

Project Report – NFT Analytics Dashboard

1. INTRODUCTION

1.1 Overview

The NFT market is booming now. We have seen shocking sales of NFTs at unexpected prices. As a result, more people are getting interested in NFTs, either as an investor or an artist. To get to know a new field and make sure you put money in the right place, you can rely on data to stay away from hearsay and decide which NFT to buy by yourself or which NFT to sell. Analytics dashboards and reports can be created to know more about NFT.

1.2 Purpose

The purpose the of the project is to create an effective and dynamic dashboard that is understandable to an individual, who is completely new to the field of NFT's. Creation of such dashboard will clear all the hearsays or vague predictions from the head of the user as the data speaks for itself. The dashboard should acknowledge all the factors that comes into the play during, buying an NFT.

2. LITERATURE SURVEY

2.1 Existing problem

There are many dashboards and analytics online which show NFT trends to look at. But none of them address educating the beginners.

2.2 Proposed solution

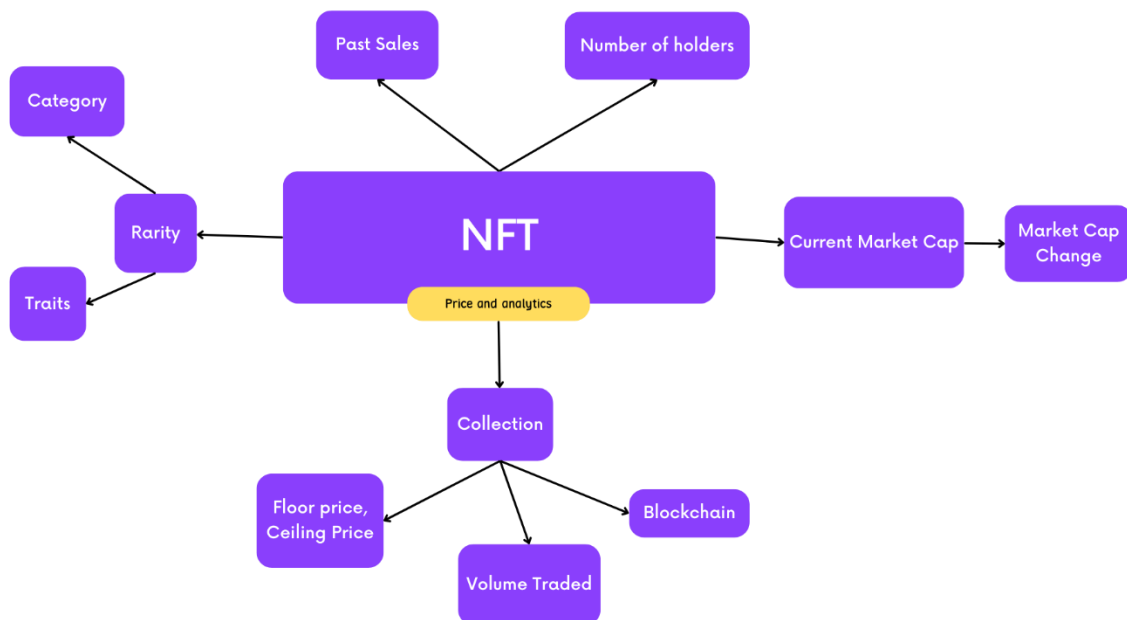
Generally, a basic dashboard just gives you some analysis. Whereas our dashboard not only gives you graphical representation of the analysis, it:

- Explains what does the graph tells.
- Explains what are the factors considered in the analysis.
- Explains why are the factors considered in this particular analysis.
- Explains when should these factors be considered.

Apart from analysis, the dashboard also provides deep knowledge to the user about NFT and its latest highlights.

3. THEORITICAL ANALYSIS

3.1 Block diagram



The price of NFTs depends on a lot of different factors such as the collection it is present in, its rarity, number of holders of that NFT, past sales etc.

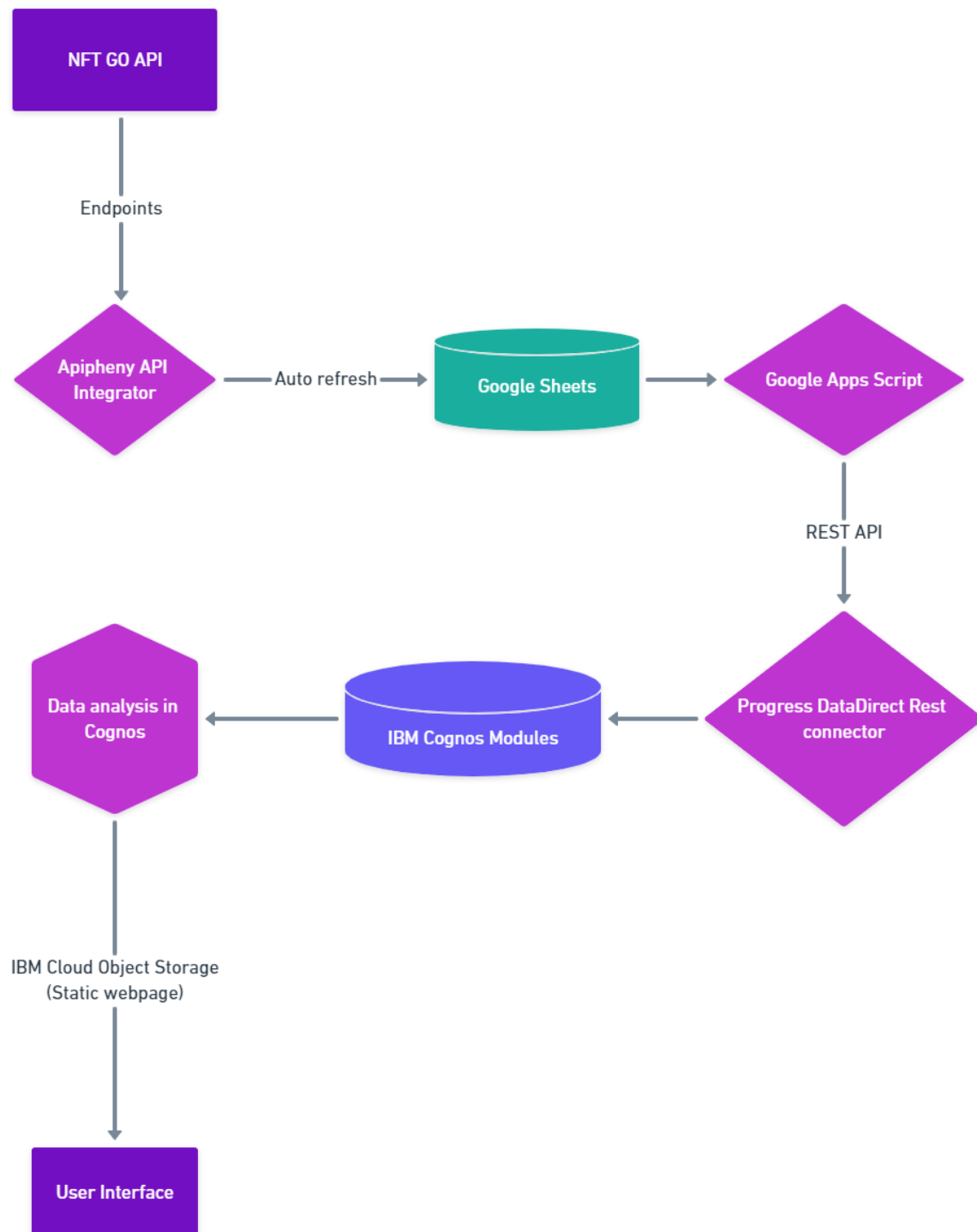
3.2 Hardware / Software designing

Any device with internet connectivity and a web browser is sufficient to view our analysis using our IBM credentials.

4. EXPERIMENTAL INVESTIGATIONS

After researching a lot about NFTs and their prices we have found that unlike stocks, NFTs are not that predictable. An NFT can be sold at any high price due to its uniqueness. While there is uncertainty in predicting price of a new NFT, the price and demand of NFTs can be linked with the collection it is present in. For example, an NFT from Bored Ape Yacht Club may be sold easily at a high price than any other new collections. But there are exceptions in some cases where an NFT may be sold higher than the ceiling price of its collection.

5. FLOWCHART

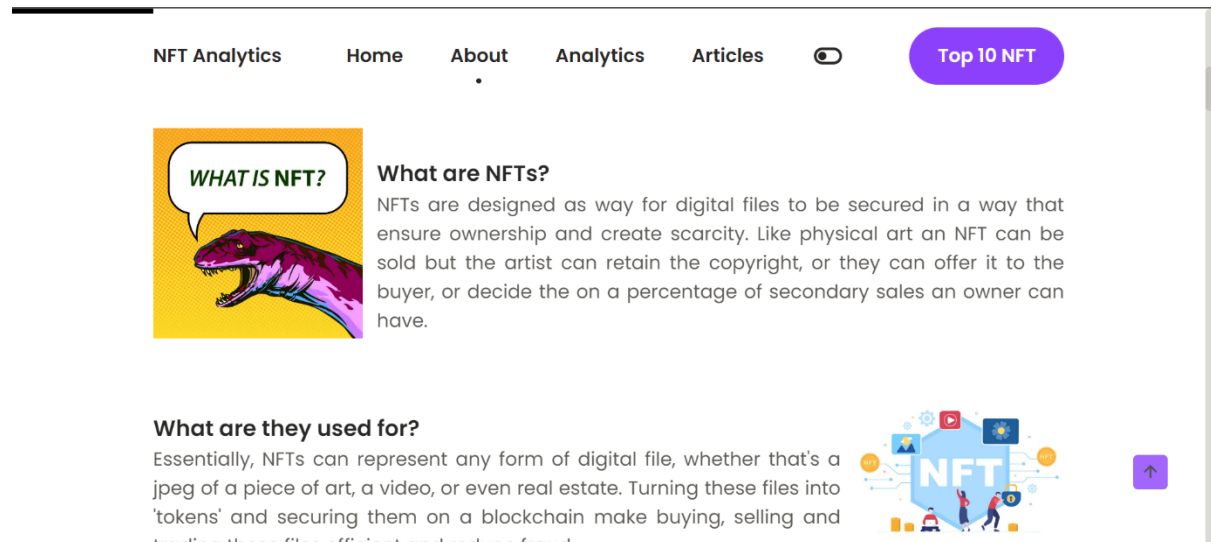


We have fetched the data from APIs and using a set of API tools we have transferred live data to Cognos for analysis. All the analysis is represented in the form of dashboards which will refresh every hour by fetching the API.

All these dashboards are present in the deployed webpage which can be accessed using only our IBM credentials.

6. RESULT

As said in the experimental analysis, the price and demand of an NFT is highly linked to its collection. So, we have found out the top collections based on different factors like floor price, volume, Market cap etc.



The screenshot shows the top navigation bar of the 'NFT Analytics' website. The navigation links are 'NFT Analytics', 'Home', 'About', 'Analytics', and 'Articles'. A toggle switch is visible next to 'Articles'. A purple button labeled 'Top 10 NFT' is located in the top right corner. The main content area features an article titled 'What are NFTs?' with a yellow background and a purple dinosaur illustration. The article text explains that NFTs are designed as a way for digital files to be secured, ensuring ownership and creating scarcity. Below the article, there is a section titled 'What are they used for?' which states that NFTs can represent any form of digital file, such as art, video, or real estate, and that turning these into 'tokens' and securing them on a blockchain makes buying, selling, and trading more efficient and reduces fraud. An illustration of people interacting with NFTs is shown on the right side of this section.

NFT Analytics Home About Analytics Articles ☐ **Top 10 NFT**

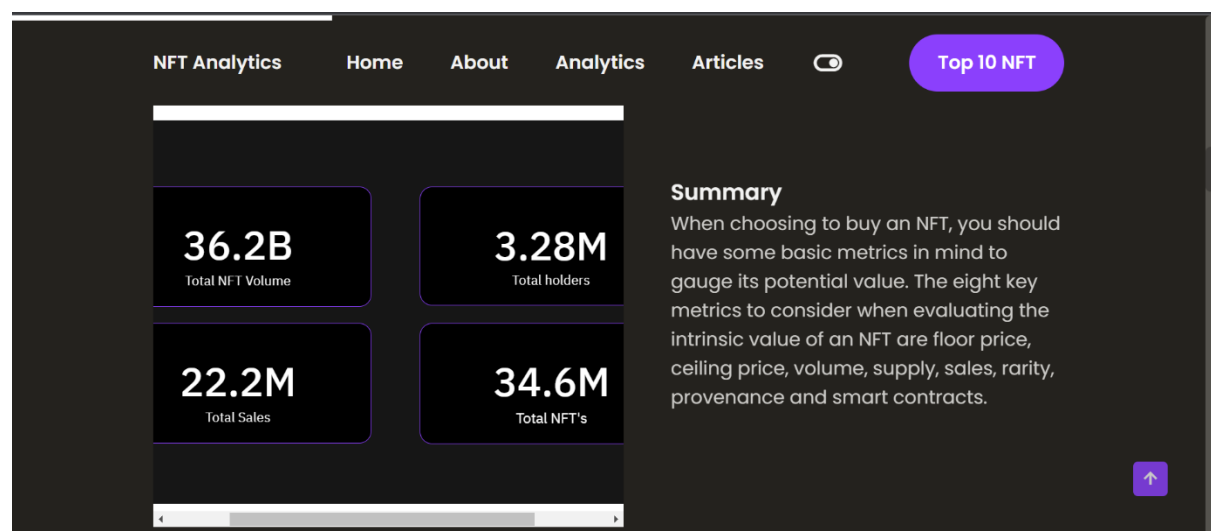
WHAT IS NFT?

What are NFTs?

NFTs are designed as way for digital files to be secured in a way that ensure ownership and create scarcity. Like physical art an NFT can be sold but the artist can retain the copyright, or they can offer it to the buyer, or decide the on a percentage of secondary sales an owner can have.

What are they used for?

Essentially, NFTs can represent any form of digital file, whether that's a jpeg of a piece of art, a video, or even real estate. Turning these files into 'tokens' and securing them on a blockchain make buying, selling and trading these files efficient and reduce fraud.



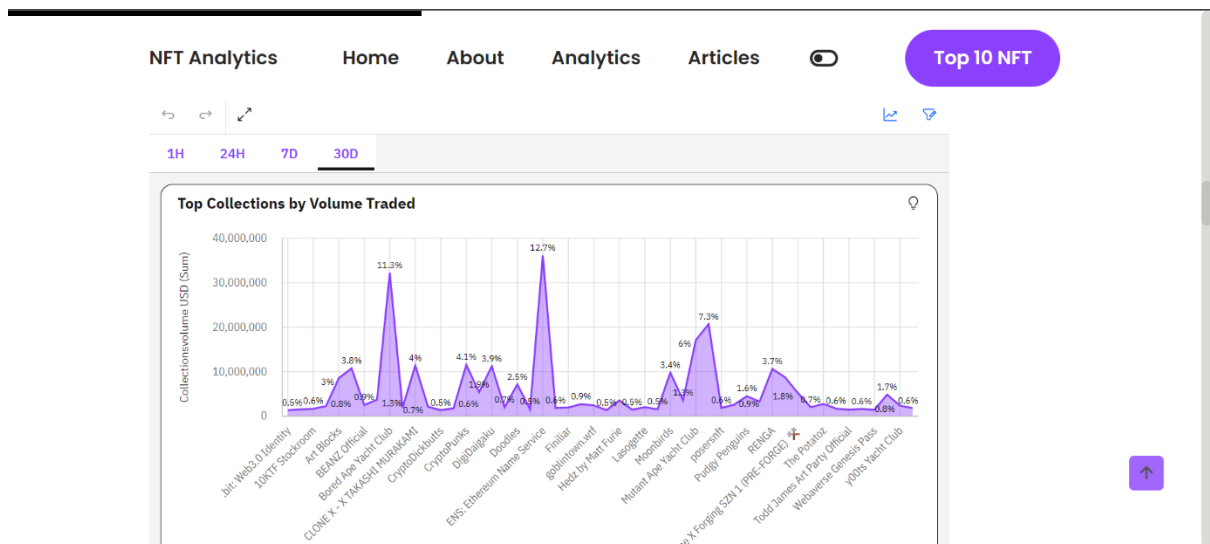
The screenshot shows the 'Summary' section of the 'NFT Analytics' website. The navigation bar is identical to the previous screenshot. The main content area features a dark background with four large, light-colored boxes displaying key metrics: '36.2B Total NFT Volume', '3.28M Total holders', '22.2M Total Sales', and '34.6M Total NFT's'. To the right of these boxes is a 'Summary' section with a heading and a paragraph explaining that when choosing to buy an NFT, one should have some basic metrics in mind to gauge its potential value. The paragraph lists eight key metrics to consider: floor price, ceiling price, volume, supply, sales, rarity, provenance, and smart contracts. A purple button labeled 'Top 10 NFT' is visible in the top right corner.

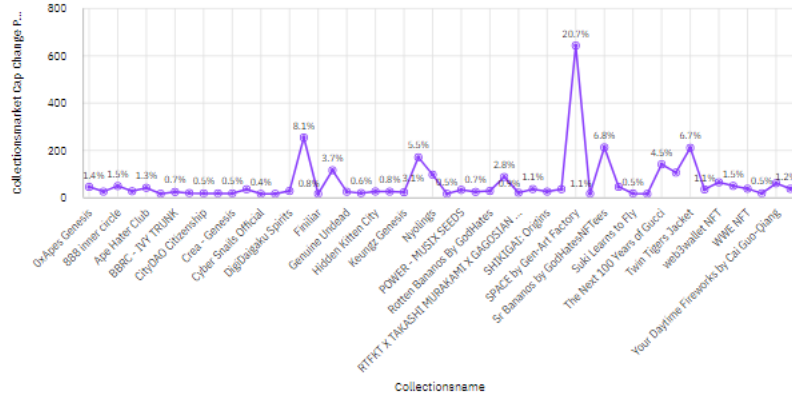
NFT Analytics Home About Analytics Articles ☐ **Top 10 NFT**

Summary

When choosing to buy an NFT, you should have some basic metrics in mind to gauge its potential value. The eight key metrics to consider when evaluating the intrinsic value of an NFT are floor price, ceiling price, volume, supply, sales, rarity, provenance and smart contracts.

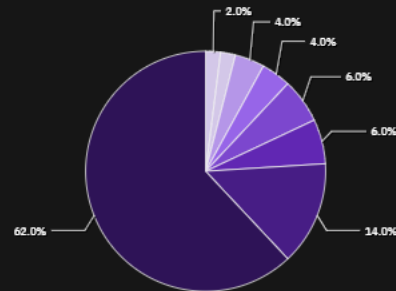
Metric	Value
Total NFT Volume	36.2B
Total holders	3.28M
Total Sales	22.2M
Total NFT's	34.6M





Categories of top NFT Collections

Collectionscategories 0

☒ (no value) ☐ game ☐ domain_names ☐ land ☐ art ☐ utility ☐ collectibles

TOP 10 NFT'S

NFT Rank	NFT's Name	NFT's Image	NFT's Price(\$)
1	CryptoPunk #9998		\$52,95,07,191.00
2	Meebit #4092		\$4,83,34,536.39
3	Meebit #6014		\$4,88,54,898.37
4	Bag #2579		\$4,78,78,242.90
5	Meebit #13824		\$5,06,20,039.29
6	Bag #3834		\$4,57,71,529.10
7	Bag #396		\$4,56,45,414.59
8	Meebit #13292		\$4,83,05,030.82

7. ADVANTAGES & DISADVANTAGES

Advantages

- An easy to use and understand user interface of the dashboard.
- All the dashboards present are real time and get updated every hour.
- Users are provided with explanations of graphs and basic overview of everything related to NFTs.

Disadvantages

- Due to uncertainty in prices of NFTs we have not predicted the prices of NFTs, but shown the most probable collections to invest in.
- We have focussed only on NFTs present in the Ethereum blockchain as it covers more than 70% of the NFT market.

8. APPLICATIONS

Any new user can easily learn about NFTs and see the analytics at one place. The graphs are clearly explained so that users can make decisions whether to buy NFTs from a specific NFT at present time or wait for the price to grow.

Business can use this analysis as a base for in depth analysis and try to improve their NFT services.

NFT creators could look at the most successful collections and research what factors are responsible for higher prices of NFTs.

9. CONCLUSION

This project focuses on the clarity provided to users rather than cluttered dashboards which can be overwhelming for any new user. The NFT analytics dashboard has many uses as mentioned in applications section. This is a necessary tool for anyone who is interested in cryptocurrency and NFTs.

10. FUTURE SCOPE

Due to the rapid rise in the blockchain market there is huge demand for cryptocurrencies and NFTs and we can see millions of dollars being invested. These may become a common investment strategy and new way of getting recognized for creators. As a result, the demand for NFT analytics will rise further in the future.

11. BIBLIOGRAPHY

Research

<https://nftgo.io/analytics/market-overview>

<https://opensea.io/>

<https://www.binance.com/en/blog/nft/metrics-to-guide-your-nft-buy-and-sell-strategy-421499824684903642>

API and tools

<https://nftgo.io/data-api/>

<https://cryptoslam.io/products/api>

<https://apipheny.io/>

<https://www.progress.com/datadirect-connectors>

<https://www.ibm.com/in-en/products/cognos>

[analytics?utm_content=SRCWW&p1=Search&p4=43700056107800350&p5=e&gclid=CjwKC_AjwkaSaBhA4EiwALBgQal8RHdmrxYkctTK7X9PQSi9_544oJFNRKd9t1nkGqsC_S1s0Q1ydaRoCvDUQAvD_BwE&gclsrc=aw.ds](https://www.ibm.com/in-en/products/cognos-analytics?utm_content=SRCWW&p1=Search&p4=43700056107800350&p5=e&gclid=CjwKC_AjwkaSaBhA4EiwALBgQal8RHdmrxYkctTK7X9PQSi9_544oJFNRKd9t1nkGqsC_S1s0Q1ydaRoCvDUQAvD_BwE&gclsrc=aw.ds)

12. APPENDIX

Live website URL:

<https://nft-dashboard.s3.ams03.cloud-object-storage.appdomain.cloud/index.html>