategies

When a crisis happens, the right crisis response strategies are needed, such as implementing strategies to reduce the consequences and protect an organization's reputation (Triantafillidou & Yannas, 2020). Benoit (as cited in Triantafillidou & Yannas, 2020) discovered five crisis response strategies to restore a reputational image. The first strategy is denial, which is done by denying the incident or mentioning other parties are responsible for the crisis (Triantafillidou & Yannas, 2020). The next strategy is responsibility evasion, which happens when the organization includes other uncontrollable factors that were not meant to happen (Triantafillidou & Yannas, 2020). Furthermore, reducing offensiveness is another strategy that involves exposing positive actions in the past and minimizing the negative effect by compensating those affected by the crisis (Ferguson, Wallace, & Chandler, 2018).

Moreover, mortification is also included in one of the strategies, as the organization admits the incident and takes responsibility for the crisis (Ferguson et al., 2018). Next, corrective action is a strategy that is implemented to recover the situation and conduct preventive action to avoid the reoccurrence of the incident (Ferguson et al., 2018). According to Triantafillidou & Yannas (2020), corrective action is the most effective strategy to be done through social media. In

addition, they found that posts conveying disciplinary actions generated more positive engagement through likes, comments, and shares (Triantafillidou & Yannas, 2020).

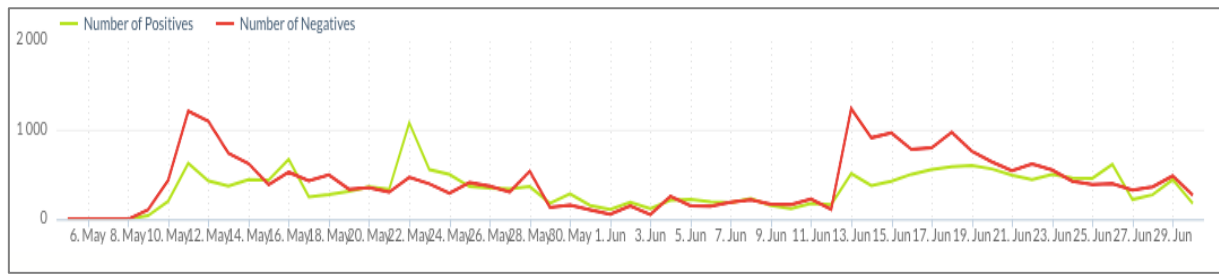
### 2.2. Rumor Clarification and Community Sentiment

Agarwal et al. (2022) report that social media users often propagate rumors during a crisis. Therefore, clarification is needed to help users determine the next actions to be made in response to the crisis (Agarwal et al., 2022). Rumor has specific characteristics, including any type of unverified information that has not been clarified by trusted sources (Zhao, Resnick, & Mei as cited in Agarwal et al., 2022). Moreover, several different rumors could be spread on social media. Therefore, the organization has to choose the right rumor to be clarified to eliminate uncertainties among social media users (Agarwal et al., 2022).

Several studies have tried to find connections between social media sentiment and cryptocurrency price movement. Using Latent Dirichlet designation (LDA), a study from Poongodi M., Nguyen, Hamdi, & Cengiz (2021) on Bitcoin-related online discussions has found that sentiment on social media could be used to predict global cryptocurrency prices. Furthermore, by using automated web scrapping and machine learning, Hassan, Hudaefi, & Caraka (2021) have discovered that sentiment on Twitter reflects cryptocurrency market conditions. Another study by Ortu, Vacca, Destefanis, & Conversano (2022) categorized cryptocurrency-related into top words: money, time, and wallet. While for personal investment topics; power, belief, and address, for Bitcoin & blockchain topics; "pay," "fee," and "rate" for the trading topic.

### 2.3. Virtual Community

McMillan & Chavis (as cited in Lizzo & Liechty, 2020) identified four factors for developing a sense of community. They found that membership is a factor in a virtual community that consists of unique symbols and terms used by members to identify themselves as part of the community, and it brings them closer to each other (Lizzo & Liechty, 2020). The next factor is influence, which is the feeling of joy and satisfaction by making an impact not only on the community but also on larger societies (Lizzo & Liechty, 2020). Moreover, Lizzo & Liechty (2020) also stated that integration and fulfillment of needs could be seen when members share the same passion and excitement within the community. The members can support each other by sharing and celebrating personal achievements or giving encouragement and motivation to members needing



**Figure 1.** General sentiment chart for keyword "Luna" (Source: Brand24)

emotional support (Lizzo & Liechty, 2020; Setyawan et al., 2020). A study on a Twitter-based cryptocurrency community conducted by Tjahyana (2021) discovered five communication patterns that occurred in the community. The first pattern involves self-identification by using unique hashtags or hashtags, and the second pattern includes interacting with each other by giving likes and replies in discussions (Tjahyana, 2021). The third pattern consists of motivating and encouraging each other, especially during unfavorable market conditions (Tjahyana, 2021). Furthermore, the fourth pattern occurs when the community members mention influencers and public figures to get confirmation about the future of the investment (Tjahyana, 2021). Finally, the last pattern involves influencers and public figures encouraging the community to continue holding their investment regardless of market conditions (Tjahyana, 2021).

### 3. Methods

This study used Netnography as a qualitative method to observe and investigate communication and interaction within Lunatics community, especially during the crisis that happened due to the Terra LUNA crash in May 2022. Netnography is a method to observe, understand and interpret communication and interaction within virtual communities on the internet (Ahuja & Shakeel, 2017). According to Kozinets (2018), netnographers have flexibilities of becoming active participants or just passive observance in the community.

This netnography study was conducted with the following steps:

1. Netnographer joined several cryptocurrency communities on Twitter, Telegram, and other social media as passive participants for more than six months.
2. Netnographer tried to observe and understand the communication and interaction within Lunatics communities and took notes of some cultural insights.
3. Brand24, as media monitoring software, was used to collect and analyze conversation data related to

Lunatics communities, especially the ones related to the Terra LUNA crash.

4. Sentiment analysis was first done using Brand24 and continued by netnographer by categorizing data based on sentiment and cultural insight found in the community.
5. Netnographer analyzed communication patterns focused on crisis response strategies and qualitatively measured the success of those strategies based on community sentiment.

## 4. Results

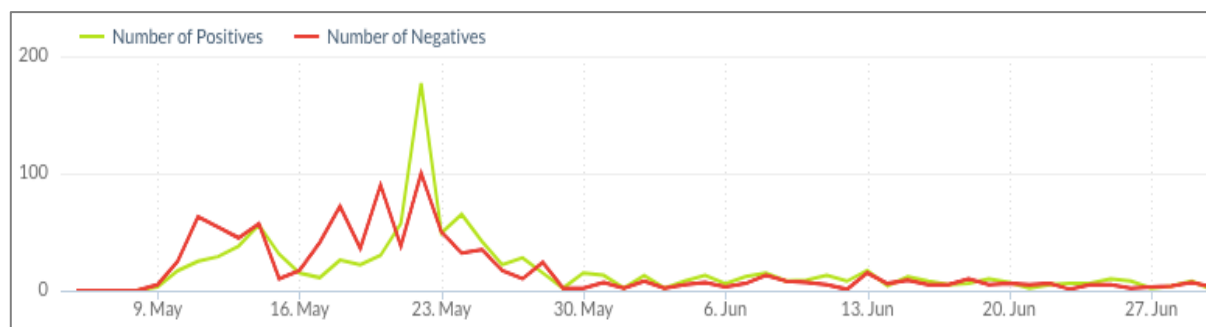
### 4.1. Sentiment Data

This research used Brand24 as a monitoring tool to collect and analyze social media and mainstream media data. This study used "#Luna" as the main keyword to get data related to the Terra LUNA crash. In addition, other keyword filters were used to get more specific data, such as "crash", "cryptocurrency," "Do Kwon," "UST," "Bitcoin," and other related keywords. Data collection was conducted between May 5 and June 30, 2022, to cover several important events during the crash. All mentioned data collected were also analyzed and categorized into two types of sentiment: positive, neutral, and negative emotion. During the selected time frame, there were a total of 157,364 mentions collected, with 19,192 positive mentions and 23,525 negative mentions.

Moreover, several days have more data mentions compared with other days within the timeframe. As shown in Table 1, those days also have many negative or positive comments. The general sentiment data chart can also be seen in Figure 1.

**Table 1.** Positive and Negative Sentiment Data

No.	Date	Positive mentions	Negative mentions
1	May 11, 2022	626	1,207
2	May 16, 2022	671	525
3	May 22, 2022	1,076	469
4	May 28, 2022	363	537
5	June 13, 2022	511	1,235
6	June 15, 2022	424	963
7	June 18, 2022	585	972
8	June 22, 2022	441	618
9	June 26, 2022	613	396



**Figure 2.** Community sentiment chart for filter keyword "Lunatics" (Source: Brand24)

Furthermore, the keyword "Lunatics" was added to filter mentions specifically related to the Lunatics community, and as a result, it has 7.321 mentions with 1.079 negative comments and 1.291 positive mentions. Especially on May 22, 2022, there was a significant increase in positive statements with the keyword "Lunatics," as we can see the spiking positive mentions on the chart, as shown in Figure 2.

#### 4.2. Crisis Response Data Categorization

Using netnography method, this research also observed conversations and messages related to the crash, specifically those related to crisis response strategy from Do Kwon Twitter personal account (@stablekwon) and Terra LUNA official Twitter account (@terra\_money).

##### 4.2.1. During the Crisis

On May 11, 2022, when Terra UST lost its 1 USD peg for the second time and dropped to almost 35 cents (Genç, 2022), Do Kwon tweeted a thread on his personal account as he tried to clarify the situation and informed the community about the recovery plan. These are several words from his tweet:

*"1/ Dear Terra Community:  
2/ I understand the last 72 hours have been extremely tough on all of you - know that I am resolved to work with everyone to weather this crisis, and we will build our way out of this.*

*Together"*

(Do Kwon 🌀 [@stablekwon], 2022a)

The official account of Terra LUNA also did the same by giving statements and clarifications about the crash. Here are several words from the thread:

*"1/ Liquidity brawl behind the scenes amid material \$UST peg deviation on third-party venues.  
Fighting back. More updates are incoming  
#LUNAtics. Hang on, fam.*

*Here are some resources to combat misinformation:  
2/ UST MCAP > LUNA -- No death spiral happens."*  
(Terra 🌐 Powered by LUNA 🌀 [@terra\_money], 2022a)

There was another thread from Do Kwon on May 16 2022 as he addressed the community to show how heartbroken he was and to inform them about the recovery efforts that has been done up until that time.

*"I've spent the last few days on the phone calling Terra community members – builders, community members, employees, friends and family, that have been devastated by UST depegging.  
I am heartbroken about the pain my invention has brought on all of you."*

(Do Kwon 🌀 [@stablekwon], 2022b)

On May 21 2022, Do Kwon had several interactions with the community by replying to tweets related to the crash. All the questions addressed to him were mostly about the recovery plan and Do Kwon's commitment to resolving the problem. This study listed some of Do Kwon tweets when he actively participated in the discussion, such as :

*"My priority is not about what happens to me, but making sure the Terra community has a place to build and years of their work does not go to waste  
I don't care what happens to me as long as that happens."*

(Do Kwon 🌀 [@stablekwon], 2022c)

However, there were debates among the members of the Lunatics community because they doubted that the network separation plan, commonly referred to as the network fork proposed by Do Kwon, was the best solution (Irwan & Julianto, 2022). The community believed that coin burning will be the right solution to recover the value of LUNA (Irwan & Julianto, 2022). The increase of positive mentions on May 22 2022, mostly consisted of the keyword "Lunatics" as the community members encouraged each other to keep on burning LUNA. An example of a community tweet that is listed on Brand24 as one of the popular tweets is a tweet from Michel MB [@MichelMB19] (2022).

*We are #LUNAtics. We will burn the shit out of #LUNA .*

*We are the community!!! We need whales with us.  
#RETWEET #lunaburn*  
(Michel MB [@MichelMB19], 2022)

#### 4.2.2. During the Recovery Phase

Terra 2.0 was launched on May 28, 2022, as part of the recovery plan, and the old LUNA code has been changed into LUNC for LUNA Classic. The launching was officially announced on Terra LUNA official account. Several days before the launch, Do Kwon also gave information about all the exchanges supporting Terra 2.0 and mentioned the new LUNA airdrops for existing LUNC holders.

*"1/ Yesterday, we said Terra 2.0 is coming.  
Tomorrow, it arrives.*

*The community has been working around the clock to coordinate the new chain's launch. Subject to potential change, we expect Terra to go live on May 28, 2022, at around 06:00 AM UTC."*

(Terra 🌐 Powered by LUNA 🌀 [@terra\_money], 2022b)

#### 4.2.3. Rumors and Negative Events

On June 13, 2022, there was a significant increase in mentions. This happened simultaneously as negative rumors spread about Do Kwon gaining a lot of fortune before the crash by cashing out \$28 billion worth of LUNA (Bertillo, 2022). Also, rumors already started to spread on May 21 2022 about Do Kwon using an unknown wallet of 20 Million LUNA to vote on the fork proposal himself (Karunanidhi, 2022). On June 12, 2022, Do Kwon published a thread on his personal Twitter account to clarify the rumors.

*"1/ This should be obvious, but the claim that I cashed out \$2.7B from anything is categorically false."*

(Do Kwon 🌀 [@stablekwon], 2022e)

Moreover, on May 21, 2022, Do Kwon already stated the voting rumors on his discussion with a community influencer @FatManTerra (Karunanidhi, 2022).

*Replying to @FatManTerra @husseinAji and three others*

*Token purchase agreement holder with TFL. Besides that I decline to respond.*

(Do Kwon 🌀 [@stablekwon], 2022d)

#### 4.2.4. Lunatics Community's Data Interactions

This study also collected and categorized mentions from the Lunatics community with Brand24 and listed several popular mentions based on the sentiment and the number of likes and shares. Moreover, we also observed and categorized conversation data from Twitter. This report shows a summary of the messages without the usernames of the Twitter accounts. These are several interaction patterns among Lunatics that occurred during the crash:

1. Using hashtag #LUNAtics as identification.
2. Using hashtag #LUNC, #LUNCburn, #LUNAburn, #LUNAClassic for those who still believe in the recovery of LUNA classic (LUNC) and encourage each other to burn their LUNC to increase its value of it.
3. We are creating micro-influencer accounts to give updates about the latest price movements and news and to keep reminding the Lunatics community about the burning strategy.
4. Using greetings or phrases for casual tweets such as "dear fellow Lunatics", "good morning," "what a great day," "good night," and "stay safe #LUNC army."
5. Showing empathy for those who suffered a lot of loss during the crash.
6. Giving encouragement, with words and phrases such as "holding strong," "stay strong," "together," "big news is coming," "pumping," "bullish," "rise from the grave," "going crazy," "accumulating," "Luna \$1", "moon," "survive," "explode" and "rocket."
7. Organizing events to facilitate NFTs, airdrops, and giveaways, especially for those who suffered a lot of loss.
8. Mentioning or replying Do Kwon (@stablekwon), Terra's official account (@terra\_money), and other public figures such as Changpeng Zhao (@cz\_binance) and Elon Musk (@elonmusk) for questioning, reporting, or confirming issues regarding the crash.

Several influencers and public figures in the cryptocurrency community also gave their opinion regarding the crash and the recovery plan. Changpeng Zhao (@cz\_binance), also the founder and CEO of Binance, tweeted his opinion while replying to some questions regarding the fork recovery plan for Terra LUNA.

*"Reducing supply should be done via burn, not fork at an old date, and abandon everyone who tried to rescue the coin.*

*I don't own any LUNA or UST, either. Just commenting."*

(CZ 💎 Binance [@cz\_binance], 2022)

## 5. Discussion

This study gathered, observed, categorized, and analyzed mentions based on the dates, sentiments, crisis response strategies, and community interaction patterns. Collected Twitter data from Do Kwon as the co-founder and CEO of Terraform Labs and the official account of Terra LUNA categorized into several crisis response strategies following the social media crisis

communication strategies discussed by Triantafyllidou & Yannas (2020). Also, some of the mentions contained to rumor clarification. Agarwal et al. (2022) stated that publishing rumor clarification on social media is also one of the essential strategies during the crisis.

### 5.1. Crisis Response Strategies

At the early stage of the crisis on May 11, 2022, Do Kwon tweeted a thread on his personal account @stablekwon to inform the community about the current crash situation (Do Kwon 🌀 [@stablekwon], 2022a). This thread consists of several different crisis response strategies. The first was mortification, as he admitted the problems that caused the crash. The next strategy was corrective action as he clarified the current condition and informed the recovery plan for Terra UST. The strategy of reducing offensiveness is by exposing positive achievements, such as reminding the community about the success of the Terra ecosystem and how it survived. However, those strategies cannot neutralize the negative sentiment, as there were more negative than positive mentions, as shown in Table 1 and Figure 1.

Another strategy for mortification was revealed in a thread on May 14, 2022. Do Kwon showed how heartbroken he was to see the pain the community must endure (Do Kwon 🌀 [@stablekwon], 2022b). He did not deny that the Terra framework, as his invention, has made a lot of people suffer. Also, the thread can be categorized as a corrective action strategy as Do Kwon informed the community about the recovery plan. He stated that the Terra UST has failed and will not become a part of the next recovery plan. In the following days, specifically on May 16, 2022, there was an increase in the number of positive mentions and a decrease in the number of negative mentions, as shown in Table 1 and Figure 1.

In contrast with what Triantafyllidou & Yannas (2020) found, the corrective action strategy was not proven to be the most effective strategy in generating positive community engagement. Instead, this study found that corrective action should be combined with mortification to stimulate more positive mentions in the community. This finding was in line with the statement by Oltra González, Camarero, & San José Cabeza (2021) about the importance of showing empathy towards the community affected by the crisis as it could make them feel optimistic towards the company.

There were significant positive mentions on May 22 2022 as shown in Table 1, Figure 1, and Figure 2. Moreover, the mentions data collected with "Lunatics" as the filter keyword show a spiking rise of positive mentions, more than double the number of negative

mentions. On that day, Do Kwon replied to many tweets from the community that addressed him. The replies consisted of several crisis response strategies, including mortification, corrective actions, and rumor clarifications. In addition, on May 19, 2022, Terra LUNA official account also retweeted Do Kwon's announcement about proposal voting regarding several recovery plans that could be categorized as a corrective action strategy. However, regardless of the significant increase in the number of positive mentions, the analyzed data showed that the positive mentions from Lunatics community mostly contained messages indicating disapproval of the proposal. Thus, the positive sentiment did not show their confidence in Do Kwon's recovery plan, which was the network forking. Instead, most Lunatics encouraged each other to keep burning LUNA as they believed it was the right recovery solution. Therefore, although the combination of mortification and corrective actions has generated positive mentions, the messages conveyed were not in line with the recovery plan, as Lunatics have their ways of surviving. These findings were in line with previous studies by Xie, Pinto, & Zhong (2022) about community resilience during crisis events. They stated that social media engagement involves interacting and supporting each other. Therefore, it is essential to strengthening community resilience to survive and overcome the crisis together (Xie et al., 2022). This discovery also indicates that the community has a significant influence on moving market sentiment, regardless of the crisis response strategies that the responsible party has done.

The new LUNA, as the result of Terra blockchain forking, was launched on May 28, 2022, and the announcement was already published several days before as part of corrective action strategies. Besides the rebirth of LUNA, existing old LUNA holders also received new LUNA airdrops as part of the compensation, which could be categorized as a reduced offensiveness strategy. However, these strategies could not neutralize the sentiment, as there were more negative and positive mentions on the launch day. Several top negative mentions on that day conveyed messages that rejected the new LUNA and kept reminding the community to burn LUNC (LUNA Classic or old LUNA). The Lunatics already lose faith in the Terra blockchain, and some are planning to sell the new LUNA as soon as they get the airdrops.

The increase in negative sentiment within the Lunatics community was in line with the previous study by Wang, Schuetz, & Cai (2021) on crisis response strategies on social media. They found that crisis response strategies could result in various reactions from the targeted community. One of the reactions that could be appeared was accusing the company



and spreading negative information (Wang et al., 2021). While the community was against the company and more negative sentiment spread, the company should initiate more discussions with the community to open possibilities for other solutions (Wang et al., 2021). Unfortunately, even though the community and investors participated in the proposal vote, the vote results were not as expected by the Lunatics community. This can be seen as more mentions from Lunatics were supporting burning solutions, not network forking. As a result, even more negative sentiments and rumors spread within the community. Therefore, as stated by Wang, Schuetz, & Cai (2021), public opinion monitoring is essential in the middle of a crisis so the company can respond correctly, especially when the negative mentions are more dominant than positive ones. Also, as Zhao & Chen (2022) suggested, it is important to have good communication management that mutually benefits both the company and its community. A company should have a community management team to maintain a mutual relationship with the district because, as Zhao & Chen (2022) stated, highly engaged reciprocal communication within the virtual community could result in brand loyalty.

## 5.2. Rumor Clarification

Does Kwon also publish several clarifications regarding rumors that spread in the community about how he gained profits before the crash and how he used a mysterious LUNA wallet to win the proposal voting? The first clarification was tweeted on May 21, 2022, and it can be categorized as denial as part of the crisis response strategies. The second clarification was published on June 12, 2022, and it also can be categorized as denial as he refused to answer questions from a community influencer, @FatManTerra, regarding the rumor. The next day on June 13, 2022, the rumors became trending among the community as @FatManTerra tweeted the screenshot of his conversation with Do Kwon on May 21, 2022, when he denied the story (Karunanidhi, 2022). However, on that day, negative mentions increased more than twice the number of positive comments. Thus, the denial strategy failed to neutralize the negative sentiment. These findings are also consistent with the study from Jain (2022) that emphasized the importance of opinion leaders controlling rumors in social media during a crisis. Therefore, instead of denying or refusing to answer, it is essential for Do Kwon, as the community leader to clarify any rumors that spread on social media.

Another cause of negative sentiment among the Lunatics community was the collapse of Celsius Network and how LUNA crash event was mentioned to be somehow related to the fall of that leading

cryptocurrency investment company (Morris, 2022). In this case, Do Kwon and Terra LUNA official accounts did not mention anything about Celsius Network. Instead, in one of his tweets, Do Kwon reminded the community about how cryptocurrency works as a decentralized system and how to survive in this industry (Do Kwon 🌀 [@stablekwon], 2022f). This could be as reducing the offensiveness strategy, as Do Kwon reminds the community about the advantages of the cryptocurrency system. Instead of responding to the rumors, Do Kwon has acted as an influential public figure encouraging the community to keep their confidence in cryptocurrency, as the fall of Terra LUNA and Celsius Network has become a crisis of cryptocurrency industrial.

## 5.3. Community Interactions

The interaction patterns found within the Lunatics community also support findings by previous studies about virtual community interactions by Lizzo & Liechty (2020). The Lunatics community has its own hashtags to identify themselves and to increase their sense of belonging. They also have their own ways of supporting each other in the middle of the crisis by simply replying, retweeting, and mentioning each other to show their unity as Lunatics community. On June 26, 2022, the power of the community moved the market sentiment. There were more positive than negative mentions that mainly consisted of how the Lunatics still believe in the recovery of LUNA Classic (LUNC). They kept encouraging each other to burn their LUNC to increase its value of it. Therefore, as Oltra González et al. (2021) stated, a company or organization must always maintain good relationships and emotional bonding with its community. Therefore, when the crisis happens, the community will keep supporting the recovery process (Oltra González et al., 2021).

In this LUNA crash incident, the community members trust those influential public figures more than in Do Kwon, the founder, and CEO of Terra Blockchain. Therefore, they kept believing what influencers and public figures said that burning was the right solution instead of the network forking solution as the official recovery plan. These findings were in line with Tjahyana's (2021) study on the cryptocurrency virtual community, as the role of influencers was very important for the community to make decisions, especially regarding the future of their investment. Also, as Zhao & Chen (2022) suggested, a company's community management team should give special privileges to highly engaged community members, such as influencers within the community, so they will support and stay loyal to the company.








Finally, future studies should include price movement as an indicator to measure the success of crisis response strategies in the cryptocurrency communities. Also, future research could try to observe more private communities such as channels, servers, and groups in Telegram, Discord, and WhatsApp.

## 6. Conclusions

This study has found that the right crisis response strategies are needed in times of crisis, as each strategy could stimulate several different types of community sentiment. Mortification and corrective action were proven to be the right strategies that should be carried out simultaneously to stimulate more positive sentiment in the community. When rumors spread during a crisis, the company should clarify the situation instead of denying the rumors to prevent more negative sentiment from spreading in the community. Communities significantly influence generating positive or negative opinions on social media during crisis events. Therefore, it is very important always to maintain a strong relationship with the community so they will fully support the recovery process and stay loyal to the company when a crisis happens.

Moreover, the company should spare time and budget to have great mutual relationships with the community, such as organizing events, giveaways, and meetups. Furthermore, maintaining a good relationship with influencers and public figures in cryptocurrency communities is very important, as they have essential roles in driving community sentiment. In addition, it is crucial to constantly monitor social media sentiment as an indicator to measure the success of crisis response strategies. Finally, a company should have a dedicated community management team to maintain a strong relationship with the virtual community and monitor community sentiment before, during, and after a crisis.

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