NFT VALUE DASHBOARD

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THE WAY TO GET STARTED IS TO QUIT TALKING AND BEGIN DOING.

Walt Disney



Agenda

About NFT

Problem Statement

Data Description

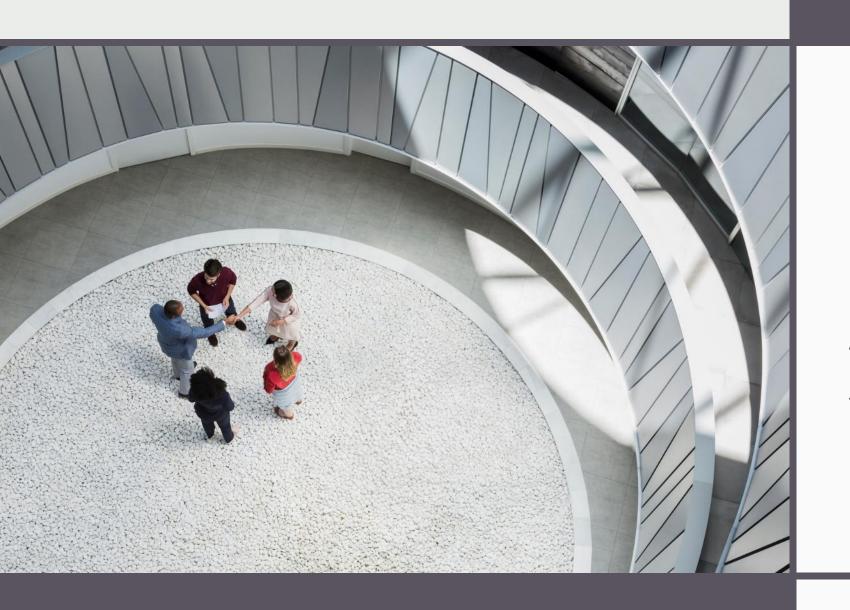
Tableau Dashboard

Jupyter Notebook

Summary



Team - SMART Street



About NFT

The Definition



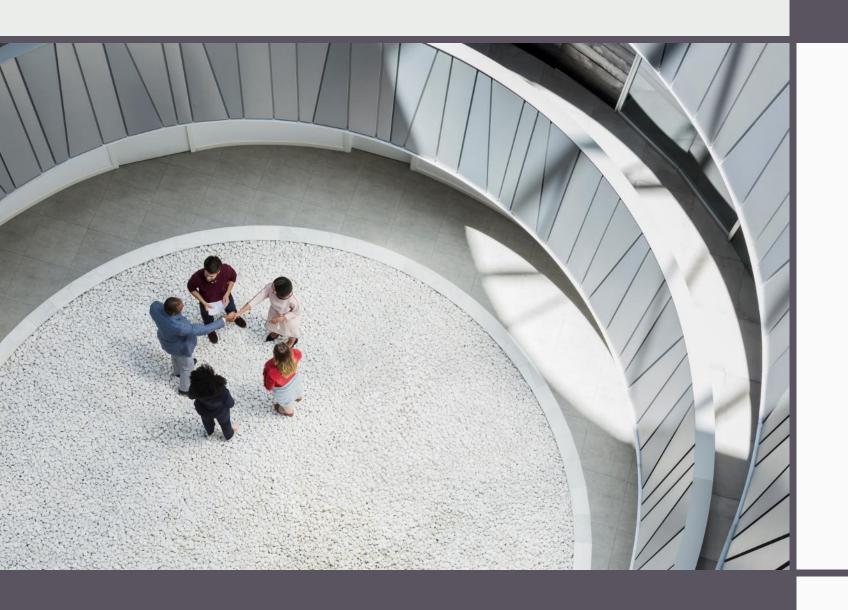
About NFT

Non-Fungible tokens or NFTs for short are unique digital items such as digital art, music, collectibles or in-game assets that are issued on a blockchain.

Basically, they are digital tokens on a blockchain network and provide a representation of a unique item.

NFTs or non-fungible tokens are presently the hottest trends in the domain of blockchain and crypto codes which can be bought or sold using cryptocurrency.

Users can trade NFT via website called as NFT marketplace. These websites facilitate a location where a trade takes place, and often takes a percentage from the transaction for their services. Every blockchain has its own NFT marketplace.



Problem Statement

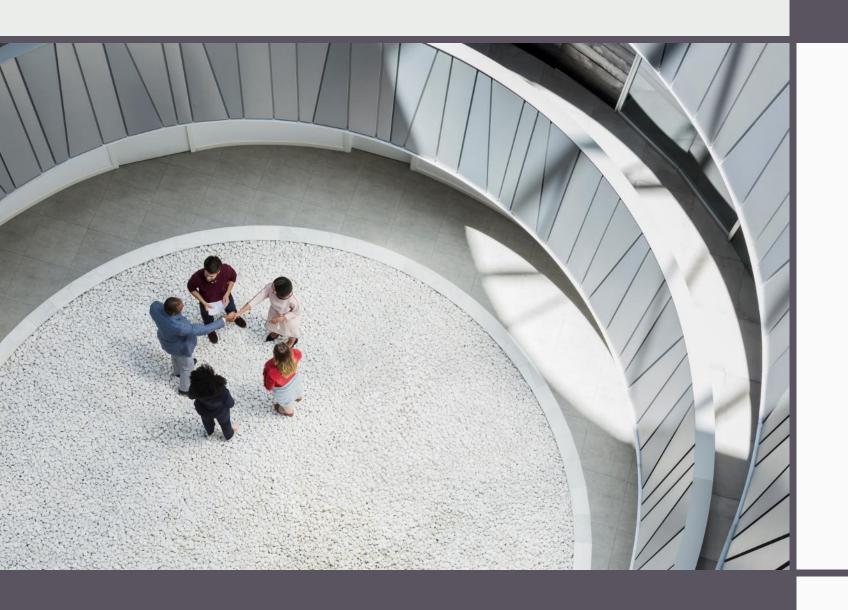
NFT Value Dashboard



Problem Statement

These days, NFTs are making a splash in the market by providing people with a new option to acquire assets. Between the second and third quarter of 2021, NFT trading increased 700% (\$10.7 billion) according to DappRadar. Whether they've been used for exchanges or as investments, NFTs have been applied to various fields, including science, technology, and art.

With NFTs becoming more popular, RMDS Lab is hosting its own data science competition - Creating a NFT Value Dashboard to Summarize the Past and Predict the Future. Contestants will be challenged with collecting datasets to create a dashboard that assesses trends in the development of NFTs and forecast their future trajectory.



Data Description

Dataset



Data Description

The datasets provided are:

1. ASSETS

Each row represents a specific NFT item. It includes features like name, description, and asset category.

2. EVENTS

Each row represents a specific event about NFTs. It includes features like event type, auction type, and duration.

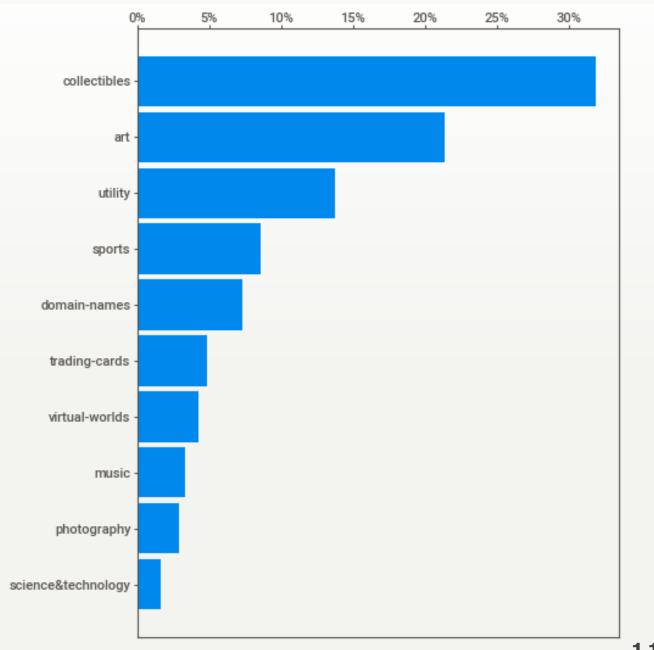
3. COLLECTIONS

Each row represents a specific NFT collection. It includes features like created date, description, and average price.

Data Description - ASSETS

Statistics	Description
Number of Observations	16550
Total size in memory	44 MB
Number of Features	31
Categorical	9
Numerical	6
Text	16

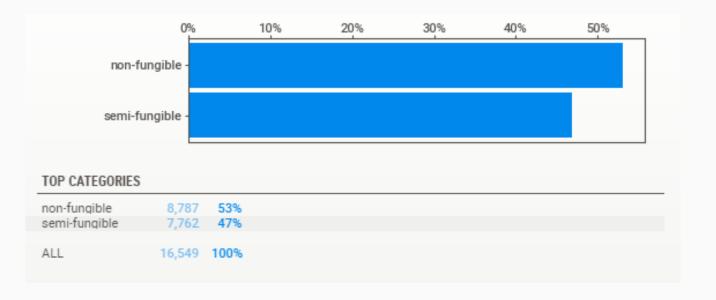
ASSET CATEGORY



TOP CATEGORIES		
collectibles	5,283	32%
art	3,542	21%
utility	2,280	14%
sports	1,425	9%
domain-names	1,211	7%
trading-cards	806	5%
virtual-worlds	706	4%
music	549	3%
photography	483	3%
science&technology	265	2%
ALL	16,550	100%

ASSET CATEGORY

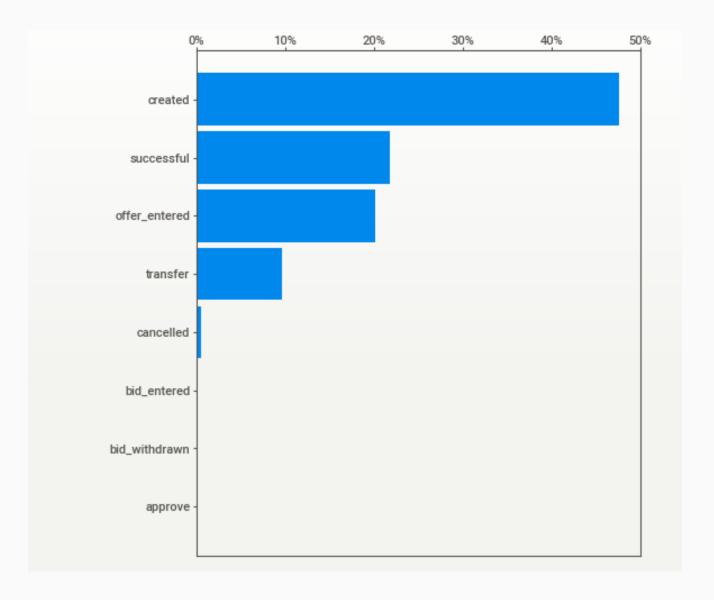
ASSET CONTRACT TYPE



Data Description - EVENTS

Statistics	Description
Number of Observations	87404
Total size in memory	86.5 MB
Number of Features	20
Categorical	3
Numerical	6
Text	11

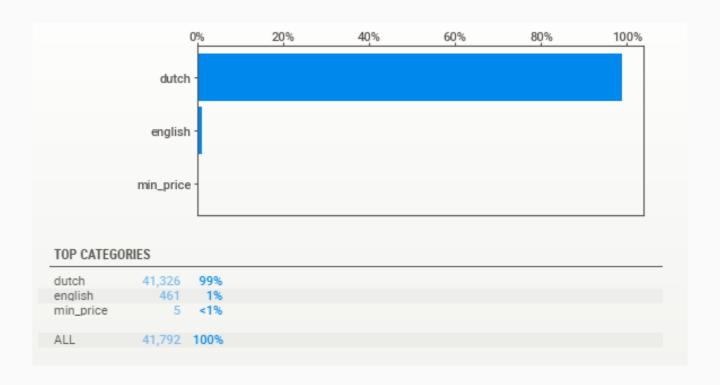
EVENT TYPE



TOP CATEGORIES		
created	41,626	48%
successful	19,050	22%
offer_entered	17,621	20%
transfer	8,380	10%
cancelled	446	<1%
bid_entered	156	<1%
bid_withdrawn	124	<1%
approve	1	<1%
ALL	87,404	100%

EVENT TYPE

AUCTION TYPE



Data Description - COLLECTIONS

Statistics	Description
Number of Observations	1427
Total size in memory	3.2 MB
Number of Features	46
Categorical	10
Numerical	24
Text	12

Sweetviz report for dataset

Dataset	Report
ASSETS	assets_sweetviz_report
COLLECTIONS	collections_sweetviz_report
EVENTS	events_sweetviz_report

Note: HTML report file is attached as part of deliverables

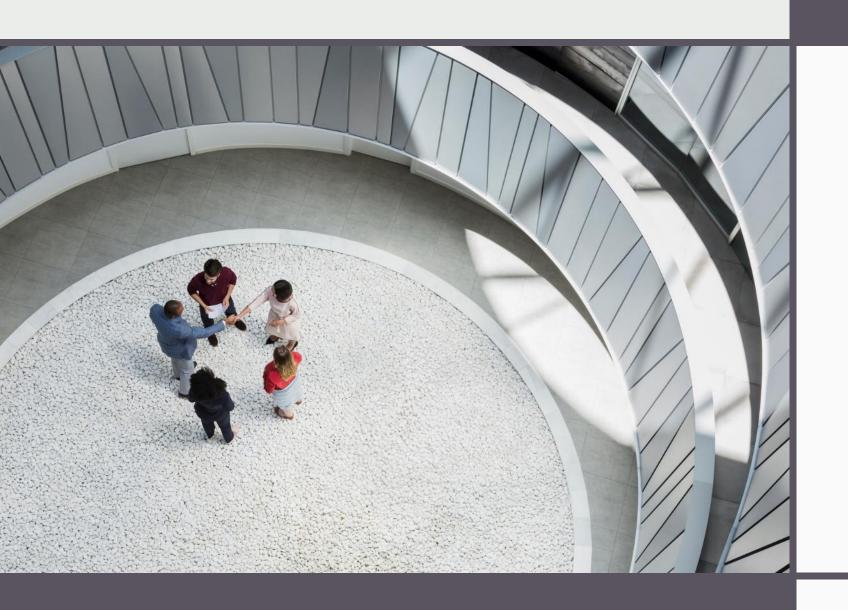


Tableau Dashboard

NFT Value Dashboard

NFT Value Dashboard - Asset Category

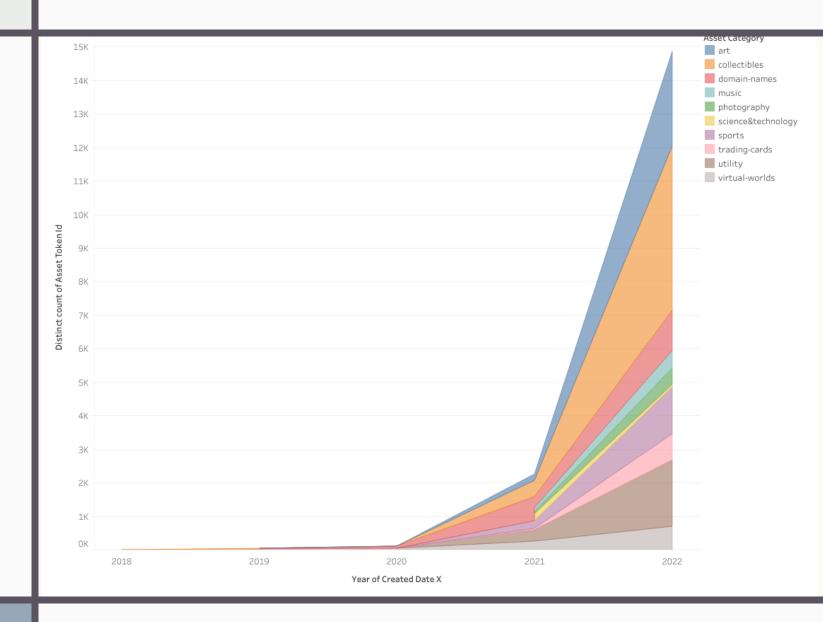
Asset Category Trend and Distribution

- Year wise Trend
- Volume Traded
- Asset Category vs Auction Type

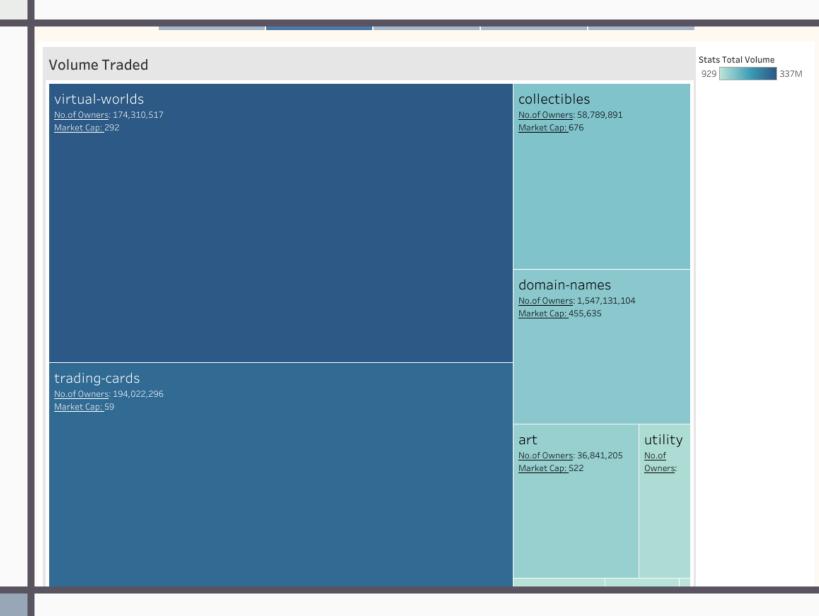
Asset Category Favorite and Social Media Presence

- Favorite Distribution
- Social Media Presence

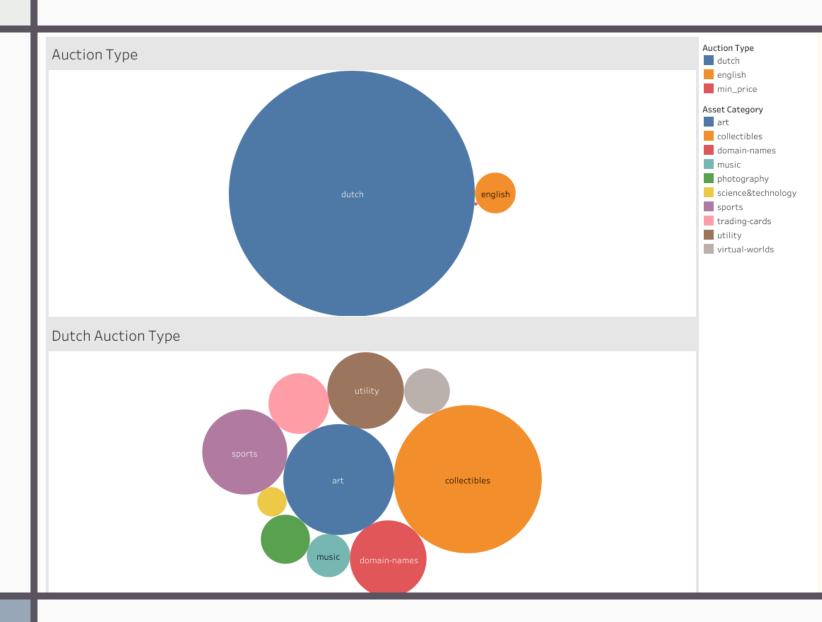
Year wise trend for Asset
 Category



Volume traded



Asset Category vs Auction
 Type



 Favorite Distribution for Asset Category



 Social Media Presence for Asset Category



NFT Value Dashboard

Top Asset Category for 1-Day, 7-Day & 30-Day Volume, Sales & Avg. Price

- <u>Top Asset Category for 1-Day</u>
- Top Asset Category for 7-Day
- Top Asset Category for 30-Day

Top 5 Slug for 1-Day, 7-Day & 30-Day Volume, Sales & Avg. Price

- Top 5 Slug for 1-Day
- Top 5 Slug for 7-Day
- Top 5 Slug for 30-Day

 Top Asset Category for 1-Day Volume, Sales & Avg.
 Price



 Top Asset Category for 7-Day Volume, Sales & Avg.
 Price



 Top Asset Category for 30-Day Volume, Sales & Avg. Price



• Top 5 Slug for 1-Day Volume, Sales & Avg. Price 1 Day 7 Days 30 Days

1 Day

Asset Category	Slug \mp	Avg. Stats One Day Average Price	Median Stats One Day Change	Median Stats O
	karafuru	3	1	
	cryptopunks	69	-1	
art	boredapeya	99	0	
	wonderpals	1	0	
	dippies	0	-1	
	boredapeya	99	0	
	clonex	18	0	
collectibles	veefriends	21	3	
	troverse-pl	0	0	
	dourdarcels	0	6	
	ens	0	-1	
	dcl-names	0	-1	
domain-names	unstoppabl	0	1	
	cryptovoxel	0	-1	
	crypto-art	0	0	
	theorbsbybt	2	1	
	wvrps-by-w	0	0	
music	snoopdogg	2	-1	
	stellar-sens	0	3	
	mola-chill-c	0	2	
	quantum-	1	2	
	unseen-em	1	0	
photography	uwpo	0	2	
	kevindyor	0	0	
	splitstories	0	0	
	biology-1	0	0	
	art-done-by	0	0	
science&techn	algorithm-n	0	0	

Highlight Asse

• Top 5 Slug for 7-Day Volume, Sales & Avg. Price 1 Day 7 Days 30 Days

7 Days

Asset Category	Slug \mp	Avg. Stats Seven Day Average Price	Median Stats Seven Day Sales	Median Stats Seven
	cryptopunks	52	107	
	boredapeya	94	47	
art	wonderpals	1	5,649	
	dippies	0	12,354	
	satoshirun	0	8,462	
	azuki	12	312	
	boredapeya	94	47	
collectibles	clonex	21	248	
	mutant-ape	19	177	
	thewalking	0	10,533	
	ens	1	357	
	unstoppabl	0	10	
domain-names	dcl-names	0	6	
	unstoppabl	0	8	
	cryptovoxel	0	2	
	theorbsbybt	1	94	
	wvrps-by-w	0	181	
music	snoopdogg	2	54	
	soulection	0	40	
	musix	0	34	
	where-my-v	64	1	
	quantum-	1	57	
photography	raskalov-co	1	9	
	bondonthe	3	7	
	-imperman	0	244	
	chaos-algor	0	1	
	art-done-by	0	0	
science&techn	algorithm-n	0	0	

• Top 5 Slug for 30-Day Volume, Sales & Avg. Price 1 Day

30 Days

Highlight Ass..

Asset Category	Slug =	Median Stats Thirty Day Volume	Median Stats Thirty Day Sales	Avg. Stats Thirty Day A
	cryptopunks	31,149	306	
	boredapeya	30,342	286	
art	gazers-by	380	48	
	meridian-b	309	26	
	letswalk	272	59	
	azuki	31,698	2,262	
	boredapeya	30,342	286	
collectibles	clonex	26,331	1,400	
	mutant-ape	20,635	1,000	
	veefriends	3,630	214	
	ens	1,230	2,201	
	unstoppabl	6	229	
domain-names	dcl-names	5	33	
	unstoppabl	1	56	
	cryptovoxel	0	10	
	theorbsbybt	2,172	1,279	
	wvrps-by-w	2,032	3,467	
music	snoopdogg	407	244	
	namewee4	4	6	
	eulerbeats	3	2	
	where-my-v	551	10	
	quantum-	361	260	
photography	rowhomes	59	19	
	bondonthe	21	7	
	urbananom	2	2	
	usscsosiris	0	16	
	chaos-algor	0	8	
science&techn	emergent-b	0	1	

NFT Value Dashboard - Event Type

NFT & SFT for Event Type

- For NFT (Non-Fungible Token)
- For SFT (Semi-Fungible Token)

NFT & SFT Top 5 Slugs for Event Type

- NFT Top 5 Slugs
- SFT Top 5 Slugs



NFT -INSIGHTS

 Number of NFT & SFT for Event Type

Asset Category	Event Type	Slug	Median Ending Price	Median Stats Total Volume	Median Total Price	Median Stats Floor Price	Median Duration in days
art	created	desperate-ape-wives	5.000e+17	1.113e+04		3.450e-01	1.782e+00
		dippies	6.000e+17	5.531e+03		3.600e-01	1.001e+00
		harvmcmblocks	6.000e+17	1.974e+02		5.490e-01	3.001e+00
		spin-the-worlds-first-pain	6.175e+17	3.570e+01		4.400e-01	6.895e+00
		wonderpals	7.800e+17	8.181e+03		6.900e-01	4.428e+00
	offer_entered	cryptocoven		7.607e+03		9.800e-01	
		forgottenruneswizardscult		1.156e+04		1.840e+00	
		genesis-creepz		2.429e+04		1.960e+00	
		karafuru		3.599e+04		2.100e+00	
		pixels-farm		4.432e+03		9.700e-01	
	successful	cryptocoven		7.607e+03	8.700e+17	9.800e-01	
		karafuru		3.599e+04	3.900e+18	2.100e+00	
		phantabear		3.277e+04	1.800e+18	6.975e-01	
		pixels-farm		4.432e+03	4.000e+17	9.700e-01	
		wonderpals		8.181e+03	9.000e+17	6.900e-01	
	transfer	dippies		5.531e+03		3.600e-01	
		kpopctzen-official		4.898e+02		3.811e-01	
		lovelesscitymetropass		5.632e+02		3.970e-01	
		reptile-armoury		9.865e+03		1.900e-01	
		spin-the-worlds-first-pain		3.570e+01		4.400e-01	



NFT -INSIGHTS

• NFT Top 5 Slug for Event Type

Asset Category	Event Type	Slug	Median Ending Price	Median Stats Total Volume	Median Total Price	Median Stats Floor Price	Median Duration in days
trading-cards	created	allstarfreaks	3.750e+17	4.591e+02		1.740e-01	3.000e+00
		arbo-artifacts	9.900e+16	1.230e+02		2.700e-03	7.001e+00
		billionaire-nft-club	4.300e+16	2.830e+01		3.830e-02	1.001e+00
		curiocardswrapper	5.245e+17	3.668e+04		3.880e-01	9.596e-01
		lux-cards	2.000e+18	5.053e+02		4.559e-02	1.810e+02
	offer_entered	arbo-artifacts		1.230e+02		2.700e-03	
		curiocardswrapper		3.668e+04		3.880e-01	
		parallelalpha		6.354e+04		1.500e-03	
	successful	arbo-artifacts		1.230e+02	1.600e+16	2.700e-03	
		curiocardswrapper		3.668e+04	4.680e+17	3.880e-01	
		lux-cards		5.053e+02	2.400e+17	4.559e-02	
		parallelalpha		6.354e+04	1.450e+16	1.500e-03	
		pokepxls		2.650e+01	1.000e+16	8.000e-03	
	transfer	arbo-artifacts		1.230e+02		2.700e-03	
		cryptohamsters-origins		1.724e+01		1.000e-02	
		parallelalpha		6.354e+04		1.500e-03	
		pokepxls		2.650e+01		8.000e-03	



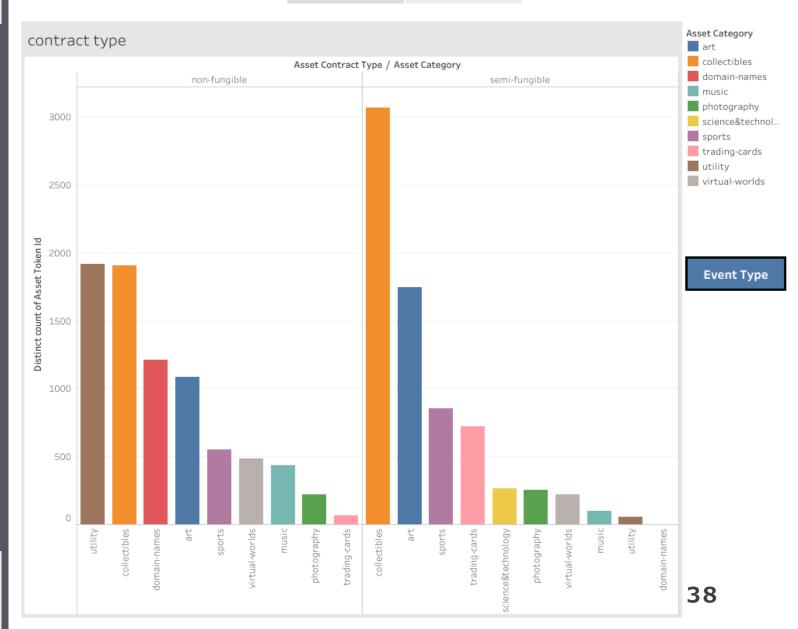
NFT -**INSIGHTS**

• SFT Top 5 Slug for Event Type

NFT INSIGHTS







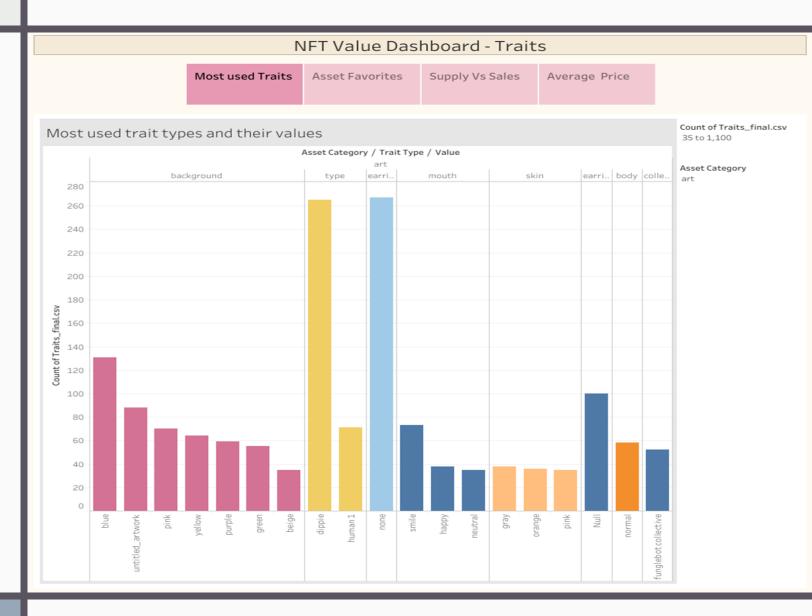
NFT Value Dashboard - Traits

Traits value Information

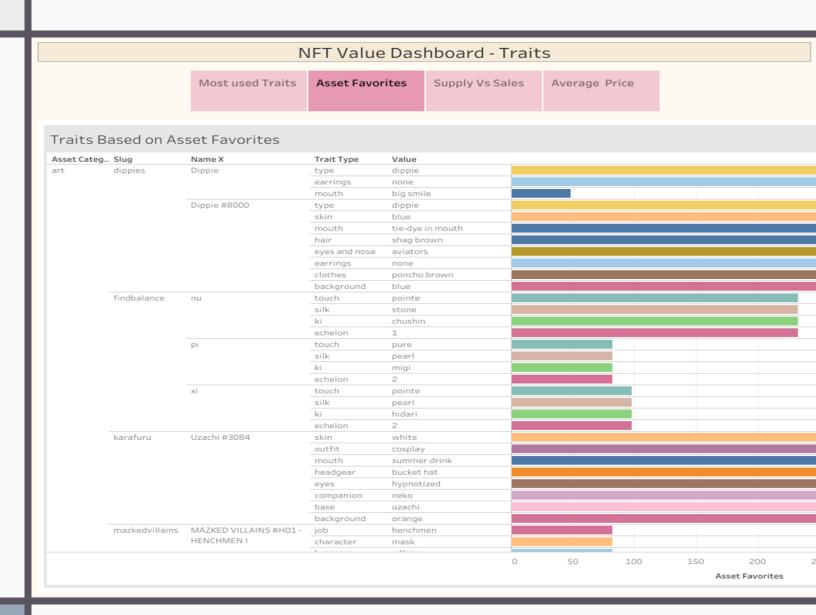
- Most used Traits and Values
- Traits based on Asset Favorites

- Total Supply vs Sales
- Traits based on Average Price

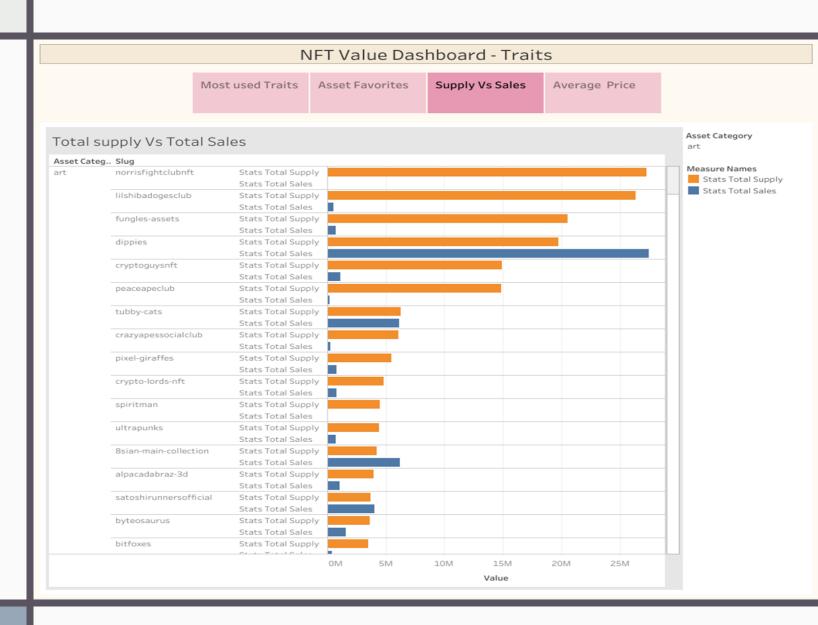
Most used Traits and Values



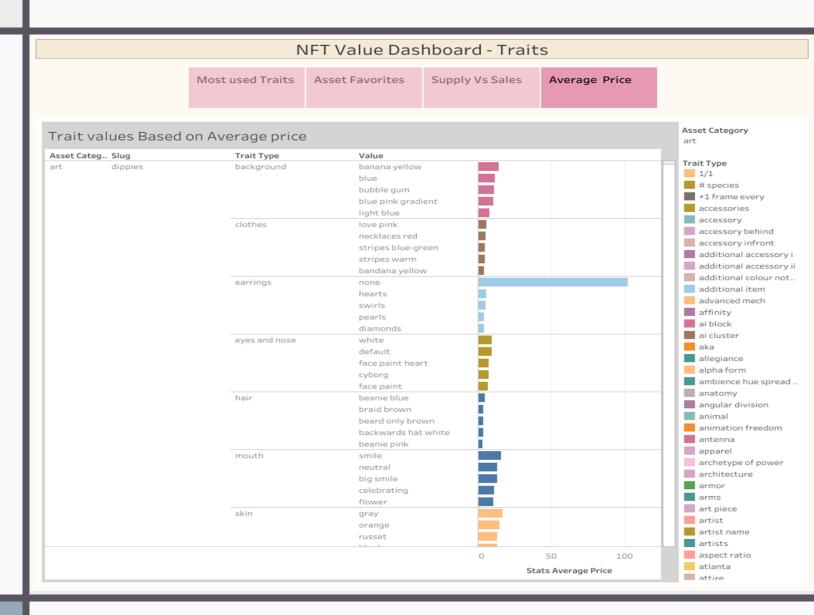
Traits based on Asset
 Favorites



• Total Supply vs Sales



Traits based on Average
 Price



NFT Value Dashboard - Trend & Forecast

Trend & Forecast

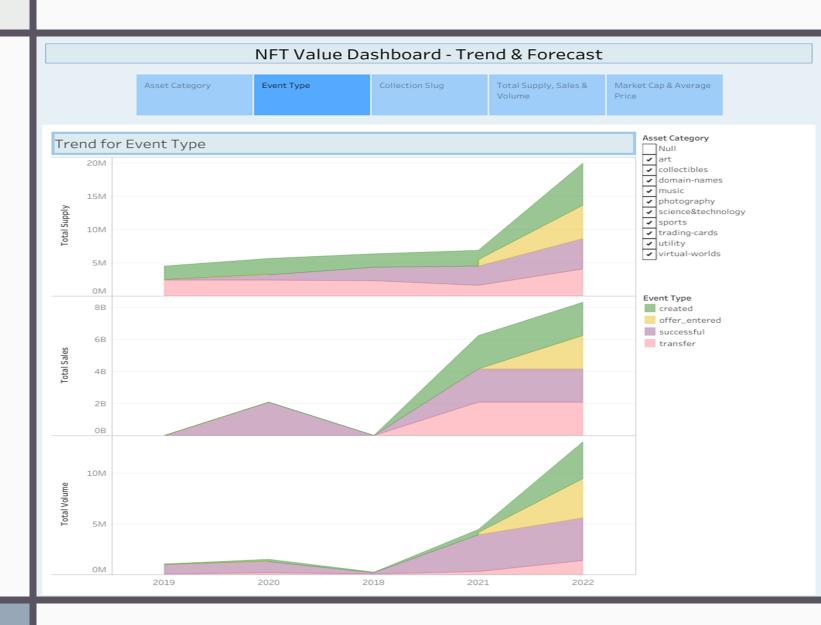
- Trend for Asset Category
- Trend for Event Type
- Trend for Collection Slug

- <u>Total Supply, Sales & Volume</u>
 <u>Forecast</u>
- Market Cap & Average Price
 Forecast

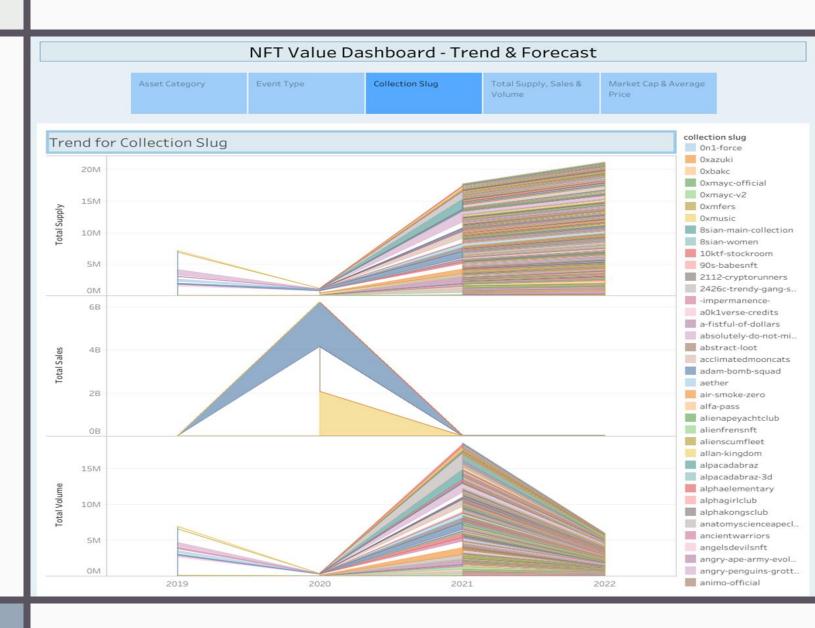
• Trend for Asset Category



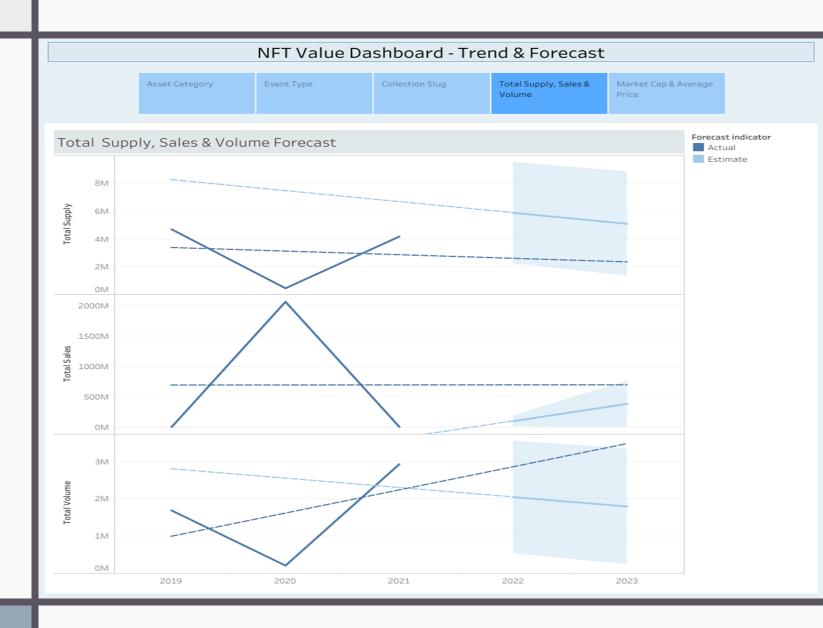
• Trend for Event Type



• Trend for Collection Slug

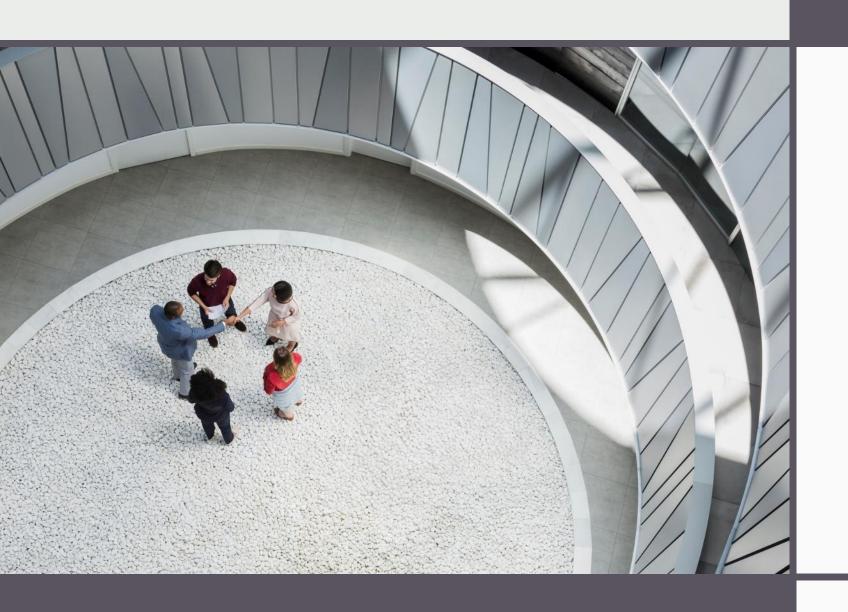


Total Supply, Sales &
 Volume Forecast



Market Cap & Average
 Price Forecast



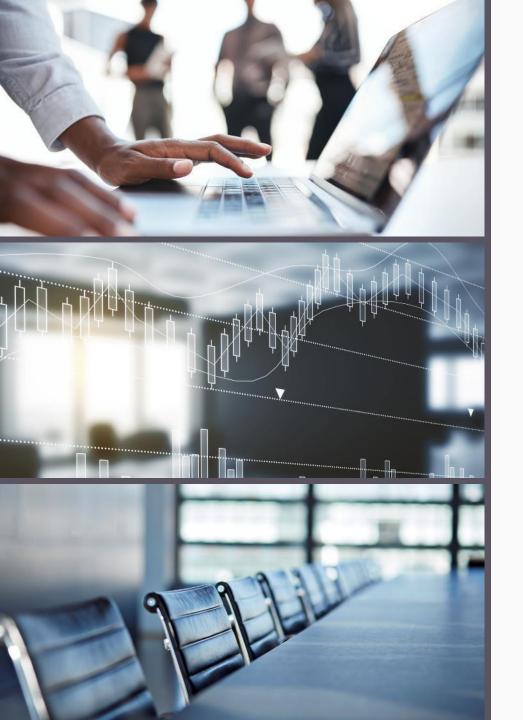


Jupyter Notebook

EDA and Model Building

Jupyter Notebook – Team SMART Street

Notebook	Description
GRMDS NFT SMART Street1	EDA
GRMDS_NFT_SMART_Street2	Model Building



Summary

NFT was **word of the year** for 2021 by Collins Dictionary along with Metaverse and Crypto in top 10 words of the year.

NFT's has opened the door for art buying and selling for everyone interested and especially giving new lease of life to artists.

Even though Science & Technology Asset Category is yet to catchup but overall Top 5 Asset Category which are **Collectibles**, **Art**, **Sports**, **Utility** and **domain-names** are going to continue to dominate NFT marketplace in year 2022 and beyond.



Summary

Top 5 NFT sales in Q1 of 2022 as per DappRadar report includes SUPERRARE, VOX COLLECTIBLES, CRYPTOPUNKS, BORED APE YACHT CLUB & DECENTRALAND.

NFT's generated \$12 billion in trades in Q1 2022 as per DappRadar report and NFT activity in blockchains outside Ethereum is ramping up.

Security is critical aspect as \$1.2 billion was stolen in hacks and bridge exploits in Q1 of 2022 as per DappRadar report.

Top 5 Hacks of Q1 2022 - DappRadar

Project	Date	Lost Funds	Scam Type	Protocol
Ronin	3/29/2022	\$615,500,000	Exploit	Ronin
Wormhole	2/2/2022	\$326,000,000	Exploit	Solana
Qubit Finance	1/27/2022	\$80,000,000	Exploit	Binance
Cashio	3/23/2022	\$48,000,000	Exploit	Solana
Lympo	1/10/2022	\$18,500,000	Access Control	Ethereum



Summary

NFT has huge potential to create new revenue streams and engagement model in Digital commerce space.

Majority of NFT's are built on **Ethereum** which is one of the largest blockchain with robust ecosystem of users and developers.

Ethereum uses **Proof of Work** mechanism and moving towards **Proof of Stake** like Flow, Polygon or Solana will help reduce environmental impact of mining process.

THANK YOU





Reduce Reuse Recycle