

A B2B GUIDE TO

DECIDING ON A BLOCKCHAIN

AN EXPERT PERSPECTIVE



CHAPTER OVERVIEW



THIS IS AN INTERACTIVE PDF. CLICK ON A TITLE TO JUMP TO THE CORRESPONDING CHAPTER.

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FOREWORD

At Zaisan, we have a clear vision of the future - one where businesses and governments can use the power of web3 to achieve new levels of security, accountability, corporate social responsibility, reliability, and transparency in a compliant manner.

To help businesses understand and unlock the potential of blockchain technology, we created this ebook. Our expert team is highly engaged in the web3 community and has spoken to hundreds of projects. We encountered two main issues:

- A project may already be built on a certain blockchain, but it is not performing as expected in terms of the business case, legal compliance, or the stability of the software
- Everything in blockchain is new, so it can be difficult to decide which blockchain to trust, is easy to build on, and has the right features

This ebook covers multiple topics from both business and technical perspectives and is intended for mid-level technologists in the industry. It will explain how to choose the right blockchain for your business, covering topics relevant to the decentralised nature of blockchain that will be useful for your analysis to avoid future problems.

We hope that this ebook will be the starting point for you to have a better understanding of blockchain platforms or help address any current challenges you may be facing.

We are excited to embark on this journey with you and look forward to seeing the successes businesses will have with this technology.

- Rhett Oudkerk Pool, co-founder and CEO of Zaisan

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GETTING STARTED

The first step in using blockchain is to consider your business goals and industry. Here are the main values that blockchain can provide to help you through this process:

- Full traceability of any information on the blockchain
- Smart contracts and automation
- Increased speed and efficiency
- Increased security
- Holistic view of transparency from all parties involved
- New business models, products, and services

If you decide to launch a blockchain initiative or integrate your systems with it, this ebook will serve as a guide on how to select the appropriate blockchain based on criteria.

There are four key elements to consider when selecting the most appropriate blockchain for your business: technology, ecosystem, focused growth, and legal compliance.



Technology refers to the speed, reliability, and security of the network



Ecosystem refers to the community of users and developers supporting the network



Focused growth refers to the central entity or foundation responsible for the development and growth of the network



Legal compliance refers to regulations such as GDPR, AML, and gambling rules

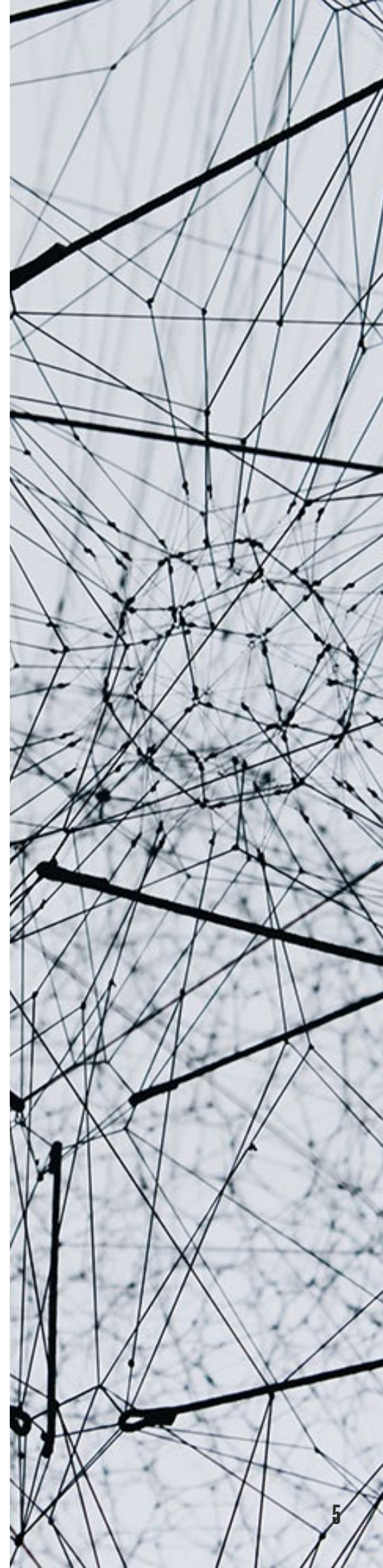
We will briefly cover each topic and its relevance, allowing you to understand the significance of each topic in the broader analytical framework. In-depth technical analysis is recommended when assessing blockchains and making investment decisions.

01 - TECHNOLOGY - LEADING IN WEB3

Delve into the fundamentals of your analysis. As you read this chapter, keep your business objectives at the forefront of your mind. Certain topics may be more relevant to your project than others.

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CONSENSUS MECHANISM

The consensus mechanism in blockchain technology actively helps all participants reach agreement regarding the current state of the blockchain. A network of computers verifies transactions and creates 'blocks of data', which ultimately leads to a consensus. Through this process, the mechanism ensures that all members of the network possess the same version of the blockchain. Hereby it is trusted that the transactions have been appropriately verified. In this way, the consensus mechanism actively maintains the integrity and reliability of the blockchain.

A few examples of consensus mechanisms:

PROOF OF WORK (PoW)

Participants need to solve difficult computational problems (fundamentally by use of energy and processing power) to achieve consensus in a distributed network.

PROOF OF STAKE (PoS)

This consensus rewards network validators with a portion of network fees for maintaining network security and validating transactions based on the amount of tokens they have staked.

DELEGATED PROOF OF STAKE (DPoS)

This consensus mechanism selects network validators through voting, who are responsible for validating transactions and maintaining the network.

PROOF OF AUTHORITY (PoA)

This consensus mechanism designates network validators based on their identity and reputation. These selected individuals exclusively hold the power to create new blocks. The election of these validators may vary across networks.

Takeaways:



As a fundament of how networks operate, consensus mechanisms enable the network to agree on the order of events and the validity of transactions (deterministic)



Each network will have its own consensus protocol, depending on the type of network and the desired performance characteristics



For your business goals, it is vital to understand the scalability, reliability, and maturity factors of a particular consensus mechanism



TRANSACTIONS PER SECOND

Transactions per second (TPS) refers to the number of transactions that a blockchain network can handle in a single second. A high TPS means that the network is able to process more transactions and thus, is more scalable.

VISA's network handles much more transactions per second than most blockchains. As an example, VISA's capacity is around 1,700 TPS, while the Bitcoin blockchain can process about 7 TPS. It is important to consider blockchains with high TPS as a key factor for projects that require handling a high number of transactions. For example, gaming projects based on a high volume of transactions require scalability as more users join. Therefore, a high TPS blockchain is necessary to sustain the demand and enable the project to grow.

BLOCK SPEED & FAST FINALITY

For public blockchains, fast finality is an attribute of a network that enables the system to reach a consensus quickly and settle on the state of the network. Companies must guarantee that transactions and operations are executed securely and accurately. Hence, businesses can function more smoothly without the need for manual intervention to confirm transactions. On the other hand, a sluggish finality indicates that the network takes longer to reach a consensus. Consequently, the network will take longer to confirm all transactions.

The velocity at which a blockchain operates determines the speed in which companies can process and confirm transactions. A blockchain with a block speed of, say, 0.5 seconds, enables the utilisation of near real-time applications with the same feel as a standard payment transaction. Conversely, a block speed of 10 minutes, as exemplified by Bitcoin, is only viable for archiving use cases.

COST STRUCTURE

Managers must consider the cost implications. This involves assessing the expenses associated with establishing a business on the blockchain to determine if it is a financially viable option. Let's take a look at the common costs of having blockchain integration.

PROCESSING COSTS

There are generally two main models for how blockchains operate:



A transaction fee model. On a blockchain, charges for transactions are commonly known as gas fees. These fees serve to incentivise the network's validators (also called miners, nodes, etc.) to process transactions. The cost of gas is calculated based on the complexity of a transaction, and the amount

of gas used for a transaction is determined by the amount of computational power required to process it. These gas fees are typically paid in the form of cryptocurrency tokens. If the gas fees are excessively high, businesses may find it financially unfeasible to run their operations on the blockchain, rendering it non-viable.



A **staking model**. Staking is the process of locking up tokens for a certain amount of time. On blockchains using a staking model, users stake their tokens in order to get access to a certain amount of resources in a certain time frame, which allows them to perform transactions. These resources then replenish over time, and often users are able to use excess blockchain resources during periods of low usage. In this model, validators are often paid through inflation or fees incurred elsewhere.

It is crucial to conduct a thorough analysis of the costs involved in establishing a business on-chain. Gas fees are a critical aspect as they can have a significant impact on the longevity of your operations. As a part of your analysis, ensure that you consider the transaction costs associated with various consensus mechanisms. These determine the expenses incurred for carrying out transactions.

SMART CONTRACT DEVELOPMENT AND OPERATIONAL COSTS

Some blockchains have bespoke languages designed specifically for smart contracts and Web3 deployments, such as Solidity. Some developers use languages like RUST and C++, or languages that can be compiled into WebAssembly (WASM) to create smart contracts. The cost of development varies depending on the availability and demand of developers.

The operational costs of deploying a smart contract can vary and it is dependent on the blockchain platform and the complexity of the contract itself. Additionally, the cost revolves around the computational resources needed, and the fees charged by the blockchain platform.

For instance, deploying a smart contract on the Ethereum network requires paying gas fees and storage in Ether (ETH) and hiring a developer or development team to create it. Additional costs may include services like third party auditing and security testing.





ENVIRONMENTAL IMPACT

Blockchain technology can increase energy consumption if not implemented correctly. The energy consumption of blockchain technology is largely due to the Proof-of-Work (PoW) consensus mechanism, like Bitcoin. PoW requires miners to solve complex mathematical problems to add a new block. As more miners join the network, the mathematical problems become more difficult. This requires more energy to power the computers that are solving them. Normally, these blockchains are not scalable and require high energy consumption to exist and run transactions.

On the other hand, Proof of Stake (PoS) consensus mechanisms are generally considered to be more environmentally friendly than Proof of Work (PoW) mechanisms. The rationale behind this is that PoS mechanisms do not require miners to expend significant computational power in solving complex mathematical problems. PoS mechanisms employ a system of validators. The validators are selected based on the number of tokens they hold and are willing to stake as collateral in order to run transactions.

It is, however, worth noting that PoS systems still consume a certain amount of energy. The environmental impact of PoS systems can vary depending on the specific design and implementation of the system. Factors such as the mix of energy types used by validators are located can also play a role in the environmental impact. Certain networks also have energy-offsetting programs, where they use part of the value created by the blockchain to offset carbon emissions.

For business sustainability, the right blockchain platform should be scalable and energy-efficient. The reason is to help reduce carbon emissions and improve energy efficiency. In addition, digital asset businesses are expected to comply with environmental regulations in the long run. So a word of advice is that you should prepare your business for that. Environmental regulations will play a big role in the development of sustainable business models. Stay informed and stay ahead of the curve!



SECURITY

Security is a core concept of any blockchain. It guarantees that the data stored on the blockchain is secure and tamper-proof. The consensus algorithm and the cryptographic mechanisms employed to secure the data determine the security of a blockchain. The platform should have a robust security infrastructure, comprising user authentication, data encryption, and other security protocols. As we move forward, it is expected that next-generation scalable blockchain will play a key role in providing a secure base layer for future IT architectures.

For public blockchains, it is imperative to evaluate the platform's track record and the community actively engaged in developing and maintaining the platform. For instance, a website that allows the public to view and scan transactions on the blockchain should be readily available. Normally, the foundation leading the blockchain platform develops it.

51% ATTACKS ON POW PUBLIC CHAINS

A 51% attack on a proof of work (PoW) consensus blockchain refers to a scenario where a single/group of miners/token holders gain control of more than half of the network. Eventually, this allows them to confirm transactions and prevent new ones from being confirmed. This can make the network unreliable and potentially damage the value of the cryptocurrency. Therefore, launching a business on a blockchain that is susceptible to 51% attacks may not be a prudent decision. The latter is due to it jeopardising the value of your business.

MATURITY

The maturity level of a blockchain will have a direct impact on the security and performance of your business. Unexpected downtime, security breaches, and other issues could occur if a blockchain is not fully developed and has glaring vulnerabilities. This can cost your business both time and money. Furthermore, customers may lose trust in the technology if it has not undergone third-party validation and testing, due to its lack of maturity.

On the other hand, a mature blockchain has undergone more testing, validation, and improvements over time. These result in fewer issues and greater trust.

SIGNS OF A MATURE BLOCKCHAIN

- Reliable organisation and strong leadership to develop the blockchain and community
- Extensive community engagement and involvement
- Many products are released and active on the blockchain
- Daily large volume of transactions on-chain
- Multiple implementations of mainnets and test networks
- Years in operation and stability

MAIN QUESTIONS TO ASK YOURSELF

- 'HOW MATURE IS THE TECHNOLOGY, ARE THERE OBVIOUS GAPS THAT NEED TO BE FILLED?'
- 'IS THE TECHNOLOGY ACTIVELY BEING IMPROVED?'



EVM AVAILABILITY

Currently, Ethereum is the most sought-after blockchain, boasting a large community of developers. This makes it an ideal choice for businesses looking to run applications and use cases using smart contracts. By selecting a blockchain that is EVM compatible, your company will have access to a wider pool of professionals. Such applications are developed by knowledgeable and skilled professionals. Additionally, your business will have the opportunity to transact with the most heavily invested blockchain, tapping into the powerful network effect of Ethereum.

The Ethereum Virtual Machine (EVM) is a component of the Ethereum blockchain. EVM enables users to execute Solidity code on a different blockchain. It is important for scalability because it allows developers to construct applications on the Ethereum blockchain. The applications can adapt to changing demands by migrating to different blockchains.

EVM compatibility simplifies the process for developers to migrate smart contracts and decentralised applications across different blockchains. It reduces the complexity of developing applications and promotes the expansion of the blockchain ecosystem. This allows for the deployment of smart contracts on EVM-compatible chains. Reasons for migrating Solidity smart contracts to other chains could include cost savings, compliance requirements, or simply because better options have become available since the initial launch of Ethereum.

THE BLOCKCHAIN TRILEMMA

The blockchain trilemma is a fundamental aspect to consider when deciding on a blockchain. It refers to the challenging balance between three key properties: decentralisation, scalability, and security. Decentralisation offers a distributed nature where no single entity has control, enhancing trust among users. Scalability ensures the blockchain can handle a high volume of transactions efficiently, which is crucial for business operations. Security is about protecting the integrity of transactions and resisting attacks.

However, achieving the perfect equilibrium among these properties is often not entirely feasible. Typically, enhancing one aspect can lead to compromises in another. For instance, a highly decentralised blockchain may struggle with scalability, as seen with early versions of Bitcoin and Ethereum. On the other hand, increasing transaction capacity might compromise security or lead to a more centralised network, which could negate one of blockchain's core advantages.

When selecting a blockchain, you must prioritise according to your business needs. If trust and distribution are paramount, decentralisation should be your focus, but this might mean slower transaction times. If your business demands fast and high-volume transactions, scalability will be key, but you may have to accept a degree of centralisation or invest more in security measures. Your decision will shape your blockchain strategy, so it's crucial to align your choice with your company's long-term goals and the specific demands of your industry.

AVAILABILITY OF A TEST NET

Testing and experimenting with a blockchain network is possible thanks to a test net. Developers can experiment with new ideas and check how the network works without losing any real money or assets. Test nets provide a safe and controlled environment for people who want to start a project on-chain. It is advised to choose a blockchain with a test net. Most blockchain networks have multiple test networks using different software versions.

Furthermore, a lively and active community is crucial for a test net to be successful, providing valuable feedback and ideas for improvement. It is also a substantial place for developers and users to come together, chat and collaborate on projects. In short, a test net is a stage in the development of a blockchain. Its success relies on the participation and engagement of a dedicated community.

DATABASE API INTEGRATION

The blockchain interacts directly with your business software through an API database. For example, businesses may continue to use established software such as SAP for supply chain management, but integrate blockchain technology as an additional functionality. To make this integration seamless, it is vital to have a robust intermediary API database to communicate with the blockchain and apply smart contract functionalities. In this way, the blockchain can be integrated with your existing systems.

Therefore, take into account the type of API that the blockchain employs for database integration. Various blockchains may utilise different types of APIs, such as REST or GraphQL, so it is indispensable to select a blockchain that uses an API that is compatible with your current systems.

OPEN SOURCE TECHNOLOGY

Open source technology is software or an application where the source code is freely available for anyone to use, modify and redistribute. The value of open source technology is that it gives developers the freedom to adapt the technology to their specific needs. Additionally, it allows the creation of new applications or technologies from the existing code. Open source technology also encourages co-creation, collaboration, and sharing of ideas and experiences between developers. This can lead to the generation of better products, services, and code by ensuring critical issues in the programming are more likely to be found.

OPTION: PUBLIC, PRIVATE OR HYBRID

When selecting the right blockchain for your project, another aspect to consider is the type of blockchain you want to pick, namely a public, private, or hybrid blockchain. Each of these types of blockchains come with their own unique benefits and drawbacks. This section outlines these benefits and drawbacks, allowing you to assess which type of blockchain is the right fit for your project.

PUBLIC BLOCKCHAIN

Public blockchains are open networks that anyone can join. This means anyone can contribute to the blockchain and access the information stored on it.

One of the key features of a public blockchain is its decentralisation. This means that no single entity has control over the network. Multiple nodes verify all transactions on the blockchain, ensuring that they cannot be changed once they are recorded. As a result, public blockchains offer increased security, which makes it a good fit for solutions that require these features.

PRIVATE BLOCKCHAIN

The main difference between public and private blockchains is the level of access to the information stored on the blockchain. On public blockchains, anyone can write and read data. Contrarily, on private blockchains, there is a permission system in place that regulates who can perform certain actions, such as reading and writing data.

Typically, a single organisation or entity owns private blockchains, whereas public blockchains are decentralised and do not have a central owner. This makes public blockchains more resistant to censorship compared to private blockchains.

Another distinction is anonymity. Because of the permissionless nature of public blockchains, the entities participating on them remain anonymous. Depending on the use case, anonymity in public blockchains can be considered a benefit or a disadvantage.

Private blockchains offer more scalability and fast transactions. A single entity owns private blockchains, and they typically have a permission system in place to control access.

Private and hybrid blockchains may be more expensive to create and maintain. In spite of that, they can also be customised to meet the specific needs of your business infrastructure.

HYBRID BLOCKCHAIN

A hybrid blockchain is a combination of a public and private blockchain. It allows for both public and private transactions to occur on the same blockchain. This can provide the best of both worlds: the increased security of a private blockchain, and the increased transparency of a public blockchain. One must note that the owners of the private blockchain will have more control over the network. The same counts for the privacy and security of the network.

Other differences between public and private blockchains include speed and scalability. Public blockchains tend to be slower and less scalable due to their decentralised nature. Private blockchains are typically much faster and more scalable, as they don't have to worry about decentralisation.



02

- ECOSYSTEM

- COMMUNITY EMPOWERMENT

Understanding the importance of the community is the be-all for a public blockchain platform. This chapter touches upon its determinants, such as stability, growth, and governance.

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COMMUNITY

The strength of the community plays a role in driving the adoption and usage of the blockchain's products and services, as well as providing support through investment. Without a robust community, a public blockchain platform will struggle to survive. This is due to a lack of interest in its development and advancement.

A community is a gathering of like-minded individuals. They include thought leaders, developers, companies, and token holders, all working towards a common goal. Together, they form a solid foundation for driving progress and innovation on the blockchain.





WORKING GROUPS

Both technical and non-technical individuals can get involved in blockchain development through working groups within a community. These groups build a collaborative and supportive community that addresses the various challenges faced by the network. Typically, the leading organisation of the blockchain nominates working groups. The network compensates its members for their contributions through grants, token shares, and opportunities for the development of decentralised apps. This not only allows the community to develop and grow, but also incentivises individuals to actively participate and make meaningful contributions to the blockchain ecosystem.

We will look in more detail into why a leading organisation and incentives are important in the 'Focused Growth' chapter.

TOKENOMICS AND TOKEN DISTRIBUTION

Tokenomics refers to the economic structures and conditions that govern the issuance, distribution, and management of a blockchain's native tokens. It encompasses the rules that dictate how tokens are created, earned, spent, and held, including aspects like the total supply of tokens, their allocation, the mechanisms of their release into the market, and the incentives designed to encourage particular behaviours within the network.

When evaluating a blockchain, it is important to understand its tokenomics because it defines the potential for value creation and retention within the network. For instance, a blockchain with a well-designed token incentive system can encourage stakeholders to participate actively and maintain the ecosystem's health. Furthermore, the distribution strategy of the tokens – whether it will be through a public sale, private sale, airdrop, or mining rewards – can significantly influence the decentralisation and security of the blockchain. A concentrated token distribution might lead to centralisation of power and influence, which can be a red flag for businesses aiming for a decentralised and equitable network structure.

Therefore, businesses should assess the tokenomics of a blockchain to ensure it aligns with their objectives. For example, if the goal is to have a decentralised application with a broad user base, a blockchain with tokens that are widely and fairly distributed might be preferable. Additionally, the deflationary or inflationary nature of the token, governance rights, and other functionalities encoded into the token can affect user engagement and the overall success of a project on that blockchain.

INFLUENCE OF THE TOKEN PRICE



The Markets in Crypto-Assets (MiCA) framework represents a significant regulatory milestone for companies engaging with digital assets within the European Union. Taking effect as of 2024, this comprehensive set of regulation is designed to bring clarity and security to the cryptocurrency market, ensuring that all crypto-assets are traded, issued, and managed in alignment with robust investor protections and stringent anti-financial crime measures.

The MiCA regulation is set to come into force with a phased implementation approach. Companies operating in the EU must be fully compliant with MiCA, which includes obtaining the necessary licenses and adhering to the consumer protection standards outlined in the regulation. The regulation provides businesses with several benefits, including a harmonized legal framework that simplifies operations across EU member states, establishing a level playing field that could enhance investor confidence in crypto-assets. Additionally, MiCA's standardized approach to the crypto

market is likely to foster innovation and growth within the sector.

However, the regulation also comes with certain drawbacks. Businesses must navigate and adapt to the complexities of MiCA, which could entail increased operational costs due to compliance efforts. Furthermore, the stringent requirements may pose challenges for smaller companies or startups with limited resources.

GOVERNANCE MODEL

A governance model is a structure that sets out the rules and procedures methods for controlling and guiding an organisation or system. It explains how power and authority are distributed, how decisions are made, and how stakeholders are involved in the organisation.

It is necessary to understand that each blockchain will have a different governance model depending on various factors such as: network access, funding allocation, token distribution, and consensus mechanism. Understanding the governance model of a blockchain can help companies make informed decisions about the adoption and use of blockchain technology.

A fair governance model increases the success of a public blockchain. It sets the rules, regulations, and standards by which block producers and network validators interact and transact on the platform. Likewise, ensuring that all participants are treated fairly and have equal access to the network's resources as they become block producers or validators.

CENTRALISED VS DECENTRALISED GOVERNANCE

Centralised governance, as the name suggests, is a model where all the decision-making process is concentrated in the hands of a single entity or group. It means that a central organisation is responsible for managing and updating the blockchain. In an ideal situation, this central authority has the expertise to ensure a smooth operation and make the informed decisions in order to develop the network forward. This doesn't include discussing decisions with potential stakeholders, like the community, block producers, and validators. The trust lies in the leading organisation's expertness.

Decentralised governance, on the other hand, operates through a distributed network of participants. This system is decentralised, and decisions are made through consensus among participants. This can take the form of voting systems or other decentralised decision-making mechanisms. In this approach, every participant has an equal voice in managing and directing the blockchain, making it more democratic and transparent.

LEVEL OF DECENTRALISATION

Decentralisation within a blockchain community affects how active, collaborative, and inclusive it is. High decentralisation leads to more individual initiative and a self-governing community. Low decentralisation results in less participation and a more passive community. The atmosphere of the community is also influenced, a highly decentralised community is more equal and supportive, while a less decentralised community has a stronger hierarchy.

WHAT IS A DAO?

A Decentralised Autonomous Organisation (DAO) is a type of organisation that is based on blockchain technology and utilises smart contracts for its operations. This allows the organisation to operate autonomously without requiring human intervention. DAOs are self-governing and can make decisions, manage assets, and conduct transactions through a decentralised network of stakeholders. Various public blockchains use DAOs as their governance model, as it allows for a transparent system of decision-making. In essence, a DAO is an organisation that is run by computer code rather than people. Hence, providing a new way of organising and managing resources.

Typically, a DAO management tool application manages governance and dispute resolution within a DAO. Each organisation has a unique set of rules and protocols that are based on its consensus mechanism. Usually, networks have (decentralised) applications available that allow you to start a DAO and establish governance.





STABILITY

When the ecosystem is reliable and stable, it builds trust among users, and more people are likely to join the platform. Additionally, a lack of major conflicts within the ecosystem ensures that the platform can operate smoothly and with minimal disruptions. This can lead to a more productive and efficient use of resources. On the other hand, if there are major conflicts and disputes within the ecosystem, it can lead to a lack of trust among users and friction within the community.

A stable ecosystem is critical for the growth and development of the platform. Without a stable environment, developers may not have the resources or the confidence to build innovative products and services on the platform. This includes proper tools, support, and documentation needed to build on the blockchain. The uncertainty and instability can also discourage developers from investing their time and resources into building on the platform. Consequently, limiting its potential for growth. Furthermore, users are less likely to join an unstable platform, which can further restrict the growth of the platform.

Next, we will look into the importance of decentralised applications (dapps) for a blockchain ecosystem.

AVAILABILITY OF (OPEN SOURCE) DAPPS

Dapps (Decentralised Applications) are valuable for blockchain ecosystems. Developers use them to create innovative, secure, and transparent applications that are powered by blockchain technology. Dapps provide a platform for users to interact and transact with each other directly. All without the need for a third-party intermediary.

The success of dapps within a blockchain ecosystem is a strong indicator of the strength of the community behind it. The number and quality of successful dapps demonstrate the value and potential that the network can provide to users. These dapps can include a variety of use cases, such as Decentralised Finance (DeFi) and Gaming (GameFi), among others.

EASY ONBOARDING (WALLETS)



There are two main types of wallets, custodial and non-custodial wallets (with custodial wallets sometimes being referred to as managed wallets). The main difference between the two types is that on a custodial wallet, a third party manages the private keys. Whereas on a non-custodial wallet, the user manages the private keys of the blockchain addresses/accounts themselves.

These wallets can come in many forms and have a variety of features. Some notable forms in which these wallets come are desktop wallets, mobile wallets, hardware wallets, web-based wallets, etc. And some notable features that wallets can have are multichain support, NFT support, fiat conversion, etc.

Generally speaking, custodial wallets tend to be easier to use and require less knowledge. While non-custodial wallets tend to be more complex, but can be made more secure and often support better access to more complex operations on the blockchain. Furthermore, if the service offering the custodial wallet, which can be an exchange but also other parties, gets compromised, you can lose all your cryptocurrencies within that wallet. While on a non-custodial wallet, if you lose your private keys or access to your wallet, you can also lose all your cryptocurrencies within that wallet.

Having both of these types of wallets available in a variety of forms and with a wide scale of features allows users of varying technical proficiency to use the blockchain and its features to the fullest extent.



OTHER FACTORS CONTRIBUTING TO THE EASE OF ONBOARDING

While wallets are a key part of any blockchain, they are certainly not the only aspect that dictates the ease of onboarding users onto the blockchain (and the apps on top of this blockchain).

When looking at the onboarding of users onto a blockchain-based project, the full journey from not knowing anything about blockchain to becoming a user of a blockchain project should be considered. In this journey, key factors such as the availability of educational resources, the availability of exchanges or other services where the blockchain's token can be acquired, and the ease of interacting with the project are all of equal importance.

While choosing the right blockchain for your project, take a critical look at each of these components, and also carefully consider how your project overcomes these barriers of entry.

MULTICHAIN COMPATIBILITY (IBC)

Multichain capabilities allow users to send and receive digital assets securely and verifiably across multiple blockchains. With this technology, users can take advantage of different blockchains and networks, such as, for example, using a certain blockchain for smart contracts and using a different blockchain for supporting the NFT side of the project.

It can provide greater scalability and flexibility, allowing users to pick the right blockchains for their specific needs. With the ability to communicate with other blockchains, users can enjoy the full benefits of blockchain without necessarily being tied to a specific blockchain. When selecting the right blockchain for your project, take a look at the bridges that have already been built with other blockchains and see if they align with your needs.

03

— FOCUSED GROWTH

- INVESTING FOR THE FUTURE

Unlocking the power of blockchain: invest in the future with a solid leadership, clear documentation, game-changing focused growth, and potential partnerships and grants.

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AN ENTITY THAT SHEPHERDS THE COMMUNITY

Despite the many benefits of decentralisation and open source technology, public blockchain communities often require leadership and guidance to thrive and reach their full potential. A central organisation or figure can play this role. All whilst serving as a representative for the platform's development and working towards its long-term success. This organisation's mission should be to bridge the gap between blockchain technology and the wider public. Certain blockchains are run 100% with a DAO system in place, therefore, the central entity is formed as a consortium.

The entity, typically chosen or endorsed by the community, will play a key role in establishing technical, legal, and financial standards for the platform. Furthermore, the entity will set its overall vision and direction. As a result, they will be providing guidance and mentorship to developers and the community as a whole. They are usually called foundation companies.

GOVERNANCE OF THAT ENTITY

When deciding which blockchain to launch a business on, it is important to carefully consider the governance model of the entity leading the platform. This is a critical factor in determining the long-term trust and reliability of the blockchain. Businesses can assure that the platform will remain secure, transparent, and reliable by understanding the exact role of the governing entity, its organisational structure, and its roadmap for the future.

In addition to understanding the governance model of the entity, the leadership and key decision makers behind the blockchain must be considered. This will help to ensure that the platform adheres to the desired standards of a successful organisation. As well as that, the leaders are committed to the long-term development of the blockchain.



DOCUMENTATION

The availability of developers is a critical factor. Especially when it comes to managing and maintaining a blockchain, comprehensive and up-to-date documentation can help to attract and retain top talented developers. The same applies to investors, who can accelerate the development of projects and bring credibility and reputation to the blockchain. Therefore, a developer portal, executive content, high-level tutorials, and a clear roadmap are components of the documentation that should be available.

CONTENT FOR EXECUTIVES

It is necessary to find documentation related to:

- Whitepapers of the overall blockchain architecture
- Typical use cases: successful implementations of business cases
- Service offering within the ecosystem: infrastructure, development, integration, and training

The whitepaper should clearly state the main objective of its design, such as future development in areas like gaming (GameFi) or decentralised finance (DeFi), if that is the case. Similarly, if the platform's goal is to scale global businesses, this should be communicated in the architecture.

Typical use cases are MVPs (Minimal Viable Products) within the blockchain. Therefore, a successful implementation of the blockchain in the product's back end is a good sign to start analysing the blockchain. MVPs are already validated products ready to go to the market. The more MVPs within the blockchain, the more chances that the software will develop further in the future.

Another aspect to consider when launching a business on a blockchain is the availability of service providers within the ecosystem. Many companies may not be willing to make significant changes to their internal organisational structure to hire new blockchain developers and project managers. Then, outsourcing services can be a valuable option. It is important to research the availability and capabilities of service providers within the blockchain ecosystem.

Companies should look for service providers that have a track record of successfully implementing blockchain solutions. Also, they should have the necessary skills and experience to develop within that particular ecosystem.

HIGH-LEVEL TUTORIALS

In public blockchains, the use of open source code is a key element that enables developers to further advance the technology. It also supports the creation of new use cases that generate value for the community. Furthermore, there must be access to documentation and guides for those who are new to programming and interested in learning more about the technology.

When a foundation has high-level tutorials, it is a positive sign of focused growth. It shows that they are eager to broaden the horizon of its technical potential.



ROADMAP

A roadmap acts as a blueprint for the development of a project. It enables potential stakeholders and backers to comprehend its objectives, key milestones, and schedule. It also ensures that all parties involved are aware of the project's progress and direction. Additionally, it also provides them with confidence that the project is being managed in an orderly manner and thus fostering trust in the project.

On the other hand, if the stakeholders and supporters are not meeting the milestones set out in the roadmap, it can reflect poorly on the project. This can end up in raising doubts about the competency of the leading organisation. Therefore, assess whether the leading organisation has achieved the milestones outlined in the roadmap in the past.



INCENTIVES

A leading blockchain organisation would have a system in place and adequate funding to establish incentives. Incentives are required to the prosperity of any blockchain network. Like any other technology, blockchain must attract individuals and businesses to their platforms and services. By providing incentives, blockchain networks can lure users to join their platform, engage in projects, and utilise the platform's services.

Moreover, incentives can be used to promote the platform's services. As a result, it increases its user base, making it more appealing to businesses and projects. The most common type of incentives are grants & partnerships.

GRANTS

The leading organisation is interested into developing more use cases and further adoption of the blockchain. Meanwhile, the community is interested in applying their technology, however, it is sometime costly to develop applications on a blockchain. For the entity leading a blockchain platform, it is beneficial to create a stimulus for the community — this stimulus can be translated and negotiated through a grant distribution. Usually, there are a few requirements and deliverables to be met. But in the end, both parties will benefit from it.

In short, grants can play a role in a public blockchain platform by facilitating the creation of new products, services, and marketing campaigns within the blockchain ecosystem. These grants can be provided to a diverse group of stakeholders, such as individuals, companies, small businesses, and startups.

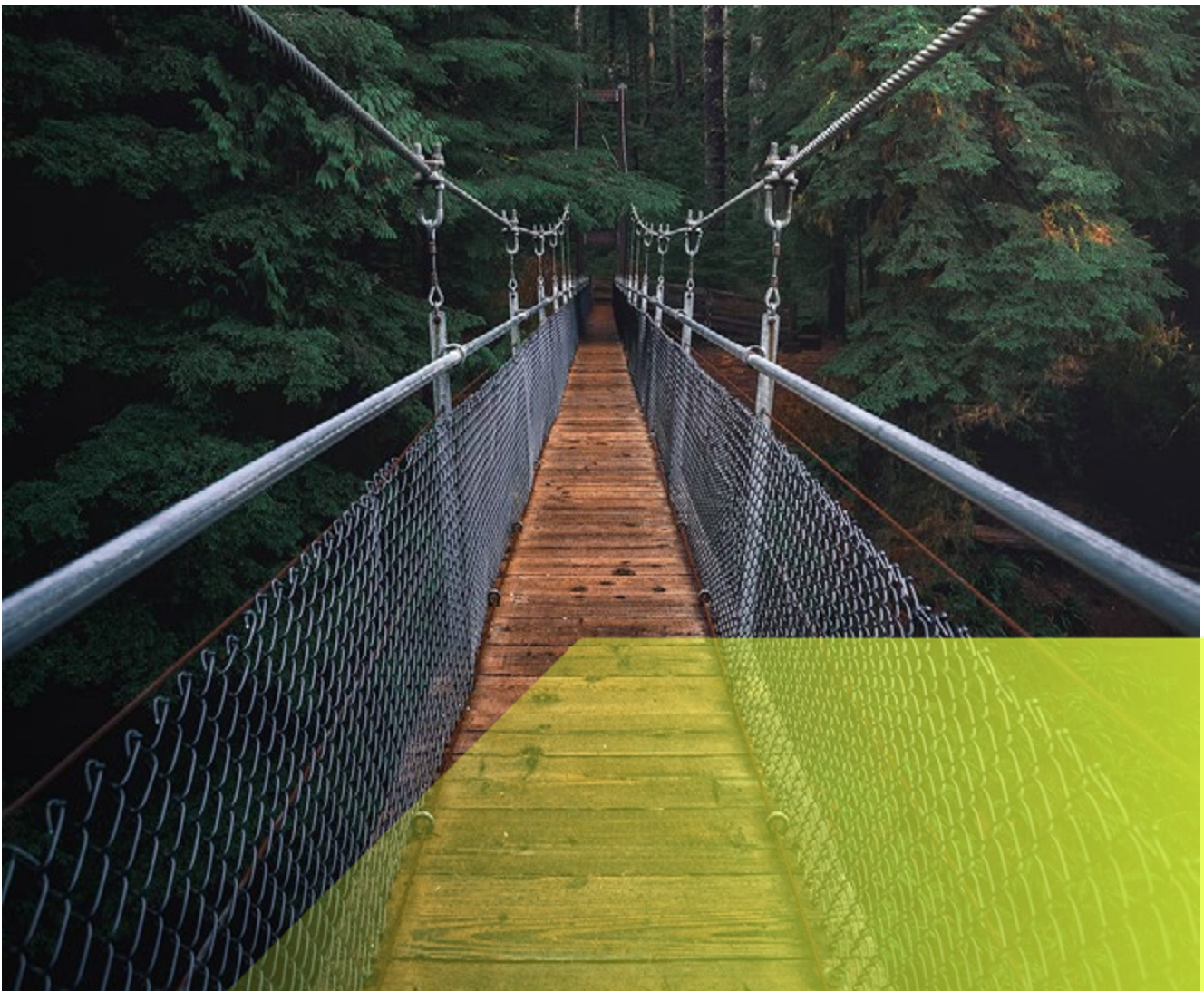
The funding provided by grants can support a wide range of activities. Such include research and development, marketing, branding, and user acquisition. By providing funding for new projects, grants can help to develop innovative solutions, create new growth opportunities, and move the blockchain ecosystem forward.

PARTNERSHIPS

Regardless of the blockchain you choose to support, exploring partnerships is a crucial aspect of the sustainability of a blockchain platform. This is because forming partnerships with other blockchain networks will drive the ecosystem to be multichain. It is the combination of both technologies and communities to enhance efficiency, growth, and development.

Therefore, a blockchain-leading company should be looking into creating bonds with other blockchain projects and networks. This is a space for co-creation, decentralised and open source technologies. It allows users and companies to work together to deliver its best version.

In addition, when evaluating a partnership with a blockchain network, it is important to ensure that the partnership aligns with your long-term business goals. For instance, when aiming to develop a secure blockchain-based system for your business, it is required to investigate the level of openness of the network to specific business use cases. Some blockchain protocols will focus more on finance, while others focus more on GameFi, or combinations.



04

LEGAL COMPLIANCE

- EU REGULATION AS THE STANDARD

Choose a blockchain that enables compliant solutions, so developers and users can have the assurance that their transactions and data are secure and adhere to relevant laws and regulations.

TOPICS - CLICK TO JUMP TO PAGE

- 35** [MARKETS IN CRYPTO-ASSETS \(MICA\)](#)
- 36** [GENERAL DATA PROTECTION REGULATION \(GDPR\)](#)
- 36** [DATA PROTECTION IMPACT ASSESSMENT \(DPIA\)](#)

Compliance with regulatory frameworks plays a role in establishing trust and reliability of the blockchain as a platform for businesses and other applications. This can help to reduce the risk of potential legal issues. Besides, it can increase the acceptance of the blockchain use cases by businesses and other organisations.

In the case of the European Union, let's take a brief look at the MiCA regulations and GDPR compliance, including the right to be forgotten and Privacy Impact Assessment (P.I.A.).

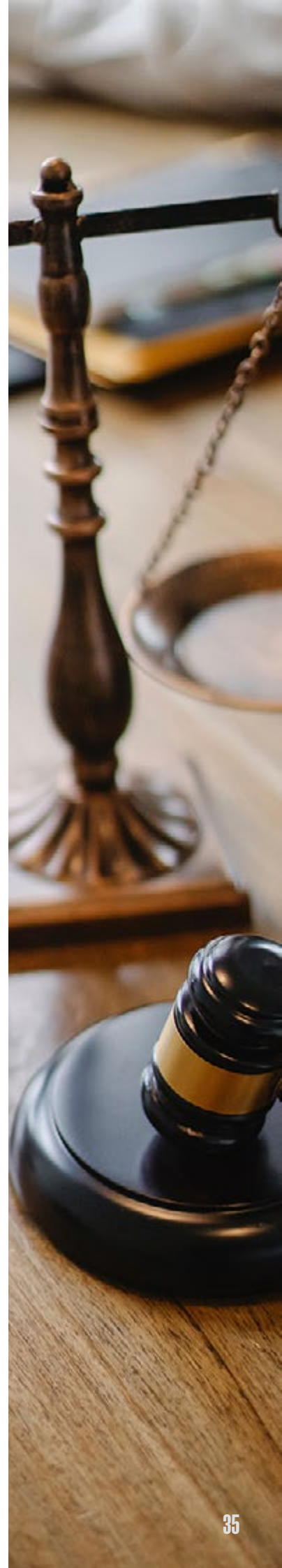
MARKETS IN CRYPTO-ASSETS (MICA)

The Markets in Crypto-Assets (MiCA) framework represents a significant regulatory milestone for companies engaging with digital assets within the European Union. Taking effect as of 2024, this comprehensive set of regulation is designed to bring clarity and security to the cryptocurrency market, ensuring that all crypto-assets are traded, issued, and managed in alignment with robust investor protections and stringent anti-financial crime measures.

The MiCA regulation is set to come into force with a phased implementation approach. Companies operating in the EU must be fully compliant with MiCA, which includes obtaining the necessary licenses and adhering to the consumer protection standards outlined in the regulation. The regulation provides businesses with several benefits, including a harmonized legal framework that simplifies operations across EU member states, establishing a level playing field that could enhance investor confidence in crypto-assets. Additionally, MiCA's standardized approach to the crypto market is likely to foster innovation and growth within the sector.

However, the regulation also comes with certain drawbacks. Businesses must navigate and adapt to the complexities of MiCA, which could entail increased operational costs due to compliance efforts. Furthermore, the stringent requirements may pose challenges for smaller companies or startups with limited resources.

In this ebook, we won't go in-depth about each bullet point of these regulations. But bear in mind its existence and importance, and checkmark if your business will comply with all of them when utilising digital assets.



GENERAL DATA PROTECTION REGULATION (GDPR)

The General Data Protection Regulation (GDPR) is a law that safeguards the personal information of European citizens. All businesses that handle EU personal information must comply with the GDPR, regardless of where they are located. This means that even if a company is based in the US, China, or India, it must comply with the GDPR in order to have clients in the EU. The GDPR grants individuals the right to access, change, delete, and limit the processing of their personal information.

Some people believe that GDPR and blockchain cannot coexist, due to the “Right to be forgotten” principle. But compliance with GDPR depends on the design of the network, as well as whether mutable elements exist that can be altered in the event of a “Right to be forgotten” request.

DATA PROTECTION IMPACT ASSESSMENT (DPIA)

Conducting a data protection impact assessment is a fundamental requirement that was introduced with the General Data Protection Regulation (GDPR). This process aids organisations in identifying and reducing any potential data protection risks associated with new projects and initiatives. It is an aspect of GDPR compliance and is required when handling personal data. This framework is useful as it helps organisations recognise those risks and take steps to address them.





TO SUM UP



The European Union periodically reviews and updates regulations regarding the movement of money. Their aim is to improve the efficiency, security, and ease of use of payment systems. This includes steps to combat fraud and money laundering, as well as promoting the adoption of innovative technologies like blockchain. Changes in regulations will likely have an impact on both businesses and individuals as technology is being more adopted.

As a result, achieving compliance can be both time-consuming and complicated. Nevertheless, businesses should ensure they meet the regulations. As well as, take the necessary steps to protect the personal data of their customers and employees. On the other hand, failure to comply can result in significant fines and damage to reputation.

05 — BRING YOUR BUSINESS ON-CHAIN

We know it can be a lot of information to process and the nature of technology can change quickly. We understand that blockchain can be overwhelming. But take it easy, you learned so much already! You are on the right path to understanding the whole value and potential of blockchain for generations yet to come.

At Zaisan, we are dedicated to keeping up with the latest developments in blockchain technology and providing the best support and advice to our clients.

We look forward to starting the journey with you.

EFFORTLESSLY INTEGRATE BLOCKCHAIN INTO YOUR BUSINESS

Zaisan offers a full range of private or public blockchain integration services tailored to serve your specific needs. Zaisan's technical consultants will assist you to define and blueprint the nature of your project, following which the team will design, develop, and deploy the necessary integrations. The final product is delivered ready-to-use straight out of the box for fully streamlined integration.



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