

Module 4. Future of Decentralized Economies: DAOs, Blockchain Startups and Career Opportunities

Overview

The course was developed by WhiteBIT, one of the largest European crypto exchanges and the official cryptocurrency exchange partner of FC Barcelona.

Disclaimer: the materials provided in this course are purely informative. We **do not** provide any form of encouragement to buy cryptocurrency or invest in projects mentioned in the course. Beware that engaging in crypto trading is a high-risk activity that may result in substantial financial losses.

Welcome to module 4 of our extensive course on blockchain technologies and cryptocurrencies. In this module, you will explore the phenomenon of decentralised autonomous organisations (DAOs), delving into their evolution, various types and mechanics, and examining successful examples. Additionally, we will delve into the processes of creating a DAO and explore investment opportunities in decentralised technology start-ups.

Unit 1

Topic 1. DAO unveiled: a deep dive into its description, historical evolution, and advantages

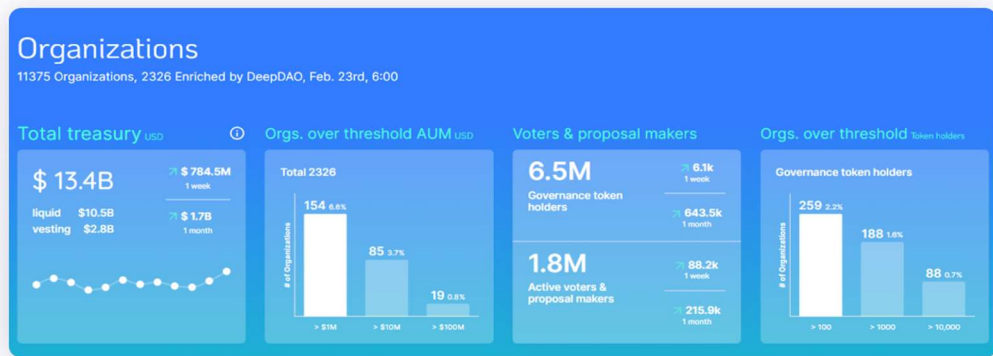
At the forefront of decentralised governance and community collaboration in blockchain technology are decentralised autonomous organizations, commonly known as DAOs. Originating in 2016 with the advent of 'The DAO' on the Ethereum blockchain, these entities were envisioned as revolutionary platforms for collective decision-making and resource allocation.

While the inaugural DAO faced challenges, including a significant security breach leading to a blockchain hard fork, the concept endured and proliferated. In the contemporary blockchain landscape, DAOs play a pivotal role, particularly in decentralised finance (DeFi). Their adaptability and resilience contribute to shaping a decentralised financial ecosystem, offering a decentralised alternative to traditional financial services. Explore



the journey and impact of DAOs as they continue to redefine collaborative governance and decentralised innovation across various blockchain networks.

Figure 1. Organisations (M4-U1-1)



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Definition of DAO

A DAO, or decentralised autonomous organisation, represents a revolutionary form of organisation governed by smart contracts embedded within a blockchain infrastructure. This innovative model ensures automated and decentralised management, incorporating decision-making processes that eliminate the need for centralised control.

Figure 2. DAO (M4-U1-2)



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The concept of **decentralisation** within a DAO embodies its online, global, and censorship-resistant nature. Unlike conventional Internet services, such as those hosted on Amazon Web Services or Google Cloud, which are susceptible to central control and potential shutdown, a decentralised organisation like a DAO operates on permissionless technology, exemplified by blockchains like Ethereum. This characteristic prevents any single entity from exerting authority to shut it down, ensuring robust and continuous operation.

The **autonomy aspect** of a DAO emphasizes self-governance. Instead of relying on human intervention, trust is placed in the integrity of smart contracts that serve as the organisation's backbone. This trust is akin to the reliance on a vending machine programmed to dispense a bottle of water or a chocolate bar upon receiving a specific amount of money and corresponding commands.

A DAO fosters coordination and cooperation around shared objectives in the **organisational** context. Entities involved in a DAO can extend beyond human participants, potentially including artificial intelligence in the future. This flexibility in organisational structure broadens the horizons of collaborative efforts and goal achievement.

Membership within a DAO is typically delineated by ownership of DAO tokens (or governance tokens), which are issued and tracked on blockchain platforms such as Ethereum. These tokens function as digital membership cards, offering holders exclusive access to restricted content, voting privileges, and various other benefits. The issuance and management of DAO tokens on a blockchain ensure transparency, security, and the seamless functioning of the decentralised organisation.

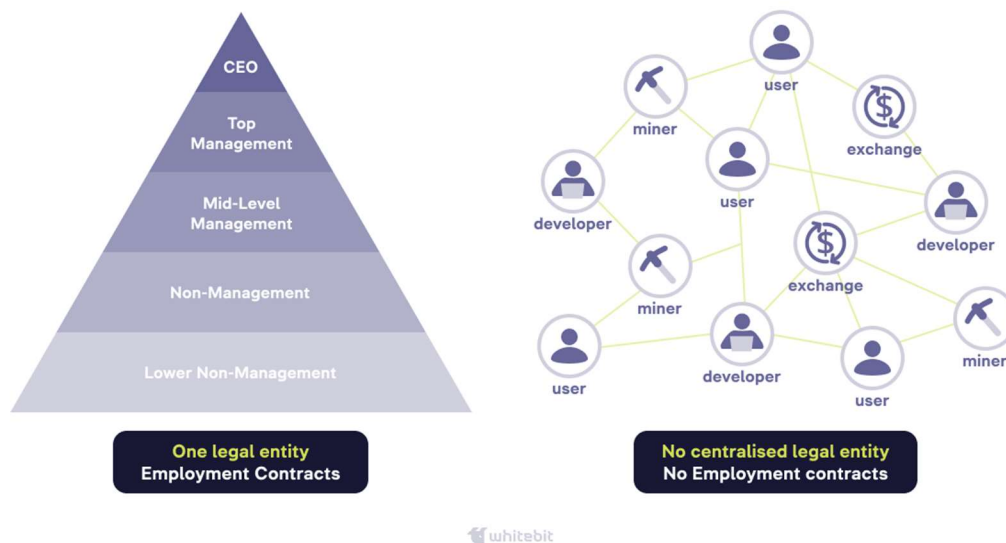
Key features of the DAO

Distinguishing DAOs from conventional organisations underscores the transformative nature of decentralised technologies. Traditionally, an organisation's legitimacy hinges on recognition from government entities like tax departments, business bureaus, or charity commissions. Even organisations operating without explicit government requirements often find it necessary to have a regulated bank account for legitimacy.

In stark contrast, DAOs operate on an infrastructure powered by software that can run on any computer globally, independent of governmental approval. This decentralised nature extends to the currency they use, which is global, open, and not subject to government control, marking a significant departure from the traditional financial systems.



Figure 3. One legal entity vs. no centralised legal entity (M4-U1-3)



Source: Own Source, prepared by the author for this text.

Structure

A DAO embodies decentralisation, functioning through smart contracts on the blockchain. This is in sharp contrast to traditional organisations that typically adhere to a centralised structure with a defined hierarchy and leadership.

Decision-making

DAOs embrace a democratic decision-making process in which members vote on critical matters. Conversely, traditional organisations often rely on managerial authority or representative democratic procedures to make decisions.

Transparency

Transparency is inherent in DAOs, with all transactions and decisions recorded on a public blockchain. Traditional organisations, on the other hand, may handle sensitive or private information, limiting the extent of their transparency.

Property

DAOs differentiate themselves by being owned and controlled by their members, who actively participate in the organisation's management through voting mechanisms. In contrast, traditional organisations are commonly owned by shareholders or a central entity that exercises control.

Immunity to censorship

Operating on a decentralised network, DAOs enjoy immunity to censorship, safeguarding them from interference by central authorities. Traditional organisations, however, can be susceptible to censorship and external interventions.

This evolution in organisational structure and operation highlights the profound impact of decentralised technologies, offering a paradigm shift in how entities function, make decisions, and foster transparency and ownership among their members.

DAO regulation

Like traditional organisations, DAOs can establish their own rules governing various aspects such as appointments, membership criteria, and voting procedures. The foundation of a DAO typically involves the creation of a charter or founding document. This document is a crucial reference point for the organisation, outlining its principles, objectives, and operational guidelines.

The charter acts as a guiding framework, ensuring clarity on matters of governance and operation. In the event of a dispute, having a well-defined charter becomes instrumental in providing a structured approach to conflict resolution. It delineates the agreed-upon protocols and processes, offering a roadmap to address disagreements or uncertainties that may arise among the DAO's members.

This commitment to a transparent and predefined framework instils confidence among the members and reinforces the self-governance aspect of DAOs. It sets the stage for a harmonious functioning in which participants know the established norms, contributing to a more effective and resilient decentralised organisational model.

The reason DAOs are created

Historically, organisational structures have evolved from Colonial joint-stock corporations to modern-day corporations and limited liability companies (LLCs). The latest addition to this lineage is decentralised autonomous organisations (DAOs), representing a paradigm shift in entities' operations. Initially associated with cyber-related projects, DAOs have expanded their reach, embracing charitable causes and profit-making endeavours. Notably, DAOs like SPADs, which are DAO-based special purpose acquisition vehicles (SPACs), are venturing into the acquisition of physical target companies, exemplifying the versatility of this organisational model.

DAOs have witnessed explosive growth, with their applications spanning diverse sectors. Traditional scepticism surrounding leaderless entities encoded with decision-making



software is gradually giving way to a recognition of their potential disruptiveness. While many DAO projects have focused on allocating cryptocurrency to crypto-related initiatives, there is a growing belief that successful examples will emerge as DAOs continue to proliferate beyond the crypto sphere.

In the insurance, real estate finance, and venture capital industries, DAOs are positioning themselves as significant disruptors of conventional models. Specific DAOs, like FriesDAO, are funding the acquisition of fast-food restaurants, creating a decentralised network governed by DAO members. Projects like BuyTheBroncos DAO aimed to acquire a football team and explore new ownership structures. BlockbusterDAO aims to transform the Blockbuster brand into a blockchain-based streaming video platform. However, it faced challenges, but it remains committed to its decentralised vision.

These examples underscore the diverse applications and disruptive potential of DAOs in various sectors. As DAOs gain traction and demonstrate success in ventures traditionally governed by centralised structures, they are poised to redefine business entities and organisational dynamics soon. The narrative around DAOs is evolving from scepticism to anticipation, with their decentralised, autonomous, and innovative nature paving the way for new possibilities and transformative business models.

Types of DAOs

Let us delve into a more detailed description of each type of DAO.

1. Governance DAOs

Governance DAOs are at the forefront of decentralised decision-making. They empower token holders with voting rights to determine blockchain protocol upgrades, parameter adjustments, and other key decisions. This democratic process ensures the community's involvement in shaping the future of the crypto project.

2. Funding DAOs

Funding DAOs serve as decentralised crowdfunding platforms. Participants pool their resources by acquiring tokens, and proposals are then submitted for community consideration. The community votes on funding initiatives, making decisions on project funding, development, or ecosystem growth.

3. Collective investment DAOs

Collective investment DAOs are designed to pool funds for investments. Members contribute capital, and the DAO makes investment decisions collectively. Returns on



investments are distributed among token holders proportionally, creating a shared and collaborative investment model.

4. Charitable DAOs

Charitable DAOs leverage decentralised decision-making to support philanthropic causes. Token holders contribute to a communal fund, and proposals for charitable donations are submitted. The community votes to decide which charitable projects receive funding.

5. Social DAOs

Social DAOs focus on community building and collaboration. They facilitate interaction among members, fostering a sense of belonging. Members may collectively decide on events, initiatives, or projects that enhance the social fabric of the DAO.

6. Service DAOs

Service DAOs offer specific products or services governed by decentralised decision-making. Token holders contribute to the development and maintenance of services, and decisions regarding service enhancements or changes are made collectively.

7. Content creation DAOs

Content creation DAOs support writers, artists, and content creators. Members contribute to a fund, and proposals for content creation are submitted. The community votes on funding content that aligns with the DAO's objectives.

8. Liquidity pool DAOs

Liquidity pool DAOs manage decentralised finance (DeFi) liquidity pools. Members contribute assets to liquidity pools, and the DAO collectively decides on strategies for optimising liquidity, yield farming, and other deFi activities.

9. Prediction market DAOs

Prediction market DAOs facilitate decentralised prediction markets. Members participate in the creation and resolution of prediction markets, predicting outcomes and collectively deciding on the validity of results.

10. Decentralised identity DAOs



Decentralised identity DAOs explore solutions for identity management on the blockchain. Members collaborate to define and implement decentralised identity standards, ensuring privacy and user control over personal information.

11. DAOs for digital collectibles

DAOs for digital collectibles curate and manage collections of non-fungible tokens (NFTs). Members decide on acquiring, selling, or showcasing digital collectibles, creating a decentralised approach to ownership and curation.

12. Protocol DAOs

Protocol DAOs oversee the development and upgrades of blockchain protocols. While not a DAO in the traditional sense, protocols like Ethereum incorporate community input through processes like the Ethereum Improvement Proposal (EIP) system, allowing token holders and developers to contribute to protocol evolution.

These descriptions highlight the diverse roles and functions of DAOs across various sectors, showcasing the adaptability and innovation within decentralised governance structures. As blockchain technology advances, the potential for new types of DAOs to emerge remains a dynamic and evolving landscape.

But the main thing for DAO is to provide a new way of functioning of the organisation and decision-making—transparent, secure, and democratic. Harnessing the power of blockchain technology, DAOs have the potential to change the way organisations operate.

Advantages of DAOs

Let us expand and refine the information on the main advantages of DAOs.

Decentralisation

DAOs leverage decentralised networks, eliminating the reliance on a central authority. This decentralisation fosters a more inclusive and democratic decision-making process, enabling members from diverse backgrounds to actively participate in the governance of the organisation. It reduces the risk of undue influence and centralisation of power.

Transparency

The use of public blockchains ensures complete transparency in DAO operations. Every transaction, decision, and modification is permanently recorded on the blockchain, providing an immutable and auditable record. This transparency builds trust among



members, as they can independently verify the organisation's activities, promoting a culture of accountability.

Security

Blockchain technology underpins DAOs, providing robust security against hacking, fraud, and malicious activities. The decentralised nature of the blockchain ensures that data is distributed across the network, making it resistant to single points of failure. Members can have confidence in the security of their assets and the overall integrity of the DAO.

Efficiency

DAOs operate through smart contracts, self-executing pieces of code that automate various processes. This automation eliminates the need for intermediaries, streamlining decision-making and operational functions. The absence of intermediaries not only enhances efficiency, but it also reduces costs, making DAOs a more cost-effective alternative to traditional organisational structures.

Flexibility

One of the defining features of DAOs is their adaptability to diverse organisational needs. Customisable through smart contracts, DAOs can be tailored for specific purposes across various industries. This flexibility allows them to serve as the backbone for decentralised finance (deFi) platforms, governance structures, social networks, and other applications, showcasing the versatility of decentralised organisational models.

Borderless

As DAOs operate on decentralised networks, they have no geographical constraints. This borderless nature makes them accessible from anywhere in the world, promoting global collaboration and inclusivity. Members can actively engage in DAO activities regardless of their location, contributing to the formation of a truly global and interconnected community.

While DAOs come with several advantages, they are not without their challenges and disadvantages. Some notable drawbacks associated with decentralised autonomous organisations (DAOs) are, for example, difficulties of creation, as terminology and understanding of user experience might be confusing. The human factor is also important, as while DAOs aim for decentralised decision-making, human involvement is still crucial. Conflicts of interest, collusion, and manipulation may occur, impacting the integrity of decision-making processes.



It is important to notice that the field of DAOs is evolving, and ongoing advancements in technology and governance practices aim to address some of these challenges. However, careful consideration and risk assessment are crucial for individuals and organisations looking to engage with DAOs.

Influential DAOs

Decentralised autonomous organisations (DAOs) have gained prominence across various sectors, showcasing their diversity and impact. Here are some notable examples.

MakerDAO

MakerDAO is a pioneering lending platform that enables users to secure loans using Ether as collateral. As one of the oldest and most successful DAOs, it boasts a market capitalisation exceeding \$5 billion, reflecting its significant influence in the decentralised finance (deFi) space.

Compound

Compound operates as a lending and borrowing platform, allowing users to earn interest on their crypto assets. With a market capitalisation surpassing \$1 billion, Compound has experienced substantial growth in recent months, highlighting its importance in the decentralised financial ecosystem.

Gnosis

Gnosis stands out as a prediction market platform, facilitating cryptocurrency-based betting on the outcomes of various events. Its market cap exceeds \$100 million, and the platform has witnessed substantial expansion in recent years, contributing to the evolution of decentralised prediction markets.

dxDAO

dxDAO provides a decentralised exchange platform on the Ethereum network. With a market cap exceeding \$100 million and ongoing growth, dxDAO plays a crucial role in shaping the decentralised exchange landscape and fostering a more inclusive financial ecosystem.

Aragon

Aragon focuses on the creation and management of decentralised organisations. With a market capitalisation surpassing \$100 million, Aragon has experienced substantial



growth in recent years, empowering users to establish and govern decentralised entities seamlessly.

These DAOs exemplify the versatility and transformative potential of decentralised organisational structures. From reshaping the financial landscape to empowering online communities for charitable causes, DAOs continue to demonstrate their capacity to drive innovation and positive change in diverse domains.

Topic 2: Crypto wallets and the use of tokens in DAOs

Let us unveil the importance of wallets and cryptocurrency in the governing mechanisms of DAOs.

Notably, DAOs lack physical offices, headquarters, or traditional bank accounts, and they operate without directors, hired managers, or designated leaders. The governance rules and decision-making parameters of a DAO are intricately encoded into the underlying blockchain software, a process facilitated by self-executing smart contracts created through coding. Every transaction conducted by a DAO is permanently recorded on the blockchain, ensuring complete transparency for its members.

Two important components are needed to start and manage the system: crypto wallets and tokens.

Cryptocurrency wallets in DAOs

In the realm of DAOs, crypto wallets serve as the primary means for individuals to engage in the governance processes. While wallets themselves do not precisely represent individuals, they function as essential tools for participating in the decision-making mechanisms of a DAO.

At its core, a crypto wallet serves as a gateway to the blockchain, providing users with the ability to interact with the network seamlessly. These wallets facilitate a myriad of actions, including buying, selling, transferring, and storing tokens, all of which are crucial functions within the DAO ecosystem. Moreover, users leverage their crypto wallets to initiate and validate actions within the DAO, contributing to the overall governance of the organisation.

Essentially, the crypto wallet becomes an indispensable tool for individuals to exercise their influence and actively participate in shaping the trajectory of a DAO. It acts as the conduit through which users interface with the blockchain, enabling them to play an integral role in the decision-making and governance processes of the decentralised organisation.



Tokens as a voting tool

Tokens within DAOs serve a dual purpose as both integral components of the ecosystem and powerful tools for voting. The fundamental concept is straightforward: the more tokens an individual possesses, the greater influence their vote carries within the DAO. However, the landscape of DAO governance is dynamic, witnessing continuous experimentation with various voting mechanisms.

The prevalent practice in most DAOs involves the utilisation of exchangeable tokens, commonly ERC-20 tokens, to facilitate governance processes. These tokens, residing on the Ethereum blockchain, represent a share of ownership or participation in the DAO. The democratic principle of one token = one vote often guides decision-making, emphasizing a proportional representation based on token holdings.

Notably, the DAO ecosystem is not bound by a one-size-fits-all approach. Innovations abound, and alternative voting mechanisms are continually emerging. Some DAOs are at the forefront of experimentation, exploring the integration of non-fungible tokens (NFTs), particularly those conforming to the ERC-721 standard. NFTs, traditionally associated with unique and indivisible digital assets, introduce a new dimension to DAO governance, providing additional flexibility and customisation.

The way decentralised organisations are managed

In the realm of decentralised autonomous organisations (DAOs), the orchestration of decision-making involves the strategic interplay of wallets and tokens. The crux lies in determining the stakeholders vested with decision-making authority and delineating the mechanics of their participation.

For instance, DAOs often grant decision-making privileges to token holders or a specifically authorised list of wallets. This critical choice establishes the constituency eligible to partake in voting processes, a fundamental aspect of DAO governance. The decision-making dynamics further extend to the method of vote quantification, with prevalent options including **1 token = 1 vote**.

This prevalent approach, particularly widespread in DAOs with expansive communities and numerous token-holding members, adheres to the democratic principle in which each token equates to one vote.

1 authorised wallet = 1 vote



Opting for this model is common in scenarios in which the organisation lacks a native token, boasts a limited number of participants, or seeks to divorce voting rights from contributors' investment levels.

When devising a DAO management model, considerations should encompass key factors:

involvement. The degree to which participants can influence organisational affairs significantly impacts their engagement and commitment.

Effectiveness of decision-making: governance models vary in their efficiency for prompt decision-making, as some may necessitate prolonged consensus-building processes.

Security: safeguarding the DAO's coffers requires robust measures to thwart malicious proposals and uphold the integrity of the organisation's resources.

Presently, voting serves as the predominant mechanism for decision-making in DAOs. However, it is pivotal to notice that alternative management mechanisms abound, reflecting the dynamism and innovation inherent in the decentralised governance landscape. As DAOs evolve, exploring diverse governance approaches becomes imperative, ensuring adaptability to the unique needs and aspirations of each decentralised autonomous organisation.

Topic 3. DAO infrastructure: participation and voting

Let us discover what DAOs typically consist of and how DAOs' participants manage their operations.

Components of DAO

A comprehensive infrastructure underpins the functioning of a decentralised autonomous organisation (DAO), encompassing various integral components that synergistically contribute to its seamless operation.

1. Blockchain network

DAOs operate on a blockchain network, with popular choices including Ethereum, Polkadot, Whitechain, etc. These blockchain platforms offer a secure and decentralised environment, forming the foundational layer for DAO activities.

2. Smart contracts



The backbone of DAOs comprises smart contracts and self-executing computer programmes ingrained with the organisation's rules and regulations. These contracts serve as the automated enforcers, defining the protocols for decision-making, voting mechanisms, and the distribution of funds within the DAO.

3. Token system

Central to DAO dynamics is the implementation of a token system. Tokens confer membership and a stake in the organisation to participants, enabling them to engage in decision-making processes. This system instils a financial incentive, motivating members to make choices that align with the organisation's best interests. Participants can freely buy, sell, or transfer tokens amongst themselves, fostering a dynamic token economy.

4. User interface

The DAO interface acts as the gateway for participants to interact with the organisation. This interface, whether a web panel or a mobile app, is designed to facilitate seamless engagement, allowing users to access the organisation's history, monitor ongoing processes, and actively participate in decision-making activities.

5. Storage

DAOs leverage the blockchain network for data and transaction storage, ensuring a permanent and transparent record of the organisation's history. The decentralised nature of blockchain technology guarantees the integrity and immutability of stored information, offering participants a reliable and auditable account of the DAO's journey.

In essence, this multifaceted infrastructure converges to create a robust and transparent framework for DAOs, empowering them to operate autonomously and efficiently within the dynamic landscape of decentralised governance.

Decision-making in DAO

The decision-making mechanism in the DAO is designed to be decentralised, transparent, and resistant to censorship, allowing it to function without a central authority. It usually works like this:

1. Creating offers

DAO members can create proposals to suggest changes or actions that need to be taken.

2. Voting



DAO members vote on proposals using a voting system.

3. Quorum

To accept a proposal, the voting must reach a quorum of a minimum number of voting participants. For example, if the quorum is set at the level of 50%, and 48% voted, then the voting did not take place.

4. Threshold value

In addition to a quorum, a minimum level of support, known as a threshold, must be met for a proposal to pass.

5. Term

Proposals are usually open for voting for a certain period, after which the votes are tallied, and the result determined.

6. Realisation

If the proposal is accepted, the changes or actions described in the proposal are automatically implemented via a smart contract on the blockchain.

Voting in DAO

Participating in the decision-making process of a decentralised autonomous organisation (DAO) involves a straightforward yet crucial series of steps. Below is a concise guide on how to engage with DAO voting, ensuring transparency, accountability, and active involvement in the organisation's governance.

1. Receive DAO tokens: to initiate participation, ownership of DAO tokens is imperative. These tokens signify a stake in the organisation, granting the holder the right to participate in voting and decision-making processes.

2. Connect to DAO: access the DAO through its web panel or mobile app, either by logging in or creating an account. Usually, it is enough to connect a wallet with the governance tokens to the protocol. This step establishes the connection needed for active engagement.



3. Viewing proposals: explore the current proposals up for DAO-wide voting. Each proposal includes comprehensive details such as its description, the designated voting period, and the various options available for consideration.

4. Casting votes: actively contribute to the decision-making process by casting votes. The blockchain network records each vote, ensuring transparency and public accessibility. The voting period adheres to predefined durations set in the DAO's smart contracts, employing mechanisms like simple majority voting or weighted voting systems.

5. Reviewing results: after the conclusion of the voting period, results are calculated based on the predefined rules within the smart contracts. These results, transparent and accessible to all, can be scrutinised on the blockchain or via the dedicated DAO app/web interface.

By following these steps, participants engage in a democratic and decentralised voting process, actively shaping the trajectory of the DAO's governance. This transparency and accountability foster trust within the community, making DAOs exemplary models of participatory decision-making.

Topic 4: The way to join DAO (decentralised organisation)

Joining a DAO is very easy compared to traditional organisations. In fact, if you own any ERC-20 token, you are probably already a member of the DAO. Moreover, even without a token, you can be an active member of the DAO community.

□ This does not mean that all your input and suggestion ideas are guaranteed to be accepted, but the community entry process is rarely necessary. Moreover, there are no required qualifications or interview/secret handshake/twelve semesters of schooling to be completed first for a DAO membership.

1. Start with a research

Before joining a DAO, it is important to research the organisation to make sure it aligns with your values and goals. You can read the organisation's charter, view its history on the blockchain network, and ask questions in the DAO forums or communities. For example, on DeepDAO. DAO communities are as diverse as you can imagine. Some, like BadgerDAO, are Web3-specific collaborations between developers building decentralised finance (deFi) products. Others, such as Friends with Benefits (FWB), are next-generation social networks.

In terms of culture, finance, and investment, DAOs like Barnbridge tend to be, as in the real world, quite conservative; others, like the Bored Ape Yacht Club, are more tolerant.



Decentraland-type organisations are mature and have well-established protocols, and small changes are more likely to pass than large ones. Other DAOs are very modest, and you can be involved in projects at the nascent stage from day one.

2. Join the community

Most DAOs use Discord, but Telegram is also common. Here, you can get to know the community and ask questions. Whichever DAO you belong to, do not be afraid of 'stupid' questions: you will cut your study time in half.

3. Get a cryptocurrency wallet and buy DAO tokens

To contribute to the DAO, you will need a cryptocurrency wallet that is compatible with the blockchain that the DAO runs on, such as Ethereum, Whitechain, Polkadot, etc.

DAO tokens can be purchased through a decentralised or centralised exchange that supports such tokens. You can then transfer them to your wallet.

Most DAOs do not require access rights, so once you have contributed, you are in the game! The DAO token is your 3-in-1 ticket, membership card, and ballot.

Some DAOs may require you to confirm your identity to participate in the decision-making process and receive benefits. This may involve providing personal information or completing a know your customer (KYC) process.

4. Vote for suggestions and nominate your own

Once you join the DAO, you can participate in the decision-making processes. View offers, cast your vote, and earn rewards based on your engagement level.

Congratulations! You have now definitely joined the DAO. Welcome to the future of cooperation, work, and management!

Unit 2

Topic 1: Crypto start-ups and security in the industry

The blockchain industry is evolving at a cosmic pace, inspiring more and more businesses to choose decentralised space as an environment for ventures. Let us discuss crypto start-ups and how to make the right choice.



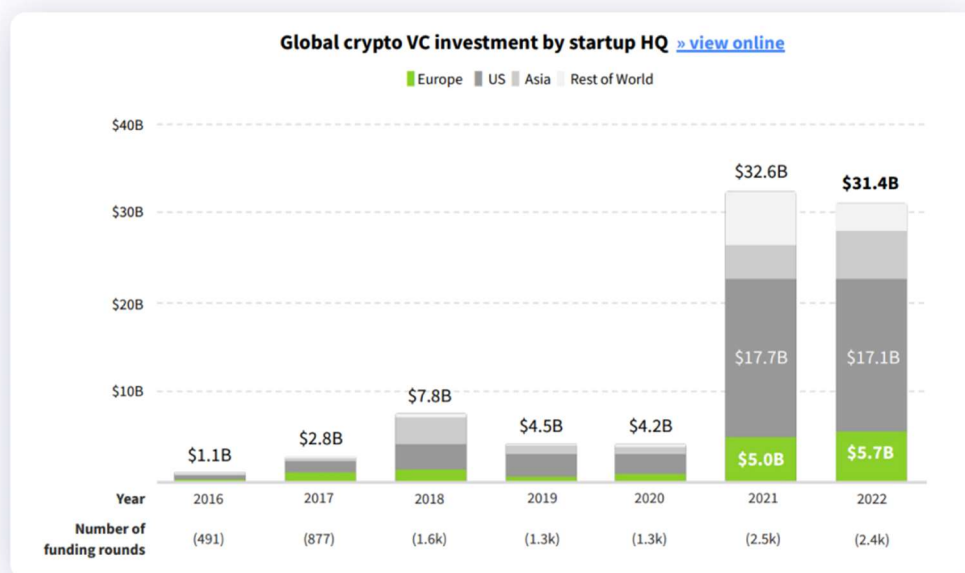
Business in the crypto world

Most companies in the crypto industry are start-ups. This is the name given to any new company seeking rapid development and success in a new business segment or an existing market.

Such companies often start with an idea that has the potential to change or improve some aspect of people's lives or businesses. These ideas can apply to various fields, from finance to the social sphere.

Start-ups are usually created with a fairly limited budget, but with great potential for growth and profitability. That is why they are sometimes called 'garage companies.'

Figure 4. Global crypto VC investment start-up HQ (M4-U2-4)



Source: Own Source, prepared by the author for this text.

Figure 5. CeFi (M4-U2-5)



Source: Own Source, prepared by the author for this text.

Crypto start-ups

A crypto start-up operating within the expansive realm of cryptocurrency and blockchain technology undertakes the ambitious task of reshaping industries through innovative solutions. These ventures embark on creating new cryptocurrencies and developing blockchain applications across diverse sectors, ranging from finance and logistics to real estate.

Fundraising strategies: ICOs and IEOs

To fuel their endeavours, crypto start-ups often turn to fundraising methods like initial coin offerings (ICOs) or initial exchange offerings (IEOs). Through these mechanisms, start-ups issue tokens that grant users access to their services or products, attracting investment and fostering user engagement.

Crypto start-ups employ various fundraising methods to secure funding for their projects. Here are some common methods:

1. initial coin offering (ICO). ICOs involve creating and selling a new cryptocurrency to investors in exchange for established cryptocurrencies like bitcoin or ethereum. Investors receive tokens representing their stake in the project.



2. Security token offering (STO): like ICOs, STOs involve selling tokens to investors. However, STOs are backed by tangible assets, profits, or revenue of the company, making them comply with securities regulations.

3. Token sales or token generation events (TGE): general terms for any sale of tokens, including ICOs and STOs. These events allow investors to purchase tokens issued by the start-up.

4. Initial exchange offering (IEO): start-ups collaborate with cryptocurrency exchanges to conduct token sales directly on the platform. Exchanges handle the fundraising process, providing a more secure environment.

5. Venture capital (VC) funding: traditional venture capital firms invest in blockchain start-ups in exchange for equity. This method follows a more conventional fundraising approach.

6. Private placements: crypto start-ups can offer tokens to a selected group of private investors before making them available to the public. This approach often targets high-net-worth individuals.

7. Community or public sales: opening token sales to the public, allowing a broader community to participate in the project's fundraising.

8. Airdrops: distributing free tokens to existing cryptocurrency holders or the wider community to raise awareness and create an initial user base.

9. Grants: some blockchain projects receive funding through grants provided by organisations or foundations interested in supporting innovative developments.

10. Decentralised autonomous organisation (DAO) fundraising: leveraging DAOs to pool funds and make collective decisions on investment. DAOs operate on smart contracts, enabling decentralised governance.

11. Initial liquidity offering (ILO): a fundraising method in which tokens are paired with liquidity on decentralised exchanges, allowing investors to buy tokens and immediately trade them.

12. Equity crowdfunding: in some jurisdictions, crypto start-ups may use equity crowdfunding platforms to sell company shares to investors.



It is crucial for start-ups to carefully consider the legal and regulatory aspects of each method, ensuring compliance with relevant laws and protecting the interests of both investors and the project.

Crypto start-ups are positioned within a market with immense potential, given blockchain's transformative impact on various industries, leading to cost reduction and enhanced business process efficiency. However, they grapple with significant challenges:

1. regulatory uncertainty. The crypto industry's lack of comprehensive regulation poses challenges. Investors may feel less protected, and businesses operating in the sector encounter hurdles due to the absence of legal clarity.

2. Scalability concerns: many blockchain platforms face scalability limitations, hindering widespread adoption. This scalability challenge can impede the full realisation of the business development potential in the crypto space.

3. Security imperatives: crypto assets are susceptible to theft and fraud, necessitating robust security measures. Ensuring the safety of customers' assets becomes paramount, requiring continuous innovation in cybersecurity protocols.

4. Adoption barriers: despite the industry's growth, cryptocurrencies and blockchain technology remain unfamiliar to the public. Overcoming this awareness gap becomes a hurdle for crypto start-ups striving to attract and retain customers.

Thriving in the crypto start-up ecosystem demands agility and resilience. Start-ups must proactively address regulatory concerns, innovate scalable solutions, enhance cybersecurity protocols, and embark on educational initiatives to drive widespread adoption. While challenges persist, the potential for transformative impact fuels the determination of crypto start-ups to shape the industries' future through blockchain innovation.

Reasons to invest in the crypto business

Investing in crypto and blockchain businesses has emerged as an enticing prospect for investors, driven by a convergence of factors. Foremost among these is the potential for high returns, with cryptocurrency markets' dynamic and volatile nature offering opportunities for substantial profits. Investors are captivated by the innovative core of blockchain technology, recognising its transformative potential in disrupting established industries through decentralised ledgers, smart contracts, and cryptographic principles.



The blockchain's capacity to reshape traditional financial systems also serves as a significant motivator for investment. Investors are drawn to projects challenging existing norms and providing alternatives to conventional banking and payment systems.

Crypto venture capital funding plummeted by 68% in 2023 to \$10.7 billion, compared to the \$33.3 billion invested in 2022 (Khatri, 2023).

Still, total investment in 2023 outpaces prior bear markets, exceeding the \$6.4 billion invested in 2019 and 2020.

In 2023, venture capitalists injected \$10.7 billion into crypto and blockchain start-ups, marking a 68% decrease from the \$33.3 billion invested in 2022.

Most of these investments took place in the first half of the year, with a dip in the second half — although November saw an uptick in funding. Notably, the proportion of deals allocated to pre-seed, seed, and Series A start-ups increased in 2023, while mid and later-stage deals declined compared to the previous year.

As for verticals, NFT/gaming, infrastructure, and Web3 maintained their dominance in terms of deal count, with other categories such as data, trading, and enterprise witnessing fewer deals.

Definition of scams

In the context of crypto investing, a scam refers to fraudulent or deceptive activities designed to trick individuals into making financial investments with the promise of high returns, only for the investors to suffer losses or have their funds stolen. Scams in the crypto environment take various forms, and investors must be vigilant and informed to protect themselves. Here are some common types of crypto scams:

- **Ponzi schemes.** These scams involve promising high returns with little or no risk to investors. Early investors are paid with the funds from new investors, creating the illusion of profitability. As the scheme relies on a continuous influx of new capital, it eventually collapses, leaving later investors with significant losses.
- **Fake initial coin offerings (ICOs):** some scammers create fraudulent ICOs, mimicking legitimate fundraising campaigns for new cryptocurrencies. They attract investors by promising revolutionary technologies and substantial returns. After collecting funds, the scammers disappear, leaving investors with worthless tokens.



- **Fake exchanges and wallets:** fraudsters may create fake cryptocurrency exchanges or wallets that mimic reputable services. Unsuspecting users deposit funds only to discover that the platform is a scam designed to steal their assets.
- **Social media scams:** scammers use social media platforms to impersonate influential figures or projects in the crypto space. They promote fake giveaways or investment opportunities, tricking users into sending them funds.

The way to avoid scams

Protecting your investments in the crypto space is paramount due to the prevalence of scams. Here are essential steps to avoid scams and safeguard your funds:

Conduct thorough research

- Take the time to research any company or investment opportunity thoroughly.
- Rely on reliable sources such as the official company website, regulatory authorities, and independent financial experts.
- Embrace the principle of 'do your own research' (DYOR) before making any investment decisions.

Verify information

- Be cautious of claims that seem too good to be true.
- Cross-check information from multiple sources to ensure its accuracy and legitimacy.

Avoid impulsive decisions

- Scammers often pressure individuals to invest hastily. Resist the urge to make impulsive decisions and take the time to assess investment opportunities carefully.

Check credentials

- Ensure that the company and its representatives are registered and licensed to operate in your region.
- Despite the industry's limited regulation, some countries mandate licenses for cryptocurrency exchanges (e.g., CEX).

Be wary of phishing attempts

- Do not click on questionable links, especially those in advertisements.



- Phishing attempts often target personal information, such as passwords and passphrases, with the goal of unauthorised access.

Diversify investments

- Avoid concentrating all your funds in a single investment opportunity.
- Diversify your investments across different options to mitigate risks and protect against potential losses.

Exercise caution with high-risk activities

- Approach cryptocurrency trading with caution, recognising the high-risk nature of the activity.
- Make informed decisions by analysing your financial capabilities, assessing risks, and seeking advice from financial and investment experts.

Disclaimer

The lessons and tasks of the course are informative. We **do not in any way** encourage you to buy cryptocurrency or invest in any projects. Crypto trading is a high-risk activity that can lead to significant financial losses. Before selling, buying, or investing in cryptocurrencies, it is recommended to make a detailed analysis of your financial opportunities and risks, as well as get advice from finance and investment specialists. Each trader is responsible for their actions and for solving any issues related to investing in cryptocurrencies.

By adhering to these guidelines, you can enhance your ability to discern legitimate opportunities from potential scams, ultimately safeguarding your investments in the dynamic and evolving crypto landscape.

Topic 2: The way DAOs raise funds

Attracting funds for the development of a cryptocurrency or blockchain project is a nuanced process that requires strategic planning and adherence to industry standards. The competitive nature of the market necessitates a comprehensive approach. Here are essential steps and methods to attract investments, including ICO, STO, IEO, IDO, and crowdfunding.

1. Develop a comprehensive business plan

- Craft a clear and compelling business plan outlining goals, strategies, market analysis, and revenue-generation plans.



- Provide a roadmap that showcases the project's trajectory and potential for growth.

2. Build a strong and experienced team

- Assemble a team with diverse skills and expertise relevant to the project's objectives.
- Investors seek assurance in the team's capabilities to execute the proposed plan successfully.

3. Cultivate a network of advisors and a community

- Establish a network of advisors who can provide valuable insights and guidance.
- Build a community around the project through social media, forums, and other platforms to generate interest and attract potential investors.

4. Develop a prototype (MVP)

- Create a minimal viable product (MVP) or prototype to showcase the project's functionality.
- A functional prototype demonstrates the project's feasibility and serves as a tangible representation for potential investors.

5. Emphasize market potential

- Highlight the market demand for your project and underscore its high growth potential.
- Investors are drawn to projects with promising market dynamics and potential significant returns.

6. Regulatory compliance

- Ensure compliance with relevant regulations and laws in the country in which the project will be launched.
- Adhering to legal standards enhances credibility and mitigates potential regulatory risks.

For example, we can discuss the Whitechain Foundation, which encourages projects that want to create their own startups, i.e., tokens or other blockchain projects based on the Whitechain blockchain. The Whitechain Foundation offers flexible and comprehensive support for large-scale endeavours and cutting-edge blockchain solutions.

The Foundation's Grant Program reflects the core mission and supports projects offering cutting-edge technological solutions to the industry. Furthermore, it extends its support



to projects across the development spectrum, whether they are in their early stages or have already achieved significant progress.

ICO, STO, IEO, IDO and crowdfunding

Opening and developing a business often involves securing funding. While seeking individual investors with substantial capital is common, newer and more inclusive methods have emerged in the crypto industry. One such method is crowdfunding, which involves reaching out to a broader audience, allowing numerous individuals to contribute smaller amounts collectively.

Crowdfunding platforms

Crowdfunding platforms serve as virtual meeting points in which visionary entrepreneurs present their ideas, seeking investment from interested individuals. While the individual contributions may be modest, the collective impact can result in substantial funding for the project.

Forms of fundraising in the crypto industry

There are four main ways to attract investment in the crypto industry: ICO, STO, IEO, and IDO.

- **ICO** (initial coin offering) is a form of investment attraction in which any blockchain project can participate, both coins and tokens, as well as certain applications, technologies, communities, etc. This is the sale of tokens (coins) to investors in exchange for other cryptocurrencies like USDT, ether, or bitcoin.
- **STO** (security token offering): a company or product issues so-called security tokens for sale. Possession of such a token gives the right to own a share of a company or product. Its idea is like the essence of securities, so this token type is often subject to regulatory policies.

Two more types of fundraising were invented, specifically for coins and tokens:

- **IEO** (initial exchange offering) is a form of investment attraction in which the platform is a centralised exchange.
- **IDO** (initial dex offering) is a form of investment attraction in which the platform is a decentralised exchange.



Each fundraising method serves a specific purpose, catering to diverse needs within the crypto industry. While ICOs offer broad participation, STOs prioritise regulatory compliance, and IEOs and IDOs provide alternatives based on the exchange infrastructure — centralised or decentralised.

Understanding these fundraising mechanisms is crucial for entrepreneurs navigating the crypto landscape. As the industry continues to evolve, exploring innovative and inclusive funding methods becomes integral to the success of groundbreaking projects.

What crowdfunding platforms are there? Standard platforms include:

- StartEngine
- Republic
- Wefunder
- TokenFunder
- GitCoin

These platforms typically offer features like standard crowdfunding platforms, but with the ability to accept cryptocurrency contributions and facilitate token sales. They also often provide tools for authors to manage projects and distribute tokens to participants.

Topic 3: Launchpads and tokenomics

In our preceding lessons, we delved into how start-ups secure investment and the critical factors investors scrutinise in their decision-making processes. Among these factors, one of paramount importance is tokenomics.

Understanding tokenomics

Tokenomics, a portmanteau of 'token' and 'economy,' essentially encapsulates a cryptocurrency project's supply and demand dynamics. This comprehensive term encompasses the token's issuance, attributes, distribution, supply, demand, market capitalisation, and other pertinent criteria.

Key considerations in tokenomics analysis

When dissecting tokenomics, several crucial elements warrant attention, offering insights into the project's viability and potential for growth.

1. Maximum and circulating supply



- The circulating supply indicates how many tokens are currently in circulation. This number increases when new assets are released or decreases when tokens are burned.
- Maximum supply: this represents the total number of tokens that can ever be issued, an encoded limit in the protocol that precludes the creation of additional tokens. Notable examples include bitcoin, capped at 21 million coins, and ether, which lacks a maximum supply.

Understanding the tokenomics of a project involves a nuanced evaluation of these factors, offering a holistic perspective on the token's economic dynamics. This analysis is integral for investors seeking a comprehensive understanding of a cryptocurrency's long-term viability and its potential role within the broader market.

2. Utility

It would be good if the token had use cases within its ecosystem. For example, the token can serve as a means of payment for services or goods in the application or platform. It can even provide access to special features, such as voting rights in the project, or contribute to the network's security.

3. Scalability

It is the ability of a system/network/project to increase its performance and throughput with the growth of the number of users, transactions, and other activities taking place in the system. The larger the amount of data that needs to be processed, the more efficiently the system should work.

4. Token burning: involves destroying a certain number of tokens, reducing the total supply. Token burning is often used to create scarcity and potentially increase the value of remaining tokens.

5. Incentives: outlines mechanisms for encouraging desired behaviours within the community. This could involve rewarding users for holding tokens, participating in governance, or contributing to the network.

6. Staking and delegated proof-of-stake (DPoS): if the project involves a proof-of-stake consensus mechanism, tokenomics may include details on staking, where users lock up tokens to secure the network or gain additional benefits.

7. Governance: describes how token holders participate in decision-making processes related to the project. Token holders may vote on proposals, upgrades, or changes to the protocol.



8. Vesting periods: specifies the timeline for releasing tokens to founders, team members, or early investors. Vesting periods are designed to align participants' interests with the project's long-term success.

9. Economic model: outlines the rules and mechanisms that govern the creation and flow of value within the ecosystem. This includes details on transaction fees, inflation, deflation, or any mechanisms designed to regulate the token economy.

Tokenomics is a critical aspect of a blockchain project, influencing its sustainability, attractiveness to investors, and the ecosystem's overall health. Well-designed tokenomics aligns the incentives of various stakeholders and contributes to the project's success.

The way to launch your own token: a step-by-step guide

Figure 6. Step-by-step guide to make a cryptocurrency (M4-U2-6)



Source: Own Source, prepared by the author for this text.

Launching your token involves a meticulous process to ensure its success and widespread adoption. Here is a step-by-step guide to navigate through this venture.

1. Develop a comprehensive white paper: craft a detailed white paper outlining the core idea of your token. Answer fundamental questions such as the purpose, target audience, technical implementation, marketing strategy, and unique advantages. This document serves as a crucial resource for potential investors, helping them decide whether to invest.

Tip: explore existing projects on platforms like CoinGecko to understand the diverse range of ideas in the market.



2. Determine funding requirements: clearly understand your project's financial needs. Define the soft cap, representing the minimum investment required for the basic version of your idea, and the hard cap, indicating the maximum funding required for full implementation of the project goals.

3. Token idea presentation: use a platform to present your token idea comprehensively. Explain its functionality, benefits, and potential impact. Investors who believe in the viability of your concept will purchase the token, providing the necessary investment for development.

Note: early investors often receive tokens at a lower price than the eventual trading value.

4. Token sale strategy: mitigate the risk of price manipulation by competitors through a well-thought-out token sale strategy. Typically, sales occur in three stages:

- **private sales.** Limited to a select group, often major investors, or close developers, ensuring controlled distribution.
- **Presale:** widening accessibility with a lower token price, attracting a larger participant pool. Additional conditions may apply due to limited slots.
- **Public sale:** open to all with no special conditions, marking the token's listing on an exchange for public trading.

Caution: plan token distribution channels and volumes thoughtfully to avoid market manipulation risks.

Launching your own token demands strategic planning and adherence to best practices to ensure a successful and sustainable project.

Definition of launchpads

Launchpads are platforms that help new crypto projects launch initial coin offerings (ICOs) or initial exchange offerings (IEOs) to raise funds from investors.

Launchpad provides various services: marketing, verification of financial activity, emission of tokens, and their listing on exchanges. They may also offer extras such as access to a network of investors and legal support.

Launchpads are usually run by well-known crypto exchanges or platforms, allowing projects to take advantage of the exchange's existing user base and trading volume. A well-known example is WhiteBIT Launchpad, a dynamic platform designed to support cryptocurrency projects and give users the opportunity to participate in groundbreaking ventures. The platform allows users to discover new crypto projects among the first ones,



vote for their listing on the WhiteBIT exchange (hence, supporting the project), and participate in the presale of the project's tokens (hence, becoming early investors).

Here is how an idea becomes a reality:

application and review. The journey starts by applying for the WhiteBIT Launchpad. Projects are carefully reviewed to assess their viability, team, and business model, as was mentioned above;

Invite money: if the project is approved, it can initiate fundraising through the launchpad. Investors can participate in token sales or coin offerings, providing the necessary capital for project development.

Token listing: once a successful fundraising campaign is completed, the project's tokens or coins are listed on WhiteBIT, granting access to a broader audience of potential users and investors.

Community building: WhiteBIT Launchpad supports the project in cultivating a robust and engaged community, which is vital for long-term success.

Projects that have already been launched include Scamfari (SCM), JovJou (JOVJOU), and WorldToken (WORLD). In case of success, the launchpad token sale normally finishes within a couple of minutes, allowing the project to list the token on the exchange.

Topic 4: Digital hygiene and online security

Digital hygiene refers to individuals' practices and habits to maintain a secure and healthy online presence. In the context of cryptocurrency, in which digital assets are at stake, robust digital hygiene is crucial to safeguard against various online threats, scams, and privacy breaches.

1. **Secure passwords:** use complex passwords that combine uppercase and lowercase letters, numbers, and symbols. Avoid using easily guessable information such as birthdays or common words. Password managers can assist in generating and storing strong, unique passwords for each cryptocurrency account.
2. **Secure your private keys:** private keys are the digital equivalent of physical keys to your safe. Store them in hardware wallets or secure, offline storage to mitigate the risk of online hacks. Avoid sharing private keys and consider using passphrase protection for an additional layer of security.



3. Regular software updates: updating software is crucial for fixing security vulnerabilities. Regularly update your operating system, antivirus software, and cryptocurrency wallets. Hardware wallet users should ensure that the device's firmware is up to date.

4. Phishing awareness: phishing attempts often involve deceptive emails or messages attempting to trick users into revealing sensitive information. Verify the legitimacy of communications by independently checking official websites. Never click on links or download attachments from untrusted sources.

5. Secure wi-fi connection: use a WPA3-encrypted and password-protected Wi-Fi connection to prevent unauthorised access. Avoid accessing cryptocurrency accounts on public wi-fi networks, which may be vulnerable to attacks.

6. Encryption practices: encrypt sensitive data on devices to protect it from unauthorised access. Use strong encryption for communications, especially when conducting cryptocurrency transactions. Hardware wallets inherently provide an additional layer of encryption.

7. Privacy protection: reduce sharing personal information on social media to reduce the risk of targeted attacks. Use privacy-focused browsers and consider using a VPN to enhance online privacy and anonymity.

8. Educate yourself: regularly read reputable sources to stay informed about the latest security threats. Engage with the cryptocurrency community through forums or social media to learn from the experiences of others. Ongoing education is key to adapting to new threats.

9. Regularly monitor accounts: review your cryptocurrency accounts for any unusual activity. Set up transaction alerts and notifications to receive immediate notifications of account activity. Swift response to suspicious activity can help prevent unauthorised access.

11. Know your customer (KYC) and anti-money laundering (AML)

In the realm of cryptocurrency, know your customer (KYC) and anti-money laundering (AML) processes are pivotal safeguards that ensure the security and protection of users.

KYC: building user trust and preventing fraud

KYC, or know your customer, is a cornerstone for user protection. This process involves the thorough verification of user identities before granting access to cryptocurrency



services. By collecting essential personal information, such as government-issued IDs and proof of address, KYC ensures that users are who they claim to be.

KYC serves not only as a crucial element in maintaining a secure and compliant environment, but it also plays a pivotal role in user account recovery. In the unfortunate event of password loss or account access issues, KYC procedures provide a reliable mechanism for users to regain control. By verifying the user's identity through established KYC methods, platforms can ensure a secure process for account recovery, enhancing overall user experience and safeguarding against unauthorised access.

Furthermore, KYC compliance is often a legal requirement in many jurisdictions. Adherence to regulatory standards establishes the legality of cryptocurrency platforms and fosters a sense of transparency and accountability. Users benefit from a regulated environment that prioritises responsible data handling.

In tandem with KYC, anti-money laundering (AML) measures bolster user security by targeting illicit financial activities.

AML: safeguarding against illicit financial activities

Anti-money laundering measures are designed to detect and prevent financial crimes, including money laundering and terrorist financing. Cryptocurrency platforms implement AML procedures to monitor transactions for suspicious patterns that may indicate illicit activities.

For users, AML protects against integrating illegal funds into the broader financial network. By actively working to prevent financial crimes, AML contributes to the overall stability and integrity of the financial system. Users indirectly benefit from a more secure financial ecosystem, reducing the risk of engaging with unreliable or potentially fraudulent cryptocurrency services.

Both KYC and AML play vital roles in building trust within the cryptocurrency space. Compliance with these measures enhances the credibility of platforms, fostering a safer environment for users to engage in financial transactions. Through KYC and AML, cryptocurrency platforms prioritise their users' security, trust, and integrity, creating a foundation for a secure and reliable financial ecosystem.

As we already mentioned, KYC and AML are the tools that help both the users and the financial institutions, like centralised exchanges, maintain high security standards. For example, WhiteBIT encourages its users to check the blockchain addresses whenever they want to interact with digital assets with the help of an AML checker. It verifies the address, and if the associated risks are 'high', it could be suspected of due to one of the



prohibited actions: DarkNet services, Gambling, Illegal services, Malicious software, Fraud, and more.

Any verified WhiteBIT user can independently check the address using the WhiteBIT AML service. The fee for using the tool is 1 USDT. Here is how to do it:

1. Click on 'products' in the top menu of the exchange website, and open the AML page.
2. Choose the cryptocurrency you want to check.
3. Enter the address and click 'check.'
4. The algorithm will verify the address you are interested in. Pay attention to the signals and risk scale. They will show the labels to be wary of and the risk percentage.

Users who hold WhiteBIT coin (WBT) can check their addresses free of charge.

Topic 5: Professional application of knowledge of blockchain

In the dynamic landscape of creating, enhancing, and sustaining blockchain innovations, the demand for skilled professionals is surging, leading to a rapid increase in job opportunities. Employers seek individuals with specific skills, personal attributes, and relevant experience, tailoring their requirements to the nuances of each role.

Whether it is a programmer or a marketer, the hiring process typically involves assessing practical knowledge within a specific niche, often through completing a test task. Given the competitive job market, embracing innovative and non-traditional problem-solving approaches is essential.

Despite common assumptions, the progressive high-tech sector is not solely reliant on technical specialists. The realms of cryptography and blockchain extend well beyond software development, encompassing roles for marketers, managers, and content creators. In the subsequent discussion, we will delve into the specifics of these in-demand positions.

Blockchain-related professions

The application of blockchain technology transcends the confines of cryptocurrency and project development, extending its transformative potential across diverse sectors. In the realm of blockchain and cryptocurrency projects, knowledge in this field is paramount for developers crafting decentralised solutions, engineers ensuring network security, and marketers navigating the intricacies of a rapidly evolving industry.

Beyond the core blockchain development, the impact of this technology ripples into marketing strategies, in which understanding blockchain is crucial for promoting



transparency, building trust, and navigating the unique dynamics of token-based economies. The intersection of blockchain and marketing paves the way for innovative campaigns, token incentives, and community engagement strategies.

However, the influence of blockchain stretches far beyond the confines of its birthplace. In medicine, blockchain can revolutionise data management, ensuring the security and interoperability of patient records. In education, it can reshape credential verification, making academic achievements more secure and accessible. Industries such as agriculture, real estate, and supply chain benefit from blockchain's ability to enhance transparency, traceability, and efficiency. Let us look at the possible applications of blockchain knowledge in professional life.

Blockchain development

Blockchain developer

Design, create, and optimise blockchain platforms and protocols. Responsible for the development of smart contracts and decentralised applications (dapps).

Crypto developer

Develop decentralised applications (dapps) and possess hands-on experience with advanced technologies. Proficiency in cryptography, computer science, programming languages, and mathematics is crucial.

Blockchain engineer

Responsible for ensuring seamless operation at the back end and front-end of blockchain projects. Manage the underlying framework and user interfaces for optimal performance.

Blockchain consultant

Collaborate with businesses seeking to integrate blockchain solutions. Guide clients through the integration process and assess the potential advantages of applying blockchain technology to specific use cases.

Smart contract developer

Specialises in creating self-executing contracts using blockchain technology. Implement and manage smart contracts for various applications.

Cryptocurrency compliance officer



Stay updated with compliance standards and handle complicated regulatory situations within the cryptocurrency space.

Crypto analyst

Analyse market trends, project performances, and cryptocurrency values. Provide insights and recommendations for investment decisions.

Crypto security specialist

Implement and oversee security measures to protect blockchain networks and cryptocurrency transactions. Identify and mitigate potential security threats.

Tokenomics analyst

Analyse and optimise blockchain-based tokens and cryptocurrencies' economic structures and models.

Blockchain data scientist

Use data analytics to extract valuable insights from blockchain networks and cryptocurrency transactions.

Blockchain ethical hacker

Identify and rectify vulnerabilities in blockchain networks and cryptocurrency systems to enhance security.

Marketing relations

Crypto marketing manager

Oversee targeted marketing campaigns and use social media platforms to generate customer engagement. Play an integral role in building and promoting the brand in the cryptocurrency industry.

Community manager

Foster and engage with online communities related to a cryptocurrency project. Responsible for maintaining a positive community atmosphere and addressing user inquiries.



Content creator

Develop engaging and informative content for various platforms, including blogs, articles, videos, and social media. Enhance brand visibility and educate the community about cryptocurrency projects.

Social media specialist

Manage and execute social media strategies for cryptocurrency projects. Create engaging content, monitor online conversations, and build a strong social media presence.

Influencer relations manager

Cultivate relationships with influencers in the cryptocurrency space. Collaborate with influencers to promote and endorse specific projects, enhancing visibility and credibility.

Other opportunities

Cryptocurrency educator/trainer

Educate individuals or businesses on the fundamentals of blockchain technology, cryptocurrencies, and their practical applications.

HR/recruiter

Human resources (HR) professionals and recruiters in the blockchain industry ensure the effective management and growth of the workforce within blockchain companies, including talent acquisition, job descriptions, candidate screening, knowledge assessment, etc.

Supply chain manager

With all the data in one place, organisations can use artificial intelligence to predict demand and optimise supply accordingly.

Real estate consultant

Use blockchain for transparent and efficient real estate transactions, property management, and land registry.

Healthcare data analyst



Apply blockchain to securely manage and share patient data, ensuring interoperability and privacy in healthcare systems.

Moreover, thanks to blockchain technology, customers get complete visibility and transparency of the origin of the medicines they buy.

In the case of developing markets, in which counterfeit drugs cause thousands of deaths yearly, blockchain will be a true salvation.

Legal consultant for smart contracts

Specialise in the legal aspects of smart contracts, ensuring their compliance with existing laws and regulations.

Environmental scientist

Implement blockchain for tracking and verifying environmental data, carbon credits, and sustainability initiatives.

E-governance specialist

Work on implementing blockchain in government systems for secure and transparent record-keeping and voting processes.

Agricultural technology innovator

Implement blockchain in agriculture for supply chain transparency, quality assurance, and fair-trade practices.

Fashion industry sustainability analyst

Use blockchain to trace the supply chain of fashion products, ensuring ethical sourcing and promoting sustainability.

Humanitarian aid coordinator

Use blockchain for transparent and traceable distribution of humanitarian aid, ensuring efficiency and accountability.

Tourism and hospitality specialist

Apply blockchain for secure and transparent booking systems, loyalty programmes, and identity verification in the travel industry.

Art curator for blockchain-based artwork

Work with blockchain to verify the authenticity and provenance of digital art through non-fungible tokens (NFTs).

Food safety inspector

Use blockchain to ensure food safety by tracking and verifying the origin and conditions of food products in the supply chain.

Outside financial markets, logistics is the technology's most promising application. One of the most notable developments comes from IBM and their Food Trust initiative, which they developed on the IBM Blockchain platform powered by Hyperledger Fabric. The technology is designed to ensure the traceability, authenticity, and quality of products for consumers.

The application of blockchain technology knows no bounds, extending its transformative influence across sectors and professions. Understanding blockchain's intricacies empowers developers, marketers, and industry leaders within cryptocurrency and project development and opens doors to innovation in medicine, education, agriculture, and beyond. The limitless potential of blockchain allows professionals to reimagine their fields, enhancing efficiency, transparency, and security. As the boundaries of what is possible continue to expand, those familiar with the workings of blockchain are not just equipped with knowledge but possess a tool for unlocking unparalleled opportunities. In a world in which imagination fuels progress, blockchain is a beacon, inviting individuals to envision and realise a future in which their work becomes efficient and effortlessly transformative.

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