

# The Metawhat?

## Project Description and Rationale

The introduction of virtual reality gaming to the market marked a watershed moment for digital innovation, or at least it seemed like it did for a moment. Instead, conventional means of playing video games reigned supreme and virtual reality was left behind overnight, making quiet advances in its space as the world carried on. Then, the *Metaverse* was created. That was written like it was supposed to be a big moment in this introduction, but in reality, your reaction was most likely that of confusion, or it was like remembering an old memory. I had the same reaction when thinking up project ideas and was suggested something about the Metaverse, and in the same moment, I also remembered what a complete failure it was.

After remembering how bad the Metaverse was, I also found myself interested in the thought of it, wondering where it went or if it even existed anymore. The reason I was becoming more interested in it was because the Metaverse was supposed to be a massive technological advancement meant to augment our very lives; it was supposed to be the flying car of our era, but in what way? To clarify, the Metaverse is a virtual world where people can interact with others, play games, and even work, learn, shop, and basically anything else you can do in the real world. It was advertised as being *the* futuristic virtual reality we envisioned in a distant future that surpasses any experience you could have in real life, but also as a means to communicate in a more personal and effective way than Zoom, all wrapped up in the Metaverse. However, the technology was never there, and the Metaverse faded away.

I was so curious how something like this could happen and how something of touting massive promises could slip our minds today that I had to dig deeper. More specifically, **do people still care about the Metaverse? How has public sentiment towards the Metaverse evolved since it was unveiled during the COVID-19 pandemic? What does this reveal about societal attitudes towards digital innovation and virtual worlds?**

## **Significance**

There is so much that the history of the Metaverse has to say about how we, as a society, perceive technology and the companies behind them. In a way, we ultimately have the say on what becomes technology of the future merely by what we say about it; if a product is bad, people are more than likely to reject it into the ground. While there is the argument that innovation requires failure, there are plenty of innovations that failed repeatedly until their final failure; the Metaverse may very well become one example of this since not only has it failed to capture enough people's attention, but it was also marred by bad PR and missteps made by Meta/Facebook. Companies become less willing to innovate for many reasons, but the deadliest of all is apathy. The public's reaction to the Metaverse is sure to leave a bad taste in investors' mouths, making it hard for something like the Metaverse to appeal to a profitable audience. While this all sounds like business-talk, this is, in reality, a significant cultural turning point where virtual reality may have been cut off from any chance of massive success. Just think about how influential platforms like TikTok and Youtube revolutionized the way we consumed culture and communicated. The Metaverse failed to make the same impact as those platforms, and its history should be studied in order to understand what gets approved or rejected by society.

## **Audience**

This paper is for people like myself, people who get strangely interested in something that they had long forgotten about. As I mentioned earlier, memories from around the time the Metaverse was new resurfaced upon being suggested a topic about it. It almost felt like a morbid curiosity thinking about where the Metaverse was, as it likely could've been dead as far as I knew. Where does something like the Metaverse go when it's forgotten? Who still thinks it's the best thing ever? What was it even used for? I admittedly wasn't sure what the Metaverse was exactly before diving into this research project, so this is also for those who are interested in somewhat of a retrospective on the Metaverse, and where it lies today.

## **Platform Justification**

In order to even perform an analysis, I'll need to pick a social media platform to focus on. I've decided on Twitter/X since it has allowed users to easily type their thoughts directly onto the internet, meaning their opinions are usually unfiltered and raw. This ideally makes analyzing sentiment around the Metaverse more reliable, as people will have little time between first witnessing the Metaverse to typing on Twitter/X.

## **Data Descriptions**

The public dataset I'll be using for this paper was found on Kaggle, and it includes about 50,000 Tweets containing #meta or #metaverse from November 2021, weeks after the Metaverse's announcement, with the following columns of information: username, user location, user description, user created, user followers, user friends, user favorites, user verified, date, and text; all except "text" will not be used for this analysis. Then, I scraped Twitter/X for Tweets

with the same hashtag and compiled about 700 Tweets from 1/1/2024 to 12/4/2024 (foreshadowing); the main focus of this scraped data is the text as well.

### **Technical Specifications**

First, I used a scraper from APIfy to acquire Tweets containing #meta or #metaverse. Then, I used tools such as OpenRefine and Python/Google Colab to clean both datasets, removing all unnecessary data and keeping only the text of the Tweets. After cleaning and preparing the data, I used Python/Colab and Voyant to conduct analysis and make the bulk of my findings. These tools helped me by allowing me to investigate common words and tones among remaining Metaverse-related Tweets today. Furthermore, these tools were very useful in creating visualizations to support any claims I will be making. Lastly, Canva was used to make the infographic meant to accompany this paper.

### **The Plan**

My process can be summarized very simply as: compare Metaverse-related Tweets from back then to now. More specifically, I began with analyzing Tweets from the public dataset I found. I specifically was interested in sentiments towards the Metaverse at this time, and if memory serves me correctly, it was very poor at the time. Despite this, it was important to keep an open mind and be ready for conflicting stories. Looking at words and users that appeared in high frequency was extremely important in uncovering what people collectively thought at the time.

After my findings from the 2021 Tweets, I wanted to see what people today were saying about the Metaverse. This process is similar to how I analyzed the previous dataset, only that this one was compiled by myself. I did so using a scraper from APIfy and ran it several times,

adjusting various parameters each time to ensure all the Tweets I scraped were related to the Metaverse this paper is focused on. Eventually, I was able to acquire such a dataset and repeated my analysis.

Once I made my findings, it was time to substantiate them with more compelling evidence. I used Python/Google Colab and Voyant to create visualizations that support my claims. In addition, I will be referring to other academic research to further support my findings. These academic papers largely pertain to cryptocurrencies and public perception of them, and will be instrumental in supporting my claims.

### Findings: Part 1



During my early analysis of the original dataset, I created a word cloud using Voyant to see if there were patterns in what people are saying in order to find leads. I originally thought something was wrong with the dataset, as I kept getting unusual “words”, if you can call them

that. However, this was in fact the true output of the dataset. It's no surprise that "metaverse" is the most common word in this word cloud, but everything else likely makes no sense to the ordinary viewer, so allow me to explain some of the basics for this analysis.

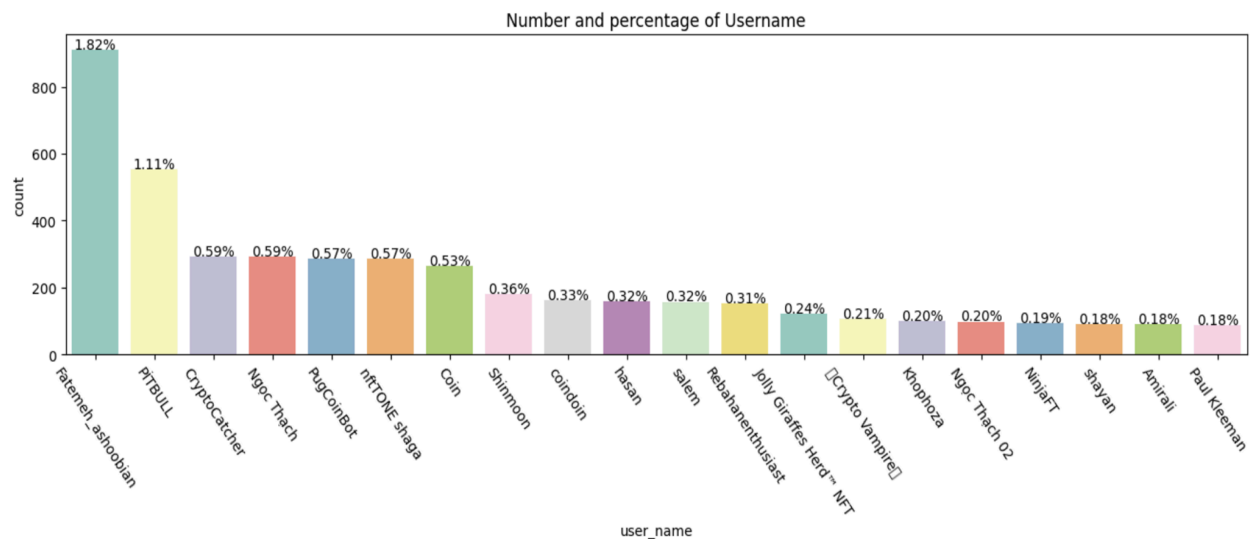
Most, if not all, of the words here are related to cryptocurrencies in one way or another. In particular, "nft" is the second most common behind "metaverse". NFT stands for Non Fungible Token, and is meant to describe unique valuables that have no specific value, cannot be exchanged for other goods, and cannot be divided as they can only be a single unit; the USD is an example of a *fungible* token.

They are also characterized by functioning similar to cryptocurrencies, which there are multiple of in the word cloud as well (ETH and BTC, just to name a couple). In short, cryptocurrency is a digital-only currency that is independent of any authority that normal currencies need to go through, like government(-adjacent) organizations and banks. Instead, they're mostly monitored by decentralized networks and the creators of the cryptocurrency themselves.

With that out of the way, it's time to state the obvious: **most people were talking about cryptocurrencies shortly after the reveal of the Metaverse**. Most unusual words can be marked up to this conclusion; if it's not a cryptocurrency, it's more likely an entity that deals with them. While none of this actually tells us the actual sentiment towards the Metaverse, we can investigate what people think about the cryptocurrency sphere and connect it to our analysis.

However, people's knowledge of cryptocurrencies isn't off to a good start. According to some studies conducted in 2018 and 2019, one of almost 15,000 adults across 15 countries and one being a survey of 2500 German adults respectively, most people are usually aware of cryptocurrencies, but very few people actually understand what they are, and even fewer actually

use them (Steinmetz et al. 2). There are more studies that sometimes have conflicting results, but generally speaking, most people are uneducated about cryptocurrencies. In addition, the same studies reveal that men are not only more likely to be aware of cryptocurrencies, but also to own them and be more involved: “Knowledge about and ownership of cryptocurrencies is mostly associated with male gender and young age. Wciom (2019) present additional determinants of awareness about Bitcoin: higher education (71%), living in major cities (75%), male gender (66%) and active internet usage (69%)... In Europe, the probability of owning cryptocurrency is higher for males (13%) than for females (6%)...” (Steinmetz et al. 5).



Upon finding this new information, I had the idea of looking at the users who tweeted the most to compare what my dataset had to say to the research I had been reading. Right away we can see there is a loud minority in those talking about the Metaverse, with one user accounting for almost 2% of the 50,000 Tweets. We also see something familiar on this graph; “bscpitbull” and “pitbull” from the word cloud could possibly be referring to PiTBULL. The third user, CryptoCatcher, gives us an idea of what we can expect the rest of the users to be interested in. After checking the user accounts listed and some others on this graph, I can confirm that **most of the people highly interested in the Metaverse are young men who are knowledgeable in**

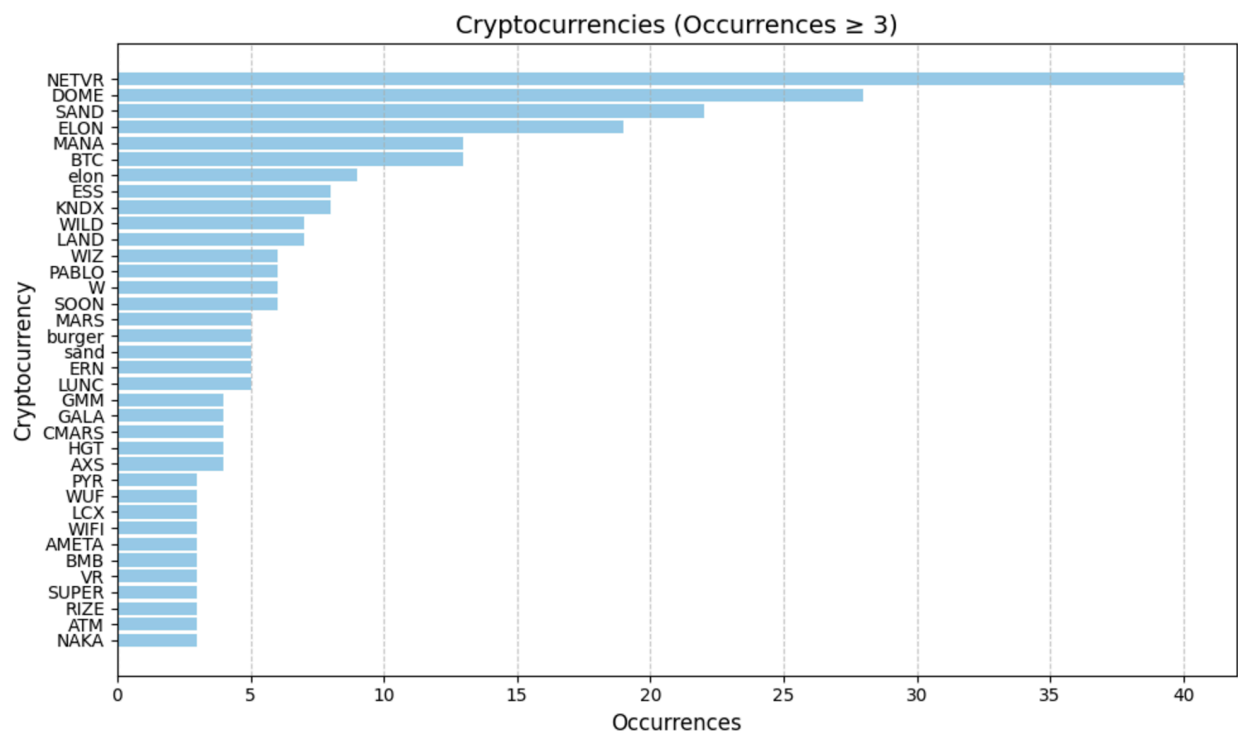
**cryptocurrency**, sometimes known as “cryptobros” on the internet. This is further supported by another study on the Metaverse’s history and challenges: “... the Metaverse concept has experienced some limitations hampered by its inability to obtain market acceptance... despite gaining considerable attention in discrete fields such as online gaming and amongst tech enthusiasts.” (Allam et al. 774)

As this also suggests, the Metaverse’s reception was generally poor for most other people, failing to reach as many audiences as possible. The reasons for which are: the Metaverse was a half-baked product that under delivered on all fronts, mounting distrust in the company before, and lack of interest in crypto and NFTs. Before the Metaverse was announced, Facebook, at the time, had been under scrutiny for various things such as accusations of poor working conditions and mishandling of hate speech, privacy, and misinformation (Lucia, et al. 2), suffering bad PR for several months before the Metaverse. This itself is the reason that Facebook became Meta and announced the Metaverse, it was a way to try to slip away from the negative perception that Facebook had earned, which in turn became another reason for people to be uninterested in the Metaverse; trust was at an all time low for this corporation. Regardless of this, the Metaverse wasn’t a standout product anyway. Early videos and demos of the Metaverse were laughable and gave little confidence to anyone, causing the majority of people to criticize it and even poke fun at it, “... or as one Twitter user put it, ‘Mark Zuckerberg's Metaverse looks worse than Quake did in 1996.’” (David, Ch 8), comparing the graphical appearance of the Metaverse to a video game from the 1990’s. It’s safe to say that **most people were, at best, not interested in the Metaverse when it was announced in 2021**. This summarizes the initial story of the Metaverse, now it’s time to see if the atmosphere has changed since then.



## Findings: Part 2

It's important to keep in mind that, considering how zealous some crypto/NFT fans can be, the Metaverse may very well still be dominated by the same user base. I started the process by scraping through Twitter/X using the same parameters as the public dataset, yet I found significantly less Tweets, ending up with about 700 Tweets in total. While this may be cause for concern that this is too small of a dataset to analyze, I believe this fact in of itself speaks volumes about the decline of the Metaverse. Continuing, I immediately noticed that cryptocurrencies and NFTs dominated all discussions about the Metaverse; the more things change, the more they stay the same. More importantly, it meant that **the only people still talking about the Metaverse are crypto enthusiasts, the same user base that dominated Metaverse discussions earlier.**

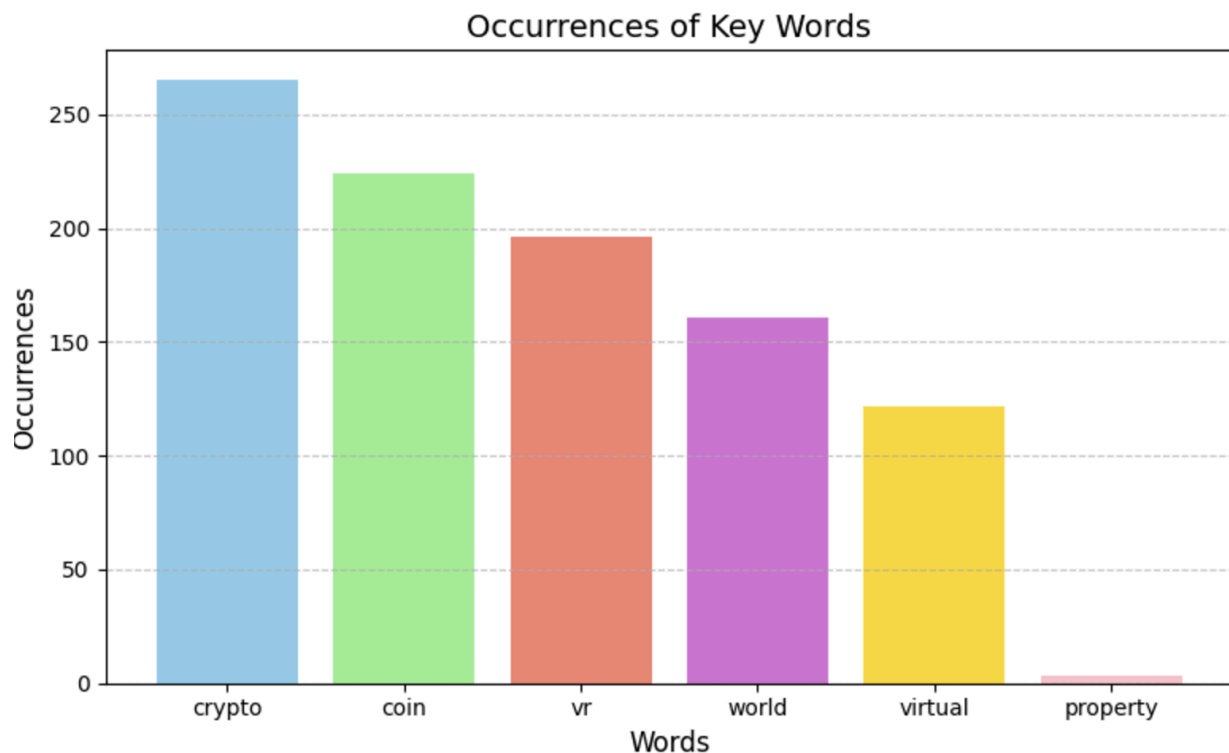


Since a word cloud would be redundant, I decided to graph occurrences of cryptocurrencies alone to see how much space they take more clearly - there were so many results that I had to exclude the ones that didn't occur at least three times. Most of the

cryptocurrencies are abbreviated, so it's hard to tell exactly what each is, but some stand out in odd ways. Coins like SUPER and SAND would admittedly seem questionable if not for other coins like “burger” and ELON, referring to the owner of Twitter/X, Elon Musk. One might naturally wonder if this is a mistake or some sort of slang somehow, but this is in fact an abbreviation of a cryptocurrency whose full title is “Dogelon Mars”, yes, really. Others might also wonder if cryptocurrencies even take themselves seriously, or if it's all a big joke.

Indeed, bystanders often find it difficult to take the cryptocurrency bubble seriously, sometimes calling them “meme coins” or “s\*\*\* coins” unapologetically. Especially in the case of NFTs, “Self-proclaimed degens ‘ape,’ or go crazy, over new NFT drops... But the average member of the public wonders why are all these people spending so much money on pictures of apes or punks” (David, Ch 8). Similar to the Metaverse, cryptocurrencies and NFTs have also had trouble garnering *positive* attention since due to some questionable details about them. In May 2022, Seth Green, an actor maybe best known for voicing Chris Griffin on *Family Guy*, was the target of a phishing scam, in which the Bored Ape NFT he bought in the previous year and was even working to create a show with had been bought without his knowledge or consent; the actor spent over \$200,000 to get his NFT back (Rosenberg). This is not an unusual occurrence in the world of crypto and NFTs. In fact, scams are so frequent that it's one of the reasons the people who know about cryptocurrencies also haven't trusted them for years now. In a 2018 survey, the fear of hacks or theft accounted for up to 31% of survey answers among those who stated they would not invest in cryptocurrency because it's too risky (Steinmetz et al. 7). All this is to say that **cryptocurrencies/NFTs haven't been trustworthy for a lot of people for a long time, and its association with the Metaverse harms it as well.**

It's unfortunate that part of the Metaverse's negative connotation is partly due to cryptocurrencies and NFTs when it was meant to be a revolutionary virtual world that happens to incorporate them in some form, such as being able to buy virtual property and land. Speaking of which, it's easy to get derailed from the Metaverse's virtual world when it seems most people are talking about the next coin, so is anyone using the Metaverse now actually interested in using their coins to purchase property through the Metaverse?



A quick look at some of those keywords reveals the answer: no, **Metaverse fans are much more interested in cryptocurrencies than purchasing virtual property, let alone the virtual world itself.** In fact, a small percentage of people among both cryptocurrency owners and non-owners would consider using it as a form of payment: “Civey (2017) find that most... among 10,033 internet users cannot imagine making payments with cryptocurrencies. While only 1.7% of the respondents had made cryptocurrency payments by the time of interview, 11.4% can imagine doing so in the future... Among 496 adult internet users, the DCI Institute (2018) finds

that Bitcoin is rarely used for online payment purposes (3.6%), compared to more established solutions...Cryptocurrencies, especially Bitcoin, are currently used primarily as a speculative asset, as confirmed by English et al. (2020), who report that 47% of cryptocurrency owners have never used them for any purpose other than speculating... The second most prominent application is to buy goods or services (27%) or to exchange them for other cryptocurrencies (25%)” (Steinmetz et al. 8).

In short, my findings are as follows:

- **Shortly after the Metaverse’s reveal, most people talking about it were interested in its relation to cryptocurrencies.**
  - **Most people who are into crypto are young men**
- **Most people were, at best, not interested in the Metaverse when it was announced.**
- **The only people still talking about the Metaverse are crypto enthusiasts, the same user base that dominated Metaverse discussions after its reveal.**
  - **Everyone else has moved on!**
- **Cryptocurrencies/NFTs haven’t been trustworthy for a lot of people for a long time, and its association with the Metaverse harms it as well.**
- **Metaverse fans are currently much more interested in cryptocurrencies than purchasing virtual property, let alone the virtual world itself.**

## **Conclusion**

All that said and done, I can now answer the burning questions I’ve had this quarter. **Do people still care about the Metaverse?** As vague as this may sound, the phrasing of this question is usually meant to refer to the general public as a whole; people like pop music because it’s *popular*. In this case, the answer is no. The Metaverse has long since fallen out of the public

eye, and most have forgotten about it for good reason. **How has public sentiment towards the Metaverse evolved since it was unveiled during the COVID-19 pandemic?** Frankly, there was no evolution to be seen here. Most people didn't like the Metaverse back then except for a relatively smaller group, and the same remains today. However, given the fact that I was only able to scrape about 700 Tweets about the Metaverse in 2024 in *total*, it's safe to say that even the majority of crypto enthusiasts have moved on; this is seemingly the only "evolution". **What does this reveal about societal attitudes towards digital innovation and virtual worlds?** The truth about this one is that the Metaverse has not only failed to bring in an audience, but it also left a bad impression on virtual reality as a whole. People will ultimately associate their thoughts on cryptocurrencies and NFTs with virtual reality, especially if the Metaverse was their first experience with it. Facebook's/Meta's influence is massive, so it's likely that a significant number of people will be skeptical of virtual reality in the future. When another corporation tries to tap into this market, people will naturally wonder, "what will they try to pull off now?"

## Work Cited

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