Non Fungible Token (NFT) / Devanand D V
Blockchain has given us the new ability to create scarce digital assets, where ownership is maintained by the decentralized network of miners but most of the assets are “fungible” in that they are able to be interchangeably by another of the same.

For example: My bitcoin is same as your bitcoin. They are mutually interchangeable.

we are also able to create, Unique Digital Assets, such as digital – native deeds, that are “Non fungible” and provably unique and without a non centralized intermediary.
What are NFTs
NFT Definition

- **NFT** or **Non Fungible Tokens** are a type of digital tokens where token is different and holds unique characteristics.

- Due to the nature of NFTs, many NFTs have varying rarity and are considered valuable in the digital asset community.

- Anything is defined as NFT, from games to painting and everything.
KEY CHARACTERCSTICS OF NFTs

➢ Indivisibility
➢ Ownership
➢ Uniqueness
➢ Rarity
➢ Transparency
➢ Interperability (Inter-operability)
**TOKEN STANDARD THAT NFT USE?**

- **Etherium** token standard is the most common token standard that NFTs use now. Typically **ERC-721** and **ERC – 1155** token standards are widely used to create various NFTs.
- Some early-stage NFTs use a hybrid **ERC-20** token standard to create NFTs unfortunately. To sell them you need to wrap them.
- Other than **Etherium** also **EOS, Flow, Tezos**, etc. Also offer a specific token standard for developing NFTs.
NFT Market place

➢ To buy and sell on NFT marketplaces, users need to create an account and connect their wallets to the account.

➢ Different marketplaces have different supported cryptotcurrencies. The most popular currency currently is **Etherium**. User can use etherium to buy NFTs.

➢ To buy Ether/Etherium or any other crypto, users have to get blockchain wallet and fund it through a flat-to crypto currency exchange.
Opensea – NFT Market place
Risk that NFTs brings

Intellectual Property

- The NFT risk and challenges related to intellectual property rights suggests that buyers only have the right to display NFTs and that they are the sole owners.

- The limitations are also evident in terms of the service that users should follow when using NFT market places.
Theft risk

- When you are trying to purchase an NFT, it is important to find out whether the seller actually owns the NFT.
- There have been examples of people clicking photos of NFTs or minting NFT replicas.
- So, when you buy an NFT, you only get the right to use the NFT rather than intellectual property rights.
- The terms and conditions for ownership of an NFT are evident in the metadata of the underlying smart contract.
Cybersecurity Risks

➢ The growth of the digital world and staggering growth in popularity of NFTs has resulted in prominent cybersecurity and fraud risks. NFT replica stores that appear similar to the original NFT store with the same logo and content from authentic stores.

➢ Another prominent challenge associated with the risks and challenges related to NFTs in cyber security refers to fake NFT stores.

➢ The other prominent non-fungible tokens risks and challenges related to cybersecurity and fraud include copyright theft, replication of popular NFTs or fake airdrops, and NFT giveaways.
Legal risk

➢ There is no legal definition of NFT known in the entire world. Different countries such as the UK, Japan, and the EU are moving ahead with different approaches for classifying NFT. This makes it necessary to come up with an international body of Non-fungible tokens for setting regulations and legalization in the entire world.

➢ There is a considerable rise seen in the NFT market, and this is why it’s essential to have a regulatory body. There is a vast increment visible in the use cases of NFTs. Now, this demands a regulatory body to adapt to the rules and regulations of NFTs.

➢ The current laws related to NFT are still stuck with finding the correct definition for it. As the market and variety of NFT are constantly growing, it is becoming difficult to come to a solid ground for compliance in NFTs.
Money laundering risks

This technology can raise alarm bells from a money laundering and financial crime perspective.

This is an NFT known as The Pixel, produced by an artist who goes by the name Pax and sold for roughly $1.3 million dollars at a Sotheby’s auction in April 2021.

Someone looking to “clean” dirty money could theoretically generate an anonymous NFT; list it for sale on the blockchain; purchase it from himself/herself from an anonymous, unregulated digital wallet with illicit funds; and then recognize the money as legitimate funds from the sale of the artwork.
Indonesian guys NFT sold for 328.78 USD. As of Friday, his collection reached a total trade volume of 384 ether, equivalent to more than $1 million.
Evaluation challenge

➢ Among non-fungible tokens risks and challenges refers to the uncertainty in determining the value of NFTs.

➢ The valuation of NFTs depends considerably on scarcity and the perception of owners and buyers alongside the availability of distribution channels.

➢ It is extremely difficult to anticipate the identity of the next buyer of an NFT or the possible factors which can drive their purchase.

➢ Therefore, the value of NFTs would basically depend on how the buyer perceives their price, thereby leading to fluctuations.
Advantages of NFTs

- Decentralized marketplace
- Unique
- Collectibles
- Resell able
- Immutable
- Copyright
- Security
- Identity Management
Industries that leveraging NFT’s

NFT in art and music

The art & music industry has a long history of gatekeepers such as brokers, galleries, agents, and labels holding the keys to the kingdom of intellectual property ownership. These gatekeepers control the distribution and sale of an artist’s work, and how the revenues are allocated.
NFT in the Gaming industry

The gaming industry would adopt NFTs since most games have created virtual economies by adding in-app purchases, essentially tokenizing assets that you can buy within a game i.e. *Shield or skin*.

The opportunity NFT offers the gaming industry is the ability to let users keep the assets they’ve purchased in their games. Currently, when a user quits their game the money/investment and the assets purchased in-game are gone.
NFT in Metaverse

- Metaverse is digital 3D universes that give users and businesses endless opportunities for porting real-world assets and services.
- Metaverses provide an open and fair economy backed by the blockchain.
- In particular, the play-to-earn gaming economy will engage and empower players of blockchain games via NFTs.
- NFTs are the bridge to the metaverse, and facilitate identity, community and social experiences in the metaverse.
- Users can collect in-game NFTs through collections to access gaming metaverses.
NFT in the Sports industry

➢ Collectibles are arguably the industry most impacted by NFT’s. This is large because NFT technology first made waves by catching mainstream attention in 2017 with "CryptoKitties" collectibles.

➢ More recently, marketplaces like "NBA TopShots" have gained huge NFT momentum, letting collectors buy a moment in an NBA game as an NFT.
NFT in Internet of things (IOT)

An estimated **50 billion connected devices worldwide**, IoT is easily one of the most prevalent technologies in existence today.

➢ NFTs can help secure IoT networks by acting as a device authenticator which prevents a single entity (i.e. a malicious actor) from controlling massive amounts of data generated by digital networks.

➢ An NFT can be physically bound to an IoT device to the use of the physical unclonable function (PUF) that enables the recovery of its private key and then its Blockchain account address (BCA). This link between the tokens and devices is difficult to break and can be traced during their lifetime.
NFT in Land ownership/claims

➢ When the land assets are represented as an NFT, letting the individual or group (for example an indigenous community) prove ownership using a cryptographically secured and signed digital token.

➢ Instead of lawyers, land registries and escrow accounts, smart contracts will ensure that money and assets change hands and both parties honour their agreements.
Any questions?
Disclaimer
This report has been produced by students of Global Risk Management Institute for their own research, classroom discussions and general information purposes only. While care has been taken in gathering the data and preparing the report, the student's or GRMI does not make any representations or warranties as to its accuracy or completeness and expressly excludes to the maximum extent permitted by law all those that might otherwise be implied. References to the information collected have been given where necessary. GRMI or it's students accepts no responsibility or liability for any loss or damage of any nature occasioned to any person as a result of acting or refraining from acting as a result of, or in reliance on, any statement, fact, figure or expression of opinion or belief contained in this report. This report does not constitute advice of any kind.

Campus Address:
88, Sector 44, Gurgaon – 122002

CONTACT US
www.grm.institute
Email: admissions@grm.institute

Thank you!