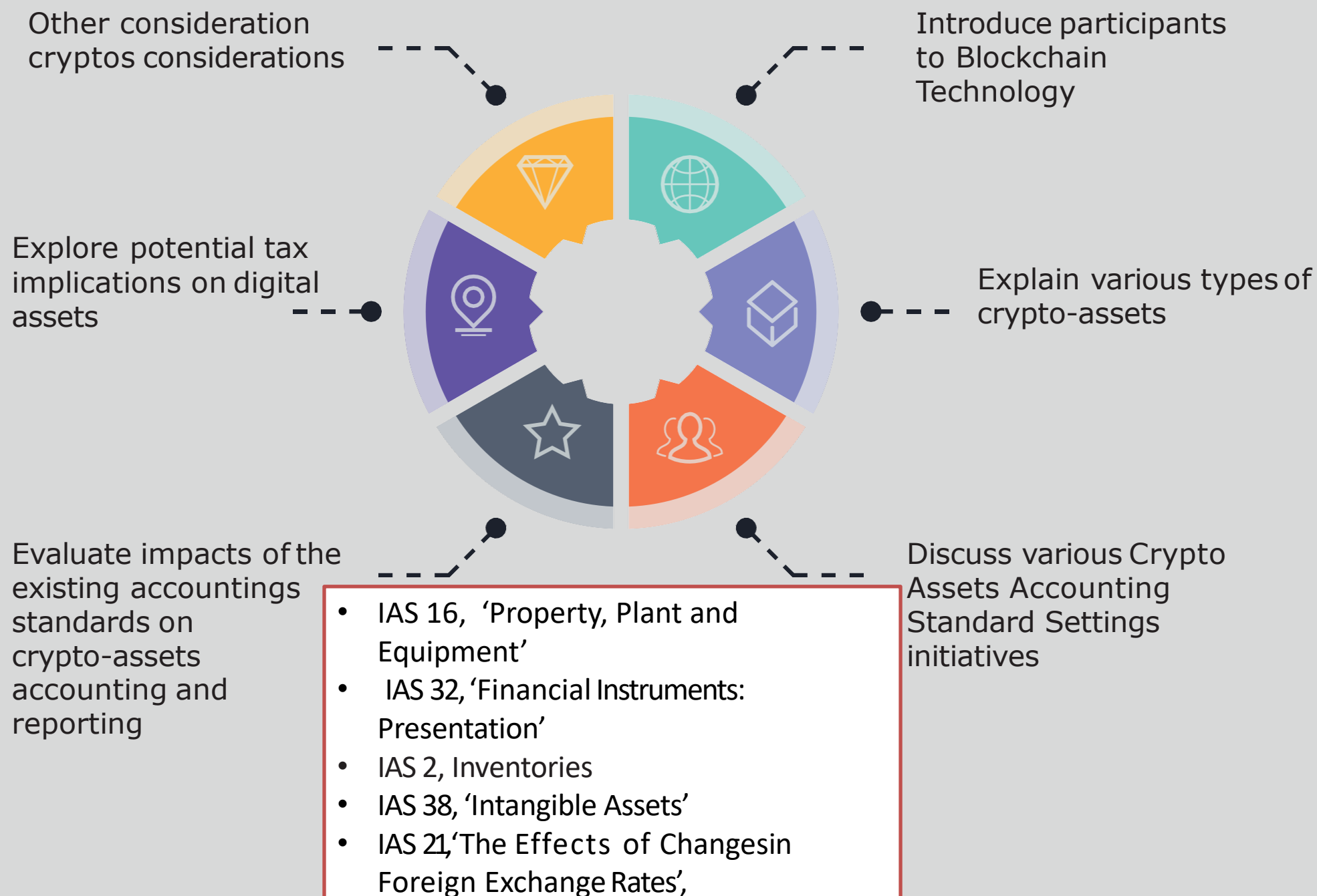# Blockchain and Crypto-assets ; Emerging Accounting Issues

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Course Objectives

Other consideration cryptos considerations

Introduce participants to Blockchain Technology

Explore potential tax implications on digital assets

Explain various types of crypto-assets

Evaluate impacts of the existing accountings standards on crypto-assets accounting and reporting

Discuss various Crypto Assets Accounting Standard Settings initiatives

- IAS 16, 'Property, Plant and Equipment'
- IAS 32, 'Financial Instruments: Presentation'
- IAS 2, Inventories
- IAS 38, 'Intangible Assets'
- IAS 21, 'The Effects of Changes in Foreign Exchange Rates',

Important Terms

- Coin/Token

- **'Coin'** - refers to a cryptographic asset that has the express purpose of acting solely as a medium of exchange

- **'Token'** - an asset that gives the holder additional functionality or utility.

- **Platform**-Software that provides a utility or services to users of the software

- **Initial Coin Offering-** means for developers to sell blockchain tokens or coins to investors.
-Issuers receives consideration in the form of cash or another cryptographic asset
-In exchange, the developer issue (or promise to issue) a digital token to the parties that provided contributions for the development of the digital token.
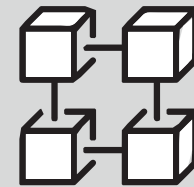
- **Fiat currency** - A fiat currency denotes paper money or coins (CAD,USD or Euro)
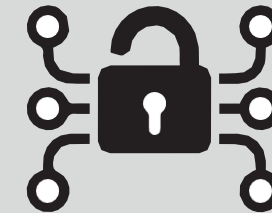
Cryptographic Assets and Related Transactions

Transferable digital representations designed in a way that prohibits their copying or duplication.

'Blockchain' or distributed ledger technology is technology that facilitates the transfer of cryptographic asset
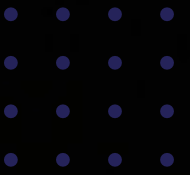
Cryptographic assets and the underlying technology provides opportunities to digitize a variety of 'real world' objects.

Blockchain

- A decentralized ledger
- Keeps a record of all transactions taking place across a peer-to-peer network
- Enables the encryption of information.

Cryptographic Assets and Related Transactions

- There is no legal definition of cryptographic assets

- Most known subsets of cryptographic assets are *cryptocurrencies*

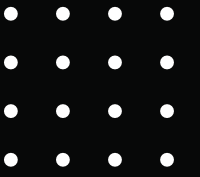- Used as a means of exchange and share some characteristics with traditional currencies/*fiat currencies*

- There are various subsets of cryptographic assets

- Most prominent cryptocurrencies

Bitcoin
Ether

- Some cryptographic assets legally considered *securities* by some local regulators

Cryptographic Assets Types

CRYPTO-ASSETS

CRYPTOCURRENCIES

BITCOIN

ETHER

BITCOIN CASH

RIPPLE (XRP)

LITECOIN

TOKENS *(Crypto-assets Other Than Cryptocurrencies)*

INITIAL COIN OFFERING (ICO)

- **MAG**
- **HYBRID**
- **SECURITY**

OTHERS(FUTURE INNOVATIONS)
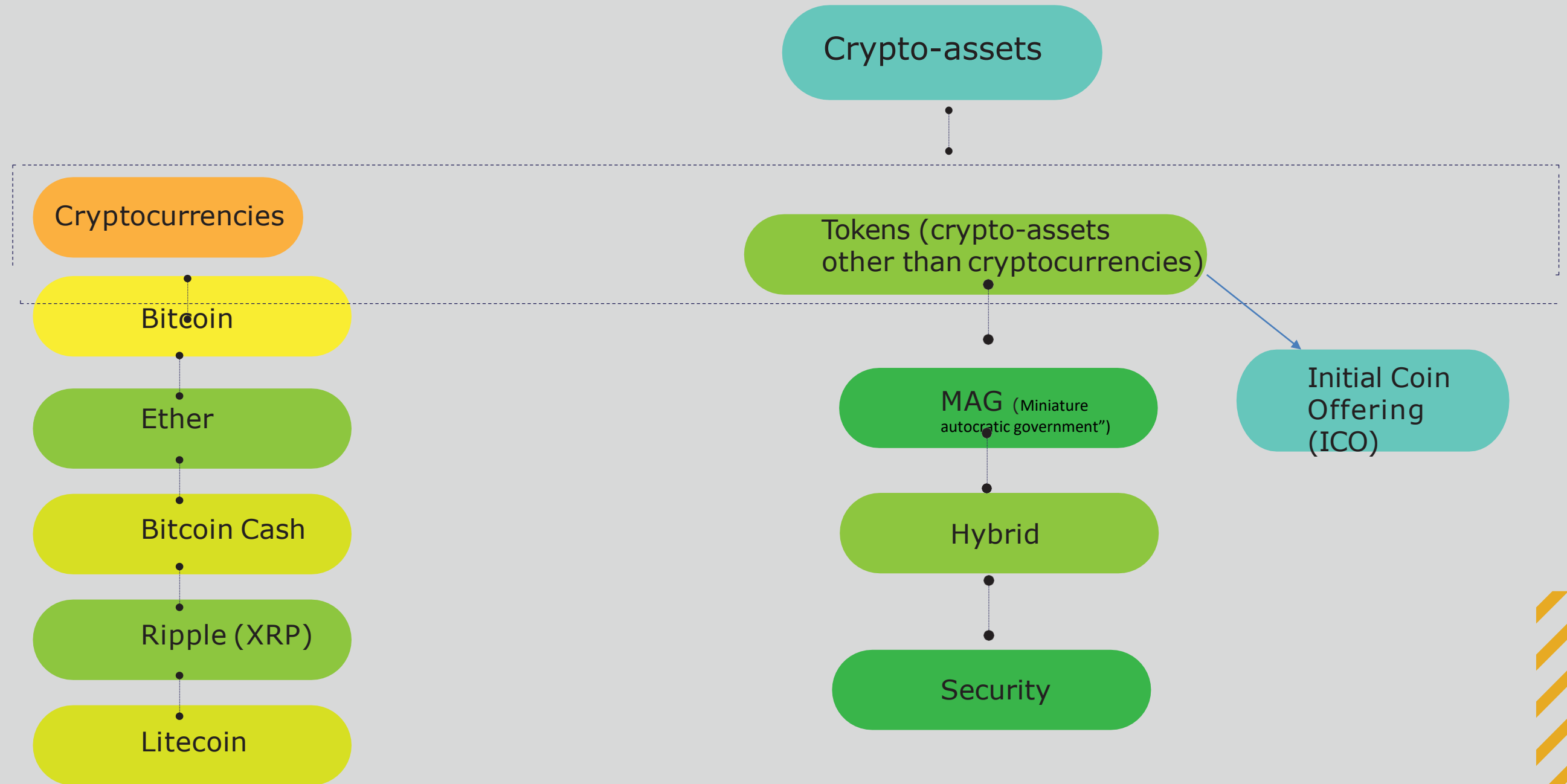
Cryptocurrencies

Those crypto-assets that constitute a peer-to-peer alternative to government-issued fiat currency;

General used as medium of exchange independent of any central bank.

These were the first types of crypto-assets to emerge-Bitcoin launched in 2009.

Like the fiat currencies, cryptocurrency has no intrinsic value
•Not redeemable for another commodity like gold.

Cryptocurrency has no physical form

Not legal tender

Not currently backed by any government or legal entity.

- Its supply *not* determined by a central bank
- All transactions are per-formed and validated by the users without an intermedi- ary

Bitcoin

Leading cryptocurrency by market capitalization

First cryptocurrencies launched during global financial crisis

In the Bitcoin blockchain, anyone can view the decentralized ledger which records ownership of bitcoins and transact upon it.

Anyone with sufficient computing power can participate in the validation of transactions - Solve complex cryptographic equations (Mining).

The equation solutions enable "blocks" of transactions to be added to the "chain" in return for newly "mined" bitcoins
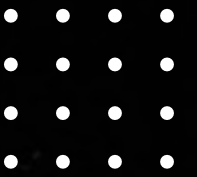
There is no need for mutual trust or central authority (e.g., a bank) to enforce rules

Public record is used to verify availability of funds

New transaction encoded into the consensus ledger through the mining process

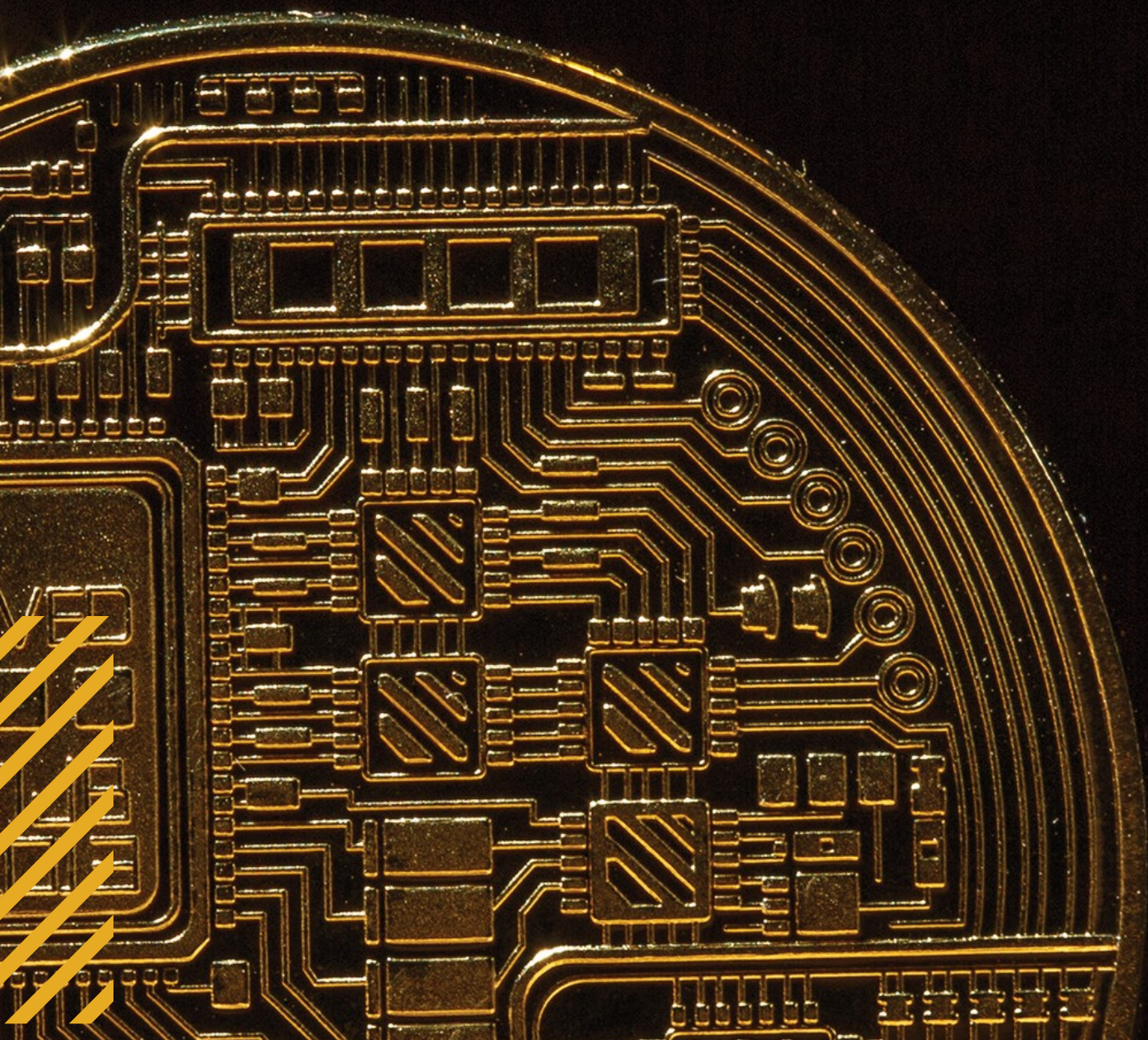Decentralized ledger is virtually immutable.

Ether

Went live in July 2015

Decentralized platform like an operating system like those found in smartphones

Anyone can build applications on top of the platform to perform various tasks.

Tokens

Distinctions between Cryptocurrency and Tokens

Cryptocurrency, designed as a general-purpose medium of exchange across applications

Tokens non-cryptocurrency tokens providing something other than purely general-purpose value transfer.

- Some tokens brought in the market through ICO process
- Used as capital raising tools

Initial Coin Offerings (ICOs)

IPO, i.e., an initial public offering of a company's shares on a stock exchange.

An ICO involves the issuance of new coins recorded on a distributed ledger (virtually always Ethereum).

The public decides whether to purchase them on the basis of information set out - in a "white paper" published by the issuing developer

The white paper sets out the technical details of the tokens' functionality

Depending on the underlying economic relationships involved, the tokens issued in an ICO may or may not be securities

ICO as Securities on a blockchain

Characteristics for Accounting Purposes

Useful to classify cryptographic assets into defined subsets based on their characteristics

This helps in determining;
- Which accounting standard applies
- Discussing the related accounting issues

There is no accepted framework for the classification of these varied cryptographic assets currently exist

No generally applied definition of a cryptographic asset in accounting.

Most relevant way for classifying cryptographic assets for accounting purposes are;

- The primary purpose of the cryptographic asset

- How the cryptographic asset derives its inherent value

**Cryptographic Assets Held by An Entity**

Cryptocurrencies held for own account

1. Applicable standard
    1. Cash or a currency
    2. Financial asset – other than cash
    3. Property, plant and equipment
    4. Inventory
    5. Intangible asset

Measurement considerations

1. Cryptographic assets other than cryptocurrencies held for own account
2. Applicable standard
    - Cash or a currency
    - Financial asset – other than cash
    - Property, plant and equipment
    - Inventory
    - Intangible asset
    - Prepayment
    - Underlying asset

Cryptographic Assets Held by An Entity

01

02

03
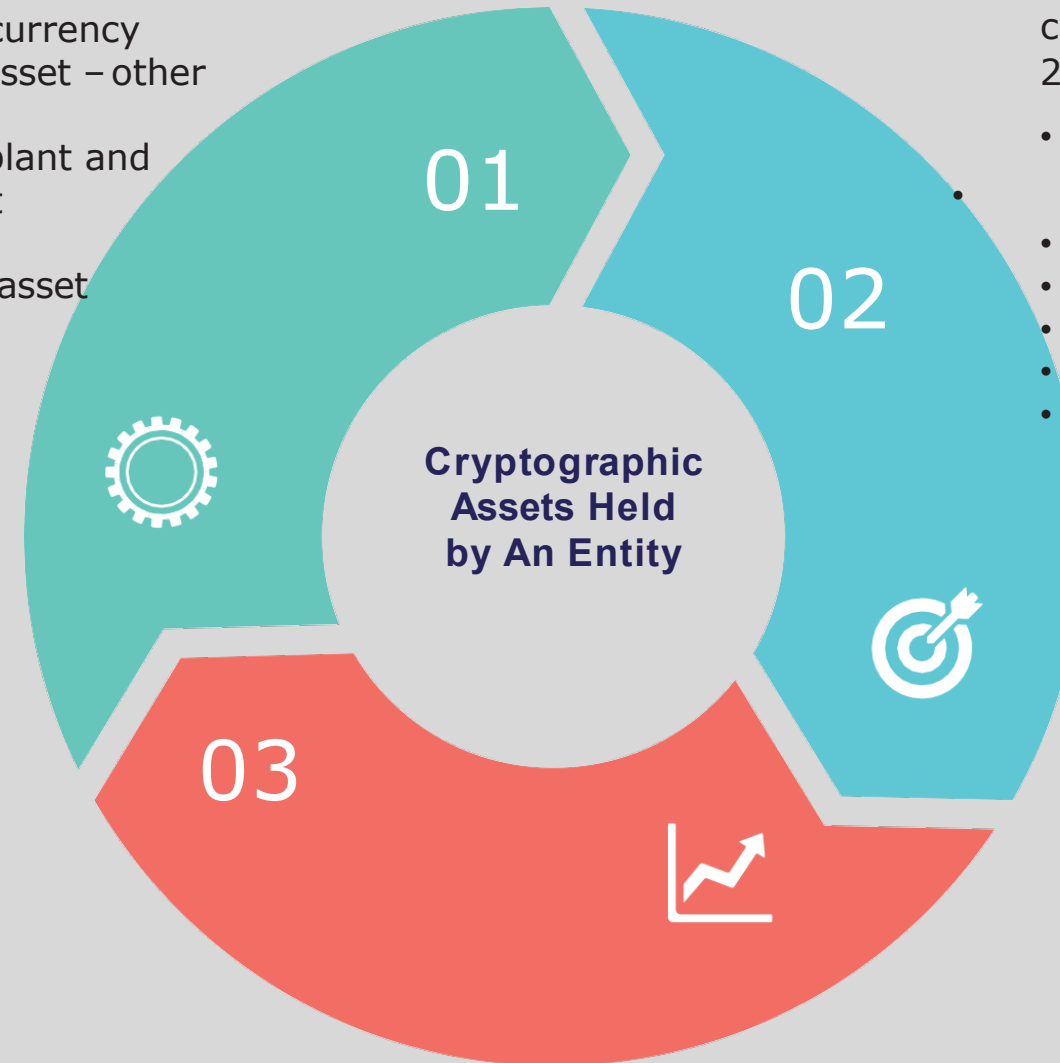
Application to categories of crypto tokens

1. Crypto tokens with the characteristics of asset-backed tokens
2. Crypto tokens with the characteristics of utility tokens
3. Crypto tokens with the characteristics of security tokens
4. Crypto tokens with hybrid characteristics

Specific subsets of cryptographic assets

Utility Tokens	Security Tokens
Access to utility or protocols	Asset ownership
Buyers, no guarantee of profits	Investors with an expectation of profit
Token sales are not regulated	Offerings are regulated

Source : BCA

Subset	Purpose	Inherent Value
Cryptocurrency	Cryptocurrencies are digital tokens or coins based on blockchain technology, such as Bitcoin. They currently operate independently of a central bank and are *intended to function as a medium of exchange.*	None – derives its value based on supply and demand.
Asset-backed token	An asset-backed token is a digital token based on blockchain technology that signifies and derives its value from something that does not exist on the blockchain but instead is a *representation of ownership of a physical asset* (for example, natural resources such as gold or oil).	Derives its value based on the underlying asset.
Utility token	Utility tokens are digital tokens based on blockchain technology that provide users with access to a *product or service*, and they derive their value from that right. Utility tokens give holders no ownership in a company's platform or assets and, although they might be traded between holders, they are not primarily used as a medium of exchange.	Value is derived from the demand for the issuer's service or product.
Security token	Security tokens are digital tokens based on blockchain technology that are similar in nature to traditional securities. They can *provide an economic stake in a legal entity:* sometimes a right to receive cash or another financial asset, which might be discretionary or mandatory; sometimes the ability to vote in company decisions and/or a residual interest in the entity.	Value is derived from the success of the entity, since the holder of the token shares in future profits or receives cash or another financial asset.