



## Blockchain Gaming in India

**For Prelims:** Blockchain Technology, Blockchain Gaming, cryptocurrency, Non-Fungible Tokens (NFTs), CryptoKitties, Difference between Games of skill and Games of chance.

**For Mains:** Application of block chain technology, Budget 2022-2023.

### Why in News?

The vast scope and potential of blockchain technology has attracted the gaming industry over the past few years. In India too, gaming industries are exploring this option.

- **Blockchain** is a decentralised database that stores information. It relies on **technology that allows for the storage of identical copies** of this information on **multiple computers in a network**.

### What is Blockchain Gaming?

- Blockchain games are online **video games that are developed integrating blockchain technology into them**.
  - It includes elements that use cryptography-based blockchain technologies like [Cryptocurrency](#) or [Non-Fungible Tokens \(NFTs\)](#).
- **These elements are used by** players to buy, sell, or trade with other players, with the game publisher taking a fee from each transaction as a form of monetization.
- **Example of Blockchain Game:** In 2017, **Dapper Labs'** had developed the first ever blockchain game called **CryptoKitties**.
  - In the game, people can virtually experience the joy of adopting and breeding a cat (CryptoKittie), without taking up the responsibility of bringing one home.
  - Each CryptoKittie is a Non-Fungible Token ("NFT").

### What are elements of Blockchain Games?

- **NFTs:** NFTs represent **in-game virtual assets** that can be owned by players, such as maps, armor or land.
  - These NFTs act as **asset tags**, identifying ownership of the in-game assets, and are stored on the blockchain.
  - Being on the blockchain allows the player to have a **secure record of ownership of the in-game assets** and also gives the assets the ability to outlive the game itself.
  - Based on the manner in which the games are designed, it also allows for the **in-game assets to be transferred from one game to another**.
  - It **also creates transparency**, since ownership records can independently be verified by any third party as well.
  - In doing so, it **makes in-game assets marketable** and creates a decentralized market, where they can be bought and sold by people.
- **Cryptocurrency:**

- Cryptocurrency, such as tokens based on the **Ethereum blockchain**, may be used for the purchase of in-game assets.
- These in-game purchases usually enable gamers **to buy items like extra lives, coins and so on directly from the game.**

PYQ

Consider the following pairs: (2018)

Terms sometimes seen in news	Context/Topic
1. Belle II experiment —	Artificial Intelligence
2. Blockchain technology —	Digital/Cryptocurrency
3. CRISPR - Cas9 —	Particle Physics

Which of the pairs given above is/are correctly matched?

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

Ans: (b)

## What is legality of Games in India?

- **Legal Jurisdiction:** The state legislators are, vide **Entry No. 34 of List II (State List) of the Seventh Schedule of the Constitution of India**, given **exclusive power to make laws** relating to betting and gambling.
- **Types Games in India:** Most Indian states regulate gaming on the basis of a distinction in law between **'games of skill' and 'games of chance'**.
- **Test of Type of Game:** As such, a **'dominant element' test** is to be utilized to determine whether chance or skill is the dominating element in determining the result of the game.
  - This 'dominant element' may be determined by examining whether factors such as **superior knowledge, training, experience**, expertise or attention of a player have a material impact on the outcome of the game.
- **Status of Type of Games Allowed:** Staking money or property on the outcome of a **'game of chance' is prohibited and subjects the guilty parties to criminal sanctions.**
  - However, placing any stakes on the outcome of a **'game of skill' is not illegal per se and may be permissible.**
  - It is important to note that the Supreme Court recognized that **no game is purely a 'game of skill'** and almost all games have an element of chance.
- **Common Gaming House:**
  - Another concept common to the gaming law in most states is the idea of a 'common gaming house'.
  - Owning, keeping, or having charge of a common gaming house or being present for the purpose of gaming in any such common gaming house is ordinarily prohibited in terms of these state gaming laws.
  - Common gaming house is defined as any house, walled enclosure, room or place in which instruments of gaming are kept or used for the profit or gain.
  - Pertinently, courts have clarified in the past that the mere charging of an extra fee to facilitate playing the game and / or to maintain the facilities may not necessarily be seen as making a profit or gain.

## What is the difference between Games of skill and Games of chance?

- **Game of Skill:**
  - A “game of skill” is based mainly on the **mental or physical level of expertise of a player, rather than a chance.**
  - One of the most significant benefits of a game of skill is that it provides freedom to the players to explore their capabilities in the sport.
  - These games invigorate the players to get accustomed to a certain set of rules while looking for ways to improve and implement different strategies through consistent practice.
  - It is false that the game of skill does not have a chance component, in fact to a certain extent they do. However, it is the individual skills that determine the success rate.
  - Example: **Chess, Carrom, Rummy,** and Fantasy Sports are said to be games of Skill.
- **Game of Chance:**
  - A “game of chance” is determined mainly by a **random factor of any type.**
  - In games of chance, the usage of skill is present but a higher level of chance determines success.
  - Games like playing cards, roulette, rolling a dice, or even picking a numbered ball are reflected upon as chance-based games.
  - It is pertinent to note that players here do not have control over the outcome of the result. Example: **Blackjack, Roulette.**

## Where does blockchain gaming lie within this framework?

- Since blockchain is merely the underlying technology, **there is no express regulation of it in India.**
- It is important to note that most of the **gaming laws were brought into effect prior to the internet era and,** therefore, only contemplate regulation of gaming activities taking place in physical premises.
- However, as the law currently stands, **each blockchain game must first pass muster as a ‘game of skill’, as against a ‘game of chance’,** to legally be made available in most Indian states.
- It is also relevant to note that in the past, the **Supreme Court has rejected the notion of video games being ‘games of skill’.**
  - It held that the outcomes of these games could be manipulated by tampering with the machines used to play.
  - Therefore, the element of skill of players could not be a dominant factor of the game.
- Since developers and publishers of blockchain games are likely to **earn revenue / charge fee for offering such games,** it does raise questions over whether they may be seen as playing a **role analogous to that played by common gaming houses under Indian law.**
- Further, the legality of blockchain games relies on the legality of cryptocurrency.
  - [Budget 2022-23](#), announced that the income from the transfer of any ‘virtual digital assets’ (which include cryptocurrency and non-fungible tokens) would be subject to income tax at the rate of 30%.
  - Policy pronouncements of this nature would need to be carefully considered by publishers of blockchain games while designing their pricing models.

## What intellectual property protections may be available to blockchain games?

- **Patent:** In terms of **Section 3(k) of the [Patent Act, 1970](#),** computer programs are per se not inventions and hence, cannot be patented.
  - However, judicial pronouncements in the past have clarified that if an invention has a **technical contribution** or a technical effect and is not merely a computer program per se, **then it would be patentable.**
  - Thus, a patent for a blockchain game may be sought if it meets the requirements of novelty, involving an inventive step, and industrial application.
- **Trademarks:** A trademark is used as an **identifying mark to determine the source of a**

**particular good or service**, and is obtained to protect the goodwill and reputation of the brand.

- Any distinguishing mark in a blockchain game or NFT that would allow consumers to identify the source of that particular game or NFT may be trademarked.
- **Copyrights:** In India, artistic work, musical work, cinematographic films, dramatic works, sound recordings and computer software are capable of being protected under copyright law.
  - Although there is no specific provision in the **Copyright Act** that deals with video games, copyright protection of video games may be sought under the category of 'multimedia products'.

## Way Forward

- The use of blockchain technology for online games is likely to be beneficial for game developers, publishers, and players.
  - However, key to their growth is regulation which ensures that it is permissible to offer such games in the Indian territory and also offers protection in the form of intellectual property rights.
- Other concerns, such as privacy and cyber security, along with how financial regulations would apply to blockchain games, would also need to be addressed.

## PYQ

With reference to "Blockchain Technology", consider the following statements: (2020)

1. It is a public ledger that everyone can inspect, but which no single user controls.
2. The structure and design of blockchain is such that all the data in it are about cryptocurrency only.
3. Applications that depend on basic features of blockchain can be developed without anybody's permission.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 only
- (d) 1 and 3 only

Ans: (d)

**Source: IE**

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