"EVERYTHING WILL BE TOKENIZED AND CONNECTED BY A BLOCKCHAIN ONE DAY" -FRED EHRSAM

WE ARE REVOLUTIONIZING THE WORLD WITH SMART CONTRACTS

BLOCKCHAIN

CONSULTING SERVICES

YOU CAN'T IGNORE THE BLOCKCHAIN ANYMORE. YOU'D BETTER START LEARNING IT. THE TIME IS NOW

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ABOUT US

Genesis Convergence is a recognized expert that provides:

- ✓ Genesis Convergence offers blockchain consulting services to harness the potential of blockchain and gain valuable insights on DeFi (decentralized finance), NFTs, Web3, and Metaverse.
- ✓ We provide consultancy that is:
  - ❖ Designed to be distributed and synchronized across networks, making it ideal for multi-organizational business networks.
  - ❖ Helps keep inaccurate or potentially fraudulent transactions out of the database before one can make a transaction
  - ❖ Subsequently records another transaction about any asset th at can change its state
  - ❖ More transformative than the web

Our Core Consultancy include following:

- ✓ Cryptocurrency Creation
- ✓ Cryptocurrency Wallet Creation
- ✓ NFTs creation
- ✓ NFT Marketplace Creation
- ✓ Tokenization Of Assets
- ✓ DApps Development
- ✓ Cryptocurrency Exchange

Current Location: Lahore, Pakistan
Planned Front-end Office: California/Washington States- USA

BLOCKCHAIN

CURIOUS ABOUT BLOCKCHAIN?

In simple terms, blockchain is a peer-to-peer distributed ledger that stores information and keeps track of transactions.

- Each member of the blockchain community has its own copy of the inform ation.
- The information is recorded subsequently into units called blocks and protected by strong cryptography, creating a chain of data.
- Changes to blocks are not permitted by the blockchain system architecture so every action and event could be traced to its origins.
- A blockchain could store data on agreements between the parties, their credentials, transactions, and any other information presented in a digital form.
- Since this information is distributed and highly secured, any attempt at fraudulent activity can be seen by the members of the blockchain community.

BLOCKCHAIN

EDUCATION INDUSTRY

In this current era, lack of technology causes several issues in Education Industry. Some of them includes

- ✓ Inefficient paper-based record-keeping processes
- ✓ Lack of transparency
- ✓ Poor student and teacher accountability
- ✓ No real motivation for students to learn and perform well in class
- ✓ Lack of trust in educational merits and academic degrees because of falsification.

Blockchain in Education Industry serves to:

- ➢ Enhanced and transparent record-keeping with Smart Contracts
- ➢ Student accountability powered by smart contracts
- ➢ Incentivizing students and teachers to achieve greater results with a decentralized platform
- ➢ Deployment of smart contracts and using cryptocurrency as a payment method
- ➢ Introducing verifiable lifetime student transcripts peer-to-peer verification
- ➢ Improve the quality of online education by enhancing the accreditation process

- A blockchain network is useful to preserve and exchange patient data
- Medical Practitioners accountability powered by smart contracts
- Private encrypted links to separately stored information such as radiographic or other images
- Cryptographically secure the data present therein can be authenticated as a digital signature performance tracking and individualization
- Shared smart contracts can be used to manage medical insurance contracts for patients

HEALTHCARE INDUSTRY

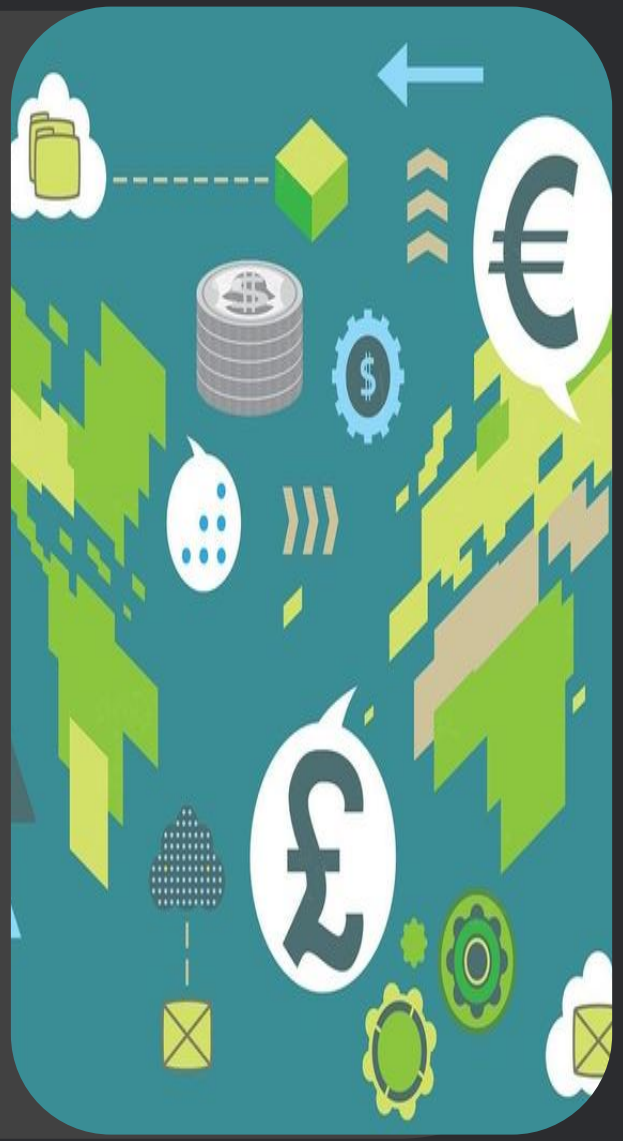
By decentralizing patient health history, tracking pharmaceuticals, and improving payment options, blockchain is becoming a valuable tool for healthcare, revolutionizing the industry worldwide.

AUTOMOTIVE INDUSTRY

The auto industry is entering a new age of digitization that will significantly change everything we are used to with blockchain technology revolutionizing the automotive industry.

- Car sales and leasing using smart contracts
- Eliminating counterfeit car parts with ridesharing being decentralized
- Auto insurance management using blockchain technology in digital world
- Cargo shipping using smart contracts
- Speeding up self-driving car development with predefined processes in blockchain
- Smart Contracts for Leasing / Financing
- Payment on predetermined conditions and installing them in a smart contract
- Deploy a block-chain based supply chain

- Cross-Border Payments using cryptocurrency
- Blockchain Lending Platforms for fast transactional processes
- Invoice Management and Billing Solution using smart contacts
- Fund Investment supporting cryptocurrencies such as Bitcoin
- Financial Record-Keeping Automation through smart contracts
- Initial Public Offering (IPO)
- Distributed ledger technology (DLT)
- Automate intercompany transactions using smart contracts and consensus mechanisms



FINANCE INDUSTRY

Blockchain in finance offers multiple benefits that helps to transform the complete financial sector. Several financial institutes have leveraged the potential of blockchain technology and cryptocurrencies to generate revenue, speed-up deliver process, reduce risk in business operations, etc.

The technology can be used to streamline the process of buying and selling property, simultaneously reducing administrative delays and errors when purchasing real-estate.

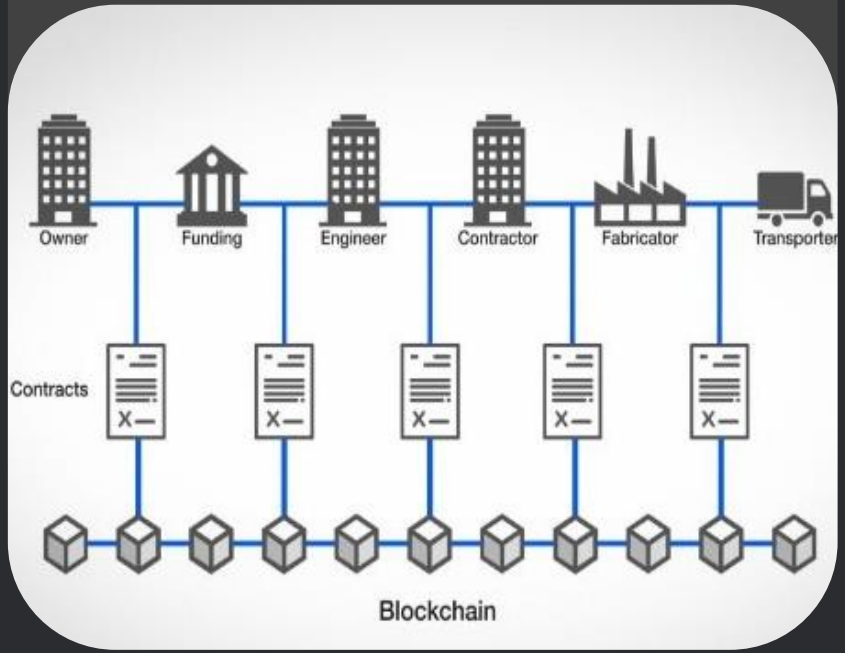
REAL-ESTATE INDUSTRY

- Smart Contracts Between Tenants and Landlords
- Possibilities of fraud-free transaction for the Real Estate Industry through Decentralization
- Tokenized Houses
- Mortgages on the Blockchain
- Token securitization of properties via blockchain, along with token-enabled marketplace
- Access to global asset distribution
- Access to broader investor pools due to ownership fractionalization

CONSTRUCTION INDUSTRY

- Predictive Asset Maintenance
- Smart contracts to keep on-going projects stay on track
- Shared project management dashboard provides a communication platform between different parties
- Accelerated Payment Processing using cryptocurrency
- Smart contracts infuse written agreements
- A ‘reputation ledger’ serving to track subcontractors’ deliverables

Use cases of Blockchain in construction industry are being discovered by the day. With their smart implications, the entire construction system can be completely refurbished. Many companies are currently working on or have already released blockchain-based systems to improve constructions.



Famous Cryptocurrencies

- Bitcoin (BTC)
- Ethereum (ETH)
- Tether (USDT)
- Binance Coin (BNB)
- U.S. Dollar Coin (USDC)
- XRP (XRP)
- Terra (LUNA)
- Solana (SOL)
- Avalanche (AVAX)

Cryptocurrency: The currency of the future

A cryptocurrency is a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on blockchain technology—a distributed ledger enforced by a disparate network of computers. A defining feature of cryptocurrencies is that they are generally not issued by any central authority, rendering them theoretically immune to government interference or manipulation.

Crypto Creation

Here are the steps to make your own cryptocurrency:

Choose a Consensus Mechanism: The protocols that consider a particular transaction legitimate and add to the block.

Pick a Blockchain Platform: Depends on the consensus mechanism you've selected, pick a specific blockchain platform.

Design The Nodes: You must decide the workings and functionality of your blockchain and design the nodes accordingly.

Establish Blockchain's Internal Architecture: Once founding the internal architecture, you cannot change several parameters after it's launching and running.

Integrate APIs: Integrate your APIs since some platforms don't provide pre-built APIs.

Design the Interface: Make sure that the web, FTP servers, and external databases are of most recent and the front-end and ba ck-end programming is done with the future upgrades in mind

Make Your Cryptocurrency Legal: Make sure that your cryptocurrency is prepared and abiding by the soon to become laws of international cryptocurrency regulations.

FAMOUS CRYPTO WALLETS

- ✓ *Coinbase*
- ✓ *ZenGo*
- ✓ *Crypto.com*
- ✓ *Ledger Nano*
- ✓ *Trezor*
- ✓ *Kraken*
- ✓ *Paybis*
- ✓ *Coinsmart*

CRYPTOCURRENCY WALLET: SECURE YOUR MONEY

A cryptocurrency wallet is a device, physical medium, program or a service which stores the public and/or private keys for cryptocurrency transactions. In addition to this, basic function of storing the keys, a cryptocurrency wallet more often also offers the functionality of encrypting and/or signing information.

Wallets can be used to create various types as per given circumstances. For instance, to streamline crypto asset management, secure cryptocurrency storage, safer cryptocurrency transfer, etc.

CRYPTO WALLET CREATION

- **Discovery Phase**

This stage includes the analysis, project plan, workflow, and wireframes approval. It helps to define business goals, analyse, and prepare a plan for further development and find optimal technologies.

- **Build a Prototype**

In this phase, an actual prototype is designed based on the information gathered customer. It is a small working model of the required system.

- **Design**

During the design phase, the actual conceptualization of the solution is created, that is, detailed software architecture is created that meets the specific requirements of the project.

- **Development**

The development phase is about writing code and converting design documentation into real software during the software development process.

- **Quality Assurance**

The QA team conducts a series of tests, including functionality testing, system integration and interoperability, and user acceptance testing to ensure that the code is clean and that the solution’s business goals are met.

CRYPTOCURRENCY EXCHANGE – BE YOUR OWN BANK

Cryptocurrency Exchange is used to create various wallet types for streamlined crypto asset management, secure cryptocurrency storage, easy, fast and safe cryptocurrency transfer.

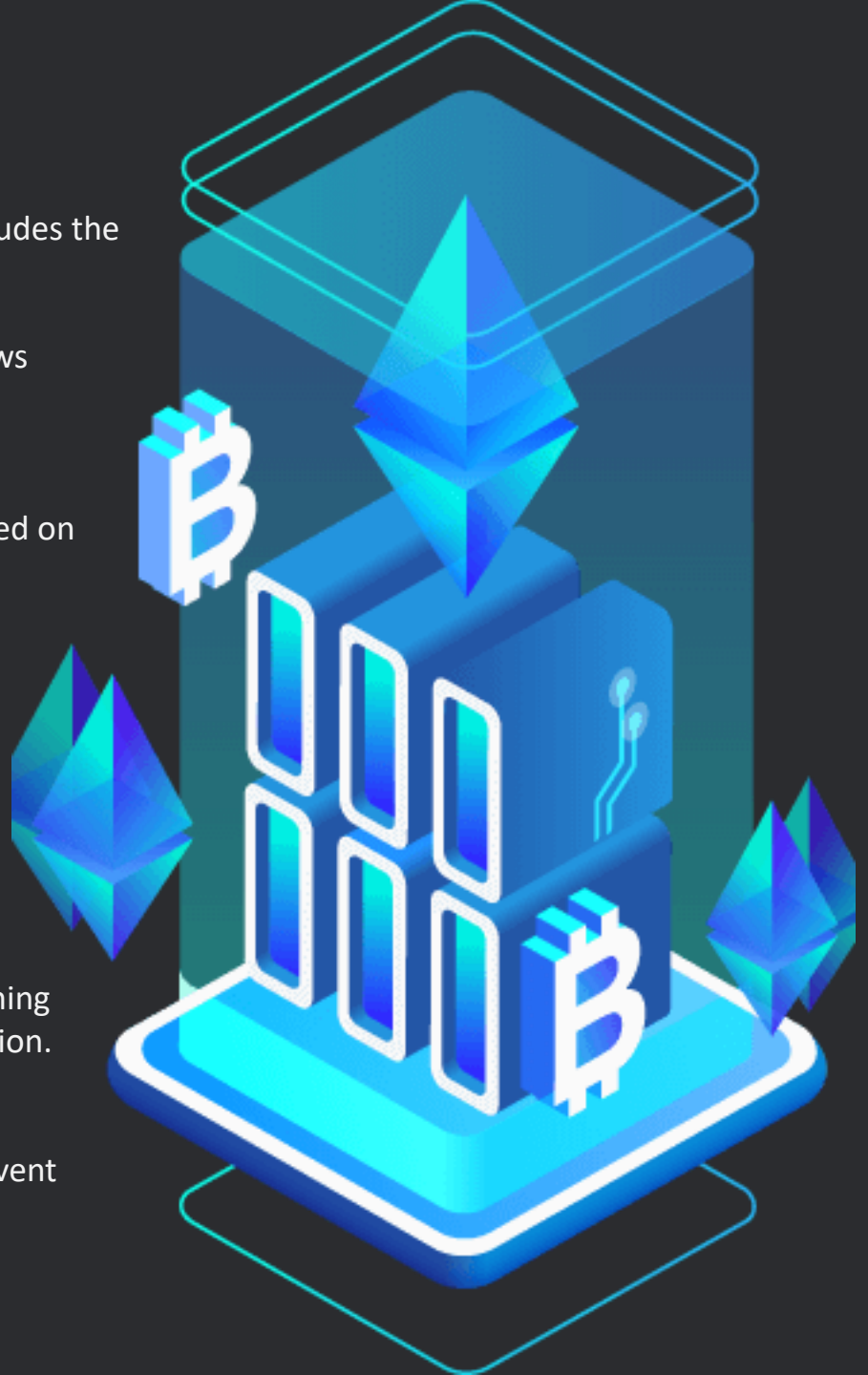
FAMOUS CRYPTO EXCHANGES

- ✓ *Cash App*
- ✓ *Bisq*
- ✓ *Coinbase*
- ✓ *Kraken*
- ✓ *BitMart*
- ✓ *Gemini*
- ✓ *Crypto.com*

A cryptocurrency exchange is an online marketplace where users buy, sell, and trade cryptocurrency. Crypto exchanges work like online brokerages, as users can deposit fiat currency (such as U.S. dollars) and use those funds to purchase cryptocurrency.

- ✓ Over 1000 different currencies such Bitcoin, Ethereum, Ripple, Zcash, etc.
- ✓ More then 50 million active traders
- ✓ Rapidly growing market with total over 200 bn USD capitalization.

Crypto Exchange Creation



➢ Design

This is the first thing for the client to see before starting to use the application. The design creation includes the following stages.

1. Wireframes – the base of the future design where its key features are implemented.
2. Prototype – the detailed visualization of the user's interaction with the application that allows preventing the possible UX-related issues.

➢ Client-side development

The web part of the application contains the client-side logics of all the pages of the website and is based on the previously created design.

➢ API

API is the back-end part of the application that is not visible to the end-user.

➢ Blockchain

The part which is responsible for the actual processing and storing of data concerning trades between users in a secure environment (any alteration by any party is impossible thanks to the blockchain).

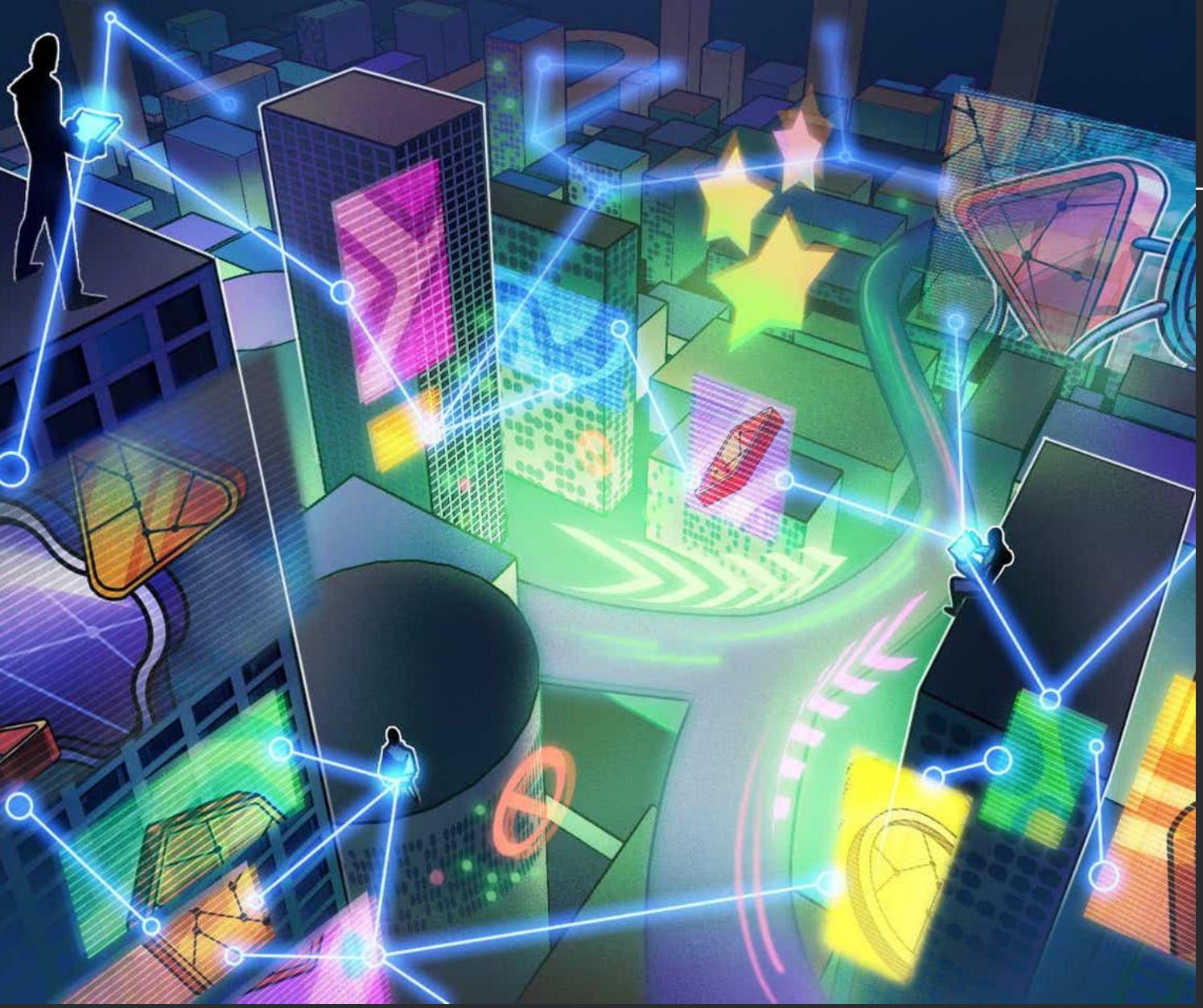
➢ Testing

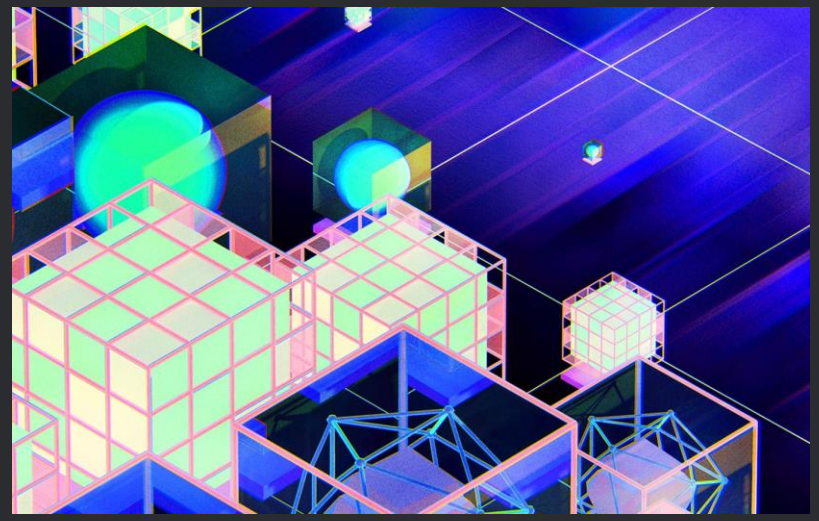
An obligatory part of modern application development. It is extremely important as it allows distinguishing and eliminating most of the bugs within the logic, as well as within the UI before launching the application.

➢ Security

Since the application is storing the sensitive information of its users, it must be properly secured to prevent possible data leaks and hacking attacks. We advise securing the user information in the following way:

- Secure architecture
- User's authentication





NFT: THE ORIGINAL DIGITAL

A non-fungible token is a non-interchangeable unit of data stored on a blockchain, a form of digital ledger, that can be sold and traded. Types of NFT data units may be associated with digital files such as photos, videos, and audio.

NFT MARKETPLACE CREATION

➢ Building UI Design

The UI design is the first impression of your marketplace when a user gets to your platform. Our developers create the best UI design that makes the users access all the options of the marketplace comfortably.

➢ NFT Token Development

The token is developed to work with all the core functionalities available on the software.

➢ NFT Smart Contract Development

The NFT marketplace operates on various functions where these functions are developed with various smart contracts

➢ User Interface Implementation

After designing the UI, token development, and deploying smart contracts, the front-end and back-end are to be linked to produce the marketplace as a fully developed one

➢ NFT Minting Attribute Inclusion

The NFT Minting can be categorized in two different ways:

- Single-mode NFT Minting: Smart contract code can be written for ERC721 (Non-Fungible Tokens) which are unique and cannot be copied.
- Multi-mode NFT Minting: Smart Contract code can be written for ERC1155(Semi-Fungible Tokens) that can be copied.

➢ Database IPFS NFT Storage Set-up

Database storage and IPFS are mandatory for business and research

➢ Testing the Project with Test Cases

The testing phase performs a major role in the NFT Marketplace Development to get the quality output of the product.

➢ Releasing in Testnet or Final Deployment

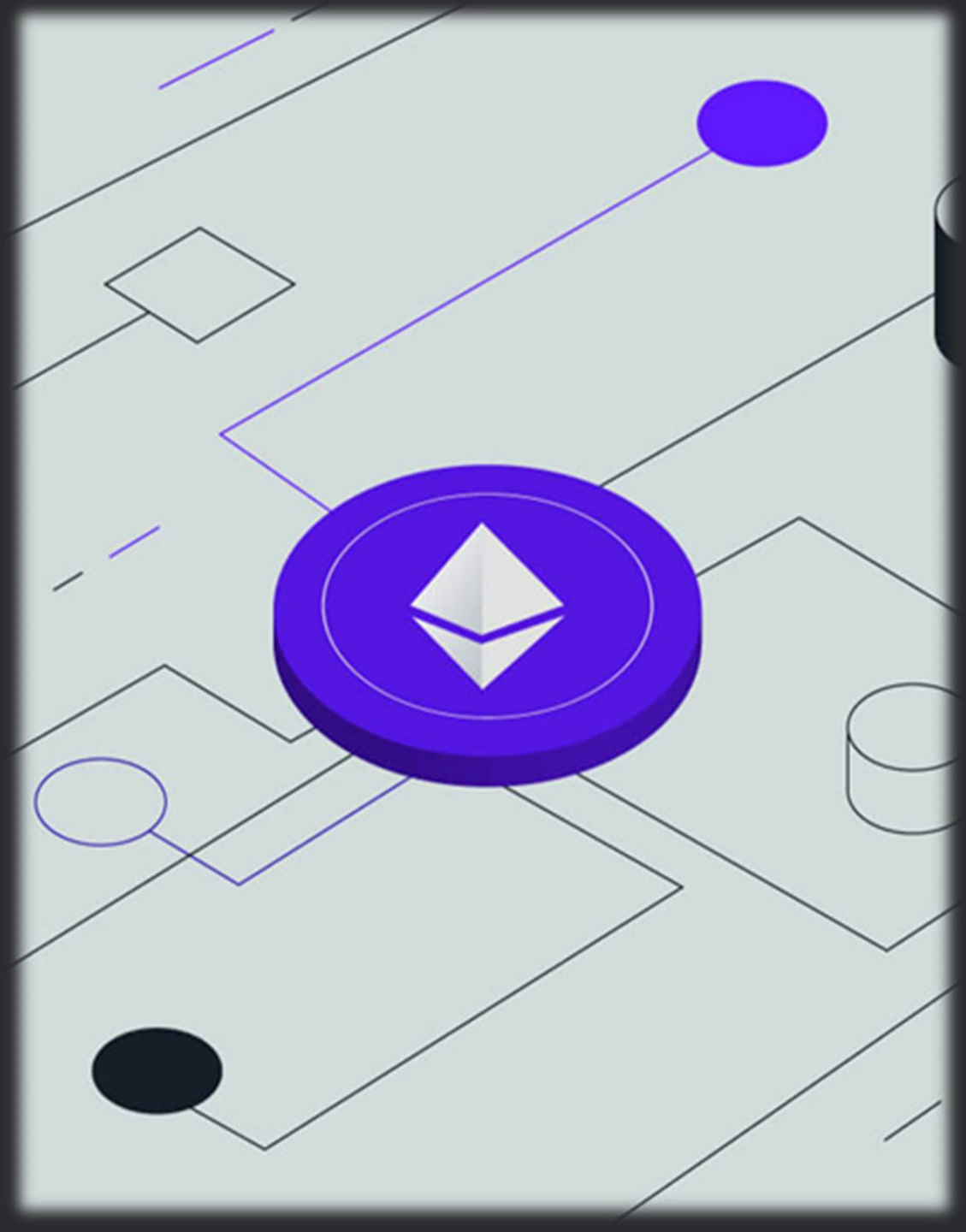
Once the above-mentioned phases get accomplished, the fully tested, robust, bug-free, fully functional NFT Marketplace gets deployed on the client's production server, and it is open for people to access

DECENTRALIZED APPLICATIONS OR DAPPS

DApps or decentralized applications, are open-source applications that are used to interact with smart contracts (ex. tokens) that run on a peer-to-peer network of servers.

- ✓ These applications can be based on a variety of blockchain platforms such as Ethereum, EOS, Hyperledger, Polkadot, and others.
- ✓ They don't rely on central servers vastly reduces the risk of failure, making them more reliable than traditional applications.
- ✓ Eliminate the middleman between users and service providers allowing greater freedom, openness and transparency also reducing the risks associated with handling user data.

Due to their nature, dApp development is a rigorous process that requires a lot of attention and care. Once a dApp (and the underlying smart contracts) is deployed, it is difficult to introduce fixes and major updates. For this reason, it is important that your dApp is developed professionally.



FAMOUS DAPPS

AD	Crypto Punks 2 Polygon	Marketplace	Polygon (Matic)
TOKEN 1	Uniswap V3	Exchange	Ethereum
TOKEN 2	Venus Protocol	Finance	BNB Chain
TOKEN 3	PancakeSwap	Exchange	BNB Chain
TOKEN 4	LooksRare	Marketplace	Ethereum
TOKEN 5	Uniswap V2	Exchange	Ethereum

DAPP DEVELOPMENT PROCESS

Developing a dApp goes through several steps to ensure that the final product serves the targeted use case. The dApps development process goes through the following phases:

- **Business & technical analysis**

The first step involves an analysis of the business use case of the dApp. This includes gaining a detailed understanding of the purpose of the app, and how it will solve the problem it will be designed for.

- **Architecture design**

When the use case has been determined, an initial design of the dApp architecture is conducted. The purpose of this design is to create a proof of concept (POC), and demonstrate how all of the parts of the dApp will fit together.

- **Low and high-fidelity designs**

After the architecture of the dApp has been agreed upon, both low and high-fidelity design prototypes are created. Fidelity design includes elements such as visual design, content, and interactivity.

- **Development of smart contracts/wallets**

The next step involves the creation of smart contracts which will connect the dApp to the blockchain and execute the business logic and functionality of the app.

- **Backend / frontend development**

At this stage, the fidelity designs are moved to the development stage and the frontend and backend are finalized. The frontend can be created in any programming language that can make API calls to the backend.

- **Internal audit**

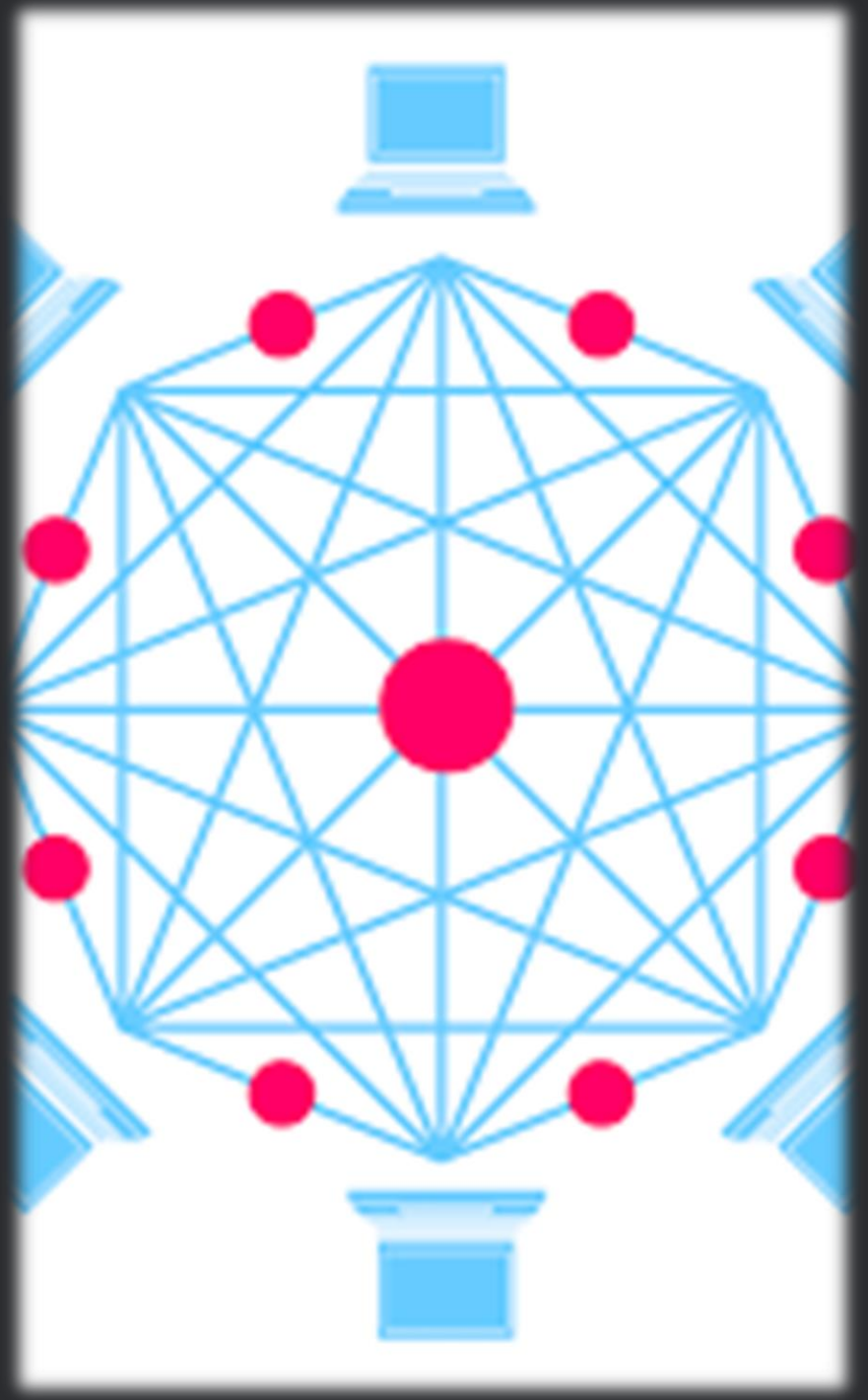
An internal audit is conducted to review the previous development stages and establish if all requirements and specifications have been met.

- **Testnet deployment**

After the audit is completed, and any potential issues have been identified and resolved, the dApp is deployed in a testnet.

- **Main net deployment**

The dApp is deployed on the main net on which it will function and becomes available to users.



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TOKENIZATION: THE FUTURE OF INVESTMENT

Tokenization is the process by which an issuer creates digital tokens on a distributed ledger or blockchain, which represent either digital or physical assets. Blockchain guarantees that once you buy tokens representing an asset, no single authority can erase or change your ownership — your ownership of that asset remains entirely immutable.

Types of tokenized assets

- Fungible asset tokenization

A fungible asset has two main characteristics:

- Interchangeable
- Divisible

- Non-fungible asset tokenization

A non-fungible token is:

- Non-interchangeable
- Non-divisible
- Unique

WHAT CAN BE TOKENIZED?

The possibilities are endless as tokenization allows for both fractional ownership and proof-of-ownership. From traditional assets like venture capital funds, bonds, commodities, and real-estate properties to exotic assets like sports teams, racehorses, artwork, and celebrities, companies worldwide use blockchain technology to tokenize almost anything. However, we have grouped them into four main categories:

01

Asset

An asset is any item of value that someone can transform into cash. It's further divided into two classes:

- ✓ Personal
- ✓ Business

02

Equity

Equity (shares) can be tokenized; however, the assets remain in the digital form of security tokens stored online in a wallet. Investors can typically buy shares on a stock exchange.

03

Funds

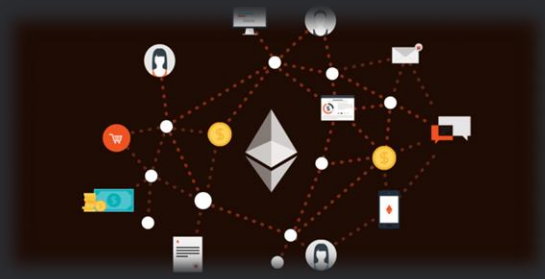
An investment fund is a type of asset that investors can tokenize. These tokens represent an investors' share of the fund. Each investor is provided tokens which represent their share of the fund.

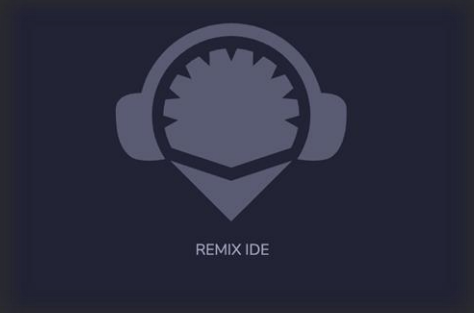
04

Services

A business can offer goods or services to raise funds or conduct business. Investors can use tokens to purchase goods or services provided by the supplier.

FAMOUS BLOCKCHAIN TOOLS AND TECHNOLOGIES





➢ Solidity - A Programming Language

Solidity is a programming language used by blockchain developers. It's one of the most popular programming languages used by developers. C++, Python, and JavaScript are some languages that influenced Solidity, which is used to write smart contracts for dApps.

➢ Ganache - Personal Blockchain for Testing

We cannot edit smart contracts once they go live on. Hence, developers carefully test their apps using programs like Ganache from the Truffle Suite of blockchain development tools. Ganache is a local memory blockchain used for development and testing

➢ Metamask – Best for Cryptocurrency Wallets

Metamask is an Ethereum wallet accessible through a browser extension and mobile application. Ethereum users typically use Metamask to buy and sell ERC-20 and ETH tokens and consequently interact securely with Ethereum based dApps. However, developers can also use Metamask to work on dApps right within their browser.

➢ dApp Board - Blockchain Explorer

dApp Board provides a visual representation and analysis of how decentralised applications are being used. With it developers can get a 360-degree view of the Ethereum ecosystem and collect data on dApps, protocols, and tokens.

➢ Blockchain-as-a-Service (BaaS)

It can be impractical for small companies and entrepreneurs to implement a full end-to-end blockchain solution. BaaS (Blockchain-as-a-Service) bears similarities to SaaS and lets users reduce the operational overheads and technical complexities that come with blockchain implementation

➢ Remix IDE - Browser-Based Development Environment

Remix IDE is a browser-based solution that allows developers to write smart contracts in Solidity and Vyper. Remix fosters faster development and implementation. It's intuitive GUIs make it great as a playground for learning and teaching Ethereum. Some of the default modules used to test, debug and deploy smart contracts in Remix are File Explorer, Plugin Manager, Solidity Editor and Terminal.

WHY CHOOSE US?

Genesis Convergence's primary goal is to excel in blockchain development services. The reason to excel in this landscape is that we know how Blockchain can help transform from lives to everything. We have the obligatory expertise in blockchain development services which enable us to offer custom blockchain-based solutions for applications to be used in industries.

THANK YOU

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Come and explore a world full of opportunities with our best blockchain development services aimed to provide you with the platform you need to succeed. We are experts in delivering:

- ✓ Strategically designed **ICO** (initial coin offering)
- ✓ Smart Contracts
- ✓ Smart wallets
- ✓ Hyperledger and other blockchain-based solutions.