Delft University of Technology

Engineering and Policy Analysis

The dynamics between VCs and token-based startups: A comparative study of startup's lifecycle, investment mechanisms and VC value-add

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Executive Summary

Token-based startups represent a rapidly growing $28.2 billion market that operates fundamentally differently from traditional ventures. Between 2017 and 2023, venture capital ("VC") funding in this sector increased by 1,281%, attracting prominent investors including Sequoia Capital, Andreessen Horowitz, and institutional players ranging from sovereign wealth funds to family offices. To understand how VC firms engage with this emerging sector, this research

conducted a systematic literature review followed by semi-structured interviews with seven experts (four founders and three VCs) in the token-based startup ecosystem. The study sought to answer how token-based startups differ in their financing lifecycle, what investment mechanisms VCs use, and how VC value creation evolves in token contexts. The findings reveal critical differences that affect both investors and entrepreneurs.

Key Business Insights

Token-based startups follow a fundamentally different development path than traditional startups. They progress through six distinct stages rather than the conventional five, with two critical phases unique to token-based startups: Testnet operations and Progressive Decentralisation. The Testnet phase serves as a make-or-break milestone where startups must prove their technology works with real users and validators before public launch. Unlike traditional startups that move sequentially through development stages, token-based startups cycle iteratively between building and testing, constantly incorporating feedback from their ecosystem.

Success metrics shift dramatically from traditional financial indicators to ecosystem health measures. Rather than tracking revenue growth and customer acquisition costs, investors and management teams monitor validator retention, developer activity, and network growth. This fundamental change requires new evaluation frameworks and longer-term capital commitment than conventional venture investing.

Token-based startups create hybrid investment structures combining traditional equity stakes with token ownership, though no industry standard exists for allocating value between these components. Investment decisions depend on network milestones like validator participation and mainnet launch rather than financial benchmarks. A key innovation is progressive decentralisation, where investor control gradually decreases as the network matures and community governance takes over.

Critical Dependencies and Risks

Token-based startups face unique infrastructure dependencies that can determine success or failure. Relationships with cryptocurrency exchanges and market makers often matter more than the underlying technology, creating power imbalances where exchanges may demand 5% token supply plus substantial upfront fees. These gatekeeping relationships represent

viability prerequisites rather than growth accelerators, fundamentally different from traditional distribution challenges.

constant price transparency of token markets creates alignment challenges absent in traditional private equity. Early price movements can misalign investor and founder incentives, as some investors may prioritise short-term token price gains over sustainable network development.

Strategic Implications for Investors

Successful investing in token-based startups requires specialised expertise that differs substantially from generalist VC capabilities. Crypto-native investors provide technical support including smart contract security audits, tokenomics design, product architecture guidance, and connections to exchanges and liquidity providers. Generalist investors often contribute little beyond capital, creating significant performance gaps between specialist and traditional venture firms.

Due diligence practices must evolve beyond traditional financial analysis. Written documentation like whitepapers have declined in importance as investors focus on actual network performance and technical validation. Investment staging ties to technical milestones rather than revenue targets, requiring longer development cycles and more flexible capital structures.

Operational Recommendations

For VC firms entering this market, developing in-house technical expertise or partnering with specialist co-investors becomes essential. Investment teams need capabilities in network economics, consensus mechanisms, and community dynamics that traditional business analysis cannot provide.

For entrepreneurs building token-based startups, investor selection becomes more critical than in traditional startups. The quality gap between specialist and generalist capital can determine access to essential infrastructure including exchange relationships and technical support. startups must prepare for extended, iterative development cycles and public scrutiny of technology and governance decisions.

The sector continues evolving toward greater alignment with traditional business frameworks, particularly around regulatory compliance and revenue diversification. startups increasingly embed legal structuring and compliance considerations from inception rather than addressing them reactively.

Market Outlook

The token-based startup ecosystem is maturing beyond initial speculation toward sustainable business models and regulatory compliance. However, the lack of standardised evaluation metrics creates information asymmetries that benefit sophisticated investors while limiting

broader institutional participation. Industry-wide development of standardised frameworks for measuring network health and governance effectiveness would improve capital allocation efficiency and reduce investment risks.

The convergence toward traditional business practices, combined with growing regulatory clarity in major markets, suggests this sector will continue attracting institutional capital while maintaining its unique characteristics around network effects, community governance, and hybrid value creation models.

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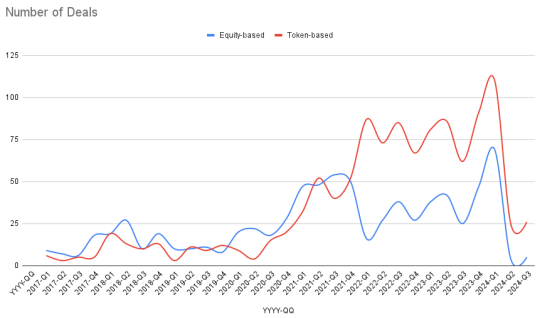
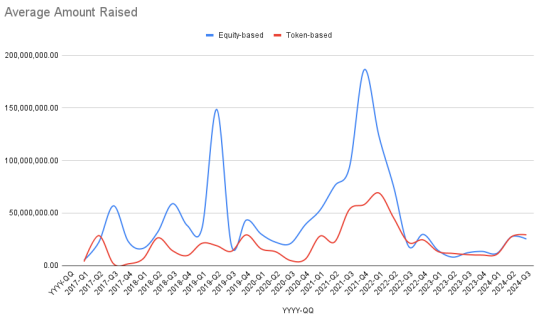
1 Introduction

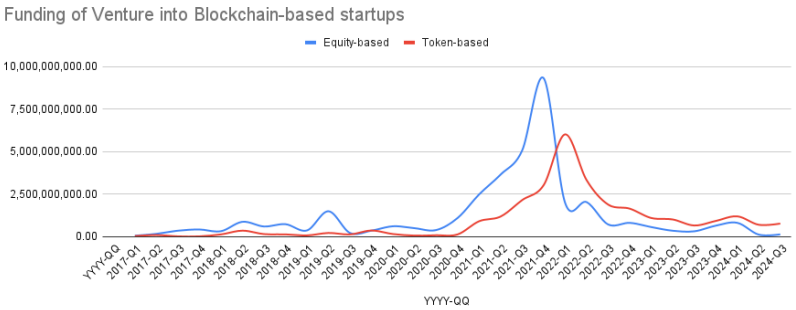
Between 2017 and 2023, venture capital (VC) funding for startups using blockchain technology grew by 1,281%, rising from $2.2 billion to $28.2 billion (Pitchbook, 2023). This surge was led by well-known Silicon Valley firms, such as Sequoia (Bloomberg, 2022) and Andreessen Horowitz (Fortune, 2022), and was later joined by large global investors, including Tiger Global and Coatue. The sector has since attracted a wide range of backers, including asset managers, pension funds, family offices and sovereign wealth funds.



(a) Number of Deals



(b) Average Amount Raised



(c) Total Funding

Figure 1: Evolution of Blockchain Venture Funding (2017-2024)

A defining feature of many blockchain startups is their use of token networks (token-based startups). These are digital systems built on blockchains in which tokens function as units of value (like money), as a means of participation for users and developers, and as governance tools (giving holders a say in decisions). Token networks can shape startup development by aligning the interests of various groups, including founders, early investors, developers, and users, through token rewards or ownership. This can make ventures less dependent on large amounts of traditional capital and, in some cases, speed up growth. Tokens also allow startups to raise funds in new ways, for example, by selling tokens to early supporters instead of relying only on equity or debt financing.

In this research, token-based startups are defined as ventures that use token networks as a central part of their business model. The analysis focuses on firms operating in the

Middleware and Applications or Blockchain Networks categories, as outlined in the Research Setting chapter.

Token-based startups differ from generalists VC-funded ventures in how they are structured, how they operate, how they raise funds, and how they create value. Instead of organizing strictly as a company with a central hierarchy, they often function through networks where tokens take the place of equity shares. In this model, tokens serve not only as financial assets but also as tools for rewarding participants, encouraging contributions, and granting holders influence over decisions that shape the project. Their operations are more open, relying on community adoption and contributions from external actors. In blockchain networks, for instance, validators are participants who confirm and secure transactions, and their involvement becomes part of the startup's execution process. Oversight is also more public because much of a startup's progress is visible on-chain, meaning that transactions, governance decisions, and funding flows are recorded on the blockchain and accessible to anyone. Financing methods also diverge, as token-based startups often raise money by selling tokens directly to users or investors, and these tokens can sometimes be traded early, providing them with a form of liquidity that traditional startup shares typically lack. Finally, value creation extends beyond the company itself, as tokens can also be utilized by external developers, users, or service providers, meaning that the economic benefits of growth are spread across the wider ecosystem rather than being confined to the firm. An overview of these key differences can be found below:

Table 1: Key Differences Between generalists VC-Funded and Token-Based Startups

Dimension	**generalists VC-Funded Startup**	**Token-Based Startup**
Structure	Firm-centric hierarchy	Network-based model where tokens are central
Execution	Closed internal development	Open and participatory, involving community and validators
Monitoring	Board oversight and private reporting	On-chain transparency visible to all stakeholders
Financing	Staged equity rounds (e.g., SAFE, Series A)	Token sales and mechanisms allowing early tradability
Value creation	Concentrated within the firm and shareholders	Extends into the wider ecosystem through token utility and governance

Despite rapid growth in funding, there are clear gaps when applying generalists VC frameworks to token-based startups. In equity investing, standardized agreements such as the Simple Agreement for Future Equity (SAFE) (Y Combinator, 2013) have become widely used and refined through repeated application. In contrast, token-based startups lack equivalent legal or contractual templates that provide the same level of clarity and

predictability for investors. Another gap lies in the type of support VCs can offer. In traditional contexts, the value that VCs bring beyond capital, such as mentoring, recruitment, or strategic advice, is well documented (Gorman & Sahlman, 1989; Hellmann & Puri, 2002). Token-based startups, however, require additional forms of expertise, including the design of token incentive systems (often referred to as token economics), strategies to attract early users and contributors (sometimes called network bootstrapping), and the setup of governance processes that determine how decisions are made in the network. These startups also depend on access to specialised actors such as market makers, crypto exchanges, and developers with blockchain-specific skills, rather than the conventional business networks that generalists VCs typically provide. Finally, the sequence of support differs. While generalists VC involvement usually follows a linear path aligned with company growth, token-based startups face critical design choices, such as how tokens are distributed, how the network architecture is structured, and how governance will operate, at very early stages, and these choices can be difficult or impossible to change later.

This study examines how VC firms engage with token-based startups, with a focus on lifecycle differences, investment mechanisms, and value creation strategies. The research uses an exploratory design, which means it aims to build understanding rather than test predefined hypotheses. This approach is appropriate because token-based startups represent a new and evolving environment where existing VC theories may not apply directly. The study therefore, investigates how the specific characteristics of these ventures, such as their reliance on tokens for financing and governance, lead to patterns of VC involvement and startup development that differ from traditional contexts.

The scope of this research covers both generalist VC firms that invest across many sectors and specialist VC firms that focus primarily on blockchain. It includes token-based startups that have attracted a meaningful share of their funding from VCs, regardless of geographic location. The analysis concentrates on the period from 2018 to 2024, often referred to as the post-ICO era. This phase followed the initial wave of token fundraising through Initial Coin Offerings (ICOs) and is characterized by more structured investment activity, reduced speculation, and more stable patterns of capital allocation. These conditions provide a more reliable setting for examining how VC–startup dynamics take shape in token-based startups.

Based on these considerations, this research intends to answer the main research question:

> ***What is the role of VC firms in the development and financing of token-based blockchain startups?***

To address this, the following sub-questions are posed:

- How does the financing lifecycle of token-based blockchain startups differ from that of traditional startups, and where do VCs fit within this lifecycle?

- Through which mechanisms and strategies do VCs invest in and engage with token-based blockchain startups?
- What specific value do VCs provide to token-based blockchain startups beyond capital, and how does this evolve throughout the startup's development?

Clarification

In this study, the term *role* refers to the position and function of VCs within the lifecycle of token-based startups. *Mechanisms* describe the specific instruments and structures used to invest (e.g., equity, tokens, or hybrids), while *strategies* capture broader approaches to value creation, such as governance design, token economics, or community building. Together, these dimensions clarify why the research questions are significant and provide a structured way to assess how VC involvement adapts in token-based contexts.

Research Flow and Methodology Overview: This research uses a step-by-step research design that combines a literature review with expert interviews to develop an understanding of token-based startup dynamics. The first step is a literature review across VC, blockchain, and startup studies, which provides theoretical foundations and highlights areas where existing knowledge is limited. Based on this review, a six-stage lifecycle framework for token-based startups is developed, along with eight propositions regarding how VC–startup relationships function in token-based startups. These propositions are then examined through semi-structured interviews with seven experts, including four founders and three VC investors, in order to test how the theoretical insights align with practical experience, as well as possibly expanding the body of literature. The methodology follows an inductive and exploratory approach that is suitable for studying emerging fields where established frameworks may not yet apply. A visual summary of this research flow is presented in Figure 2.

Key Findings: The research identifies three main findings in response to the research questions. First, token-based startups follow a six-stage development process that builds on the traditional five-stage VC model by adding two phases, the Testnet and Progressive Decentralisation. Unlike traditional startups, which typically progress through stages in a linear sequence, token-based startups often move back and forth between development and testing. Their success is also measured differently, with greater emphasis on ecosystem health indicators such as the retention of validators who secure the network and the level of activity from external developers. Second, token-based startups make use of hybrid investment structures that combine equity with token exposure. There is no single standard for dividing value between these two components, and investment decisions are based more on achieving technical or network milestones than on meeting conventional financial benchmarks. The shift toward decentralisation over time also changes governance, as control gradually moves from founders to the wider community of token holders. Third, specialist VCs provide technical

expertise that goes beyond the traditional role of VC, including smart contract auditing, tokenomics design, and strategies for creating liquidity. At the same time, the fact that tokens can be traded continuously introduces new challenges for aligning the interests of founders, investors, and community participants, challenges that are not present in traditional private equity settings.

Contributions: This thesis makes both theoretical and practical contributions to the study of VC and blockchain. On the academic side, it extends the traditional five-stage startup lifecycle by introducing a six-stage model that includes technical milestones, phases of community engagement, and governance shifts specific to token-based startups. The research shows that in these ventures, measures of ecosystem readiness, such as the activity of developers or the stability of validator participation, become more important than conventional market metrics. It also demonstrates that startup progression is often iterative, with ventures moving back and forth between stages, rather than advancing in a strictly linear way. Another academic contribution is the identification of a dual audience: founders and investors must consider both traditional stakeholders and the broader community of token holders, which creates a complexity not present in conventional startups. In addition, the study highlights that infrastructure elements such as exchanges, custodians, and market makers are necessary for a venture to be viable from the outset, rather than being optional growth accelerators. On the practical side, the thesis provides guidance for both investors and founders. It outlines how to structure funding rounds that mix equity and tokens, how to manage transparency in a staged manner, and how to plan the sequence of governance decentralisation. It also stresses the importance of involving specialist expertise in token-based projects, given the technical and market challenges they face.

Limitations: The exploratory design and the small sample of seven participants limit how far the results can be generalised, particularly since most participants came from crypto-native backgrounds, meaning they had extensive prior experience working specifically in blockchain ventures. The regulatory and technological environment in this field is also changing rapidly, so the findings reflect practices at the time of data collection and may not capture differences that have since emerged or that apply in other jurisdictions. Because academic literature on this topic is still limited, the research relied partly on industry reports and practitioner sources, which provide useful real-world perspectives but do not have the same level of peer review as scholarly work. Finally, none of the participants had yet completed the full stage of progressive decentralisation, the phase in which decision-making authority moves fully from the founding team to the community of token holders, which may have constrained the depth of insight into the later stages of the startup lifecycle.

Future Research Directions: Future research should aim to follow token-based startups over longer periods of time, using longitudinal studies that capture their full progression through all lifecycle stages. Such studies would help to test whether the patterns identified in

this research hold true as ventures mature. Comparative work across different jurisdictions would also be valuable, especially to understand how differences in regulatory development influence financing models and investor participation. Another priority is quantitative research that examines whether and how the involvement of specialist investors directly affects the performance of token-based startups, as this would provide a stronger empirical foundation for both academic theory and policy recommendations. Finally, there is a need to create standard measures for evaluating the health of token networks, such as consistent ways of tracking validator activity, developer contributions, and user adoption. Developing such metrics would be useful not only for research but also for the practical management of blockchain ecosystems.

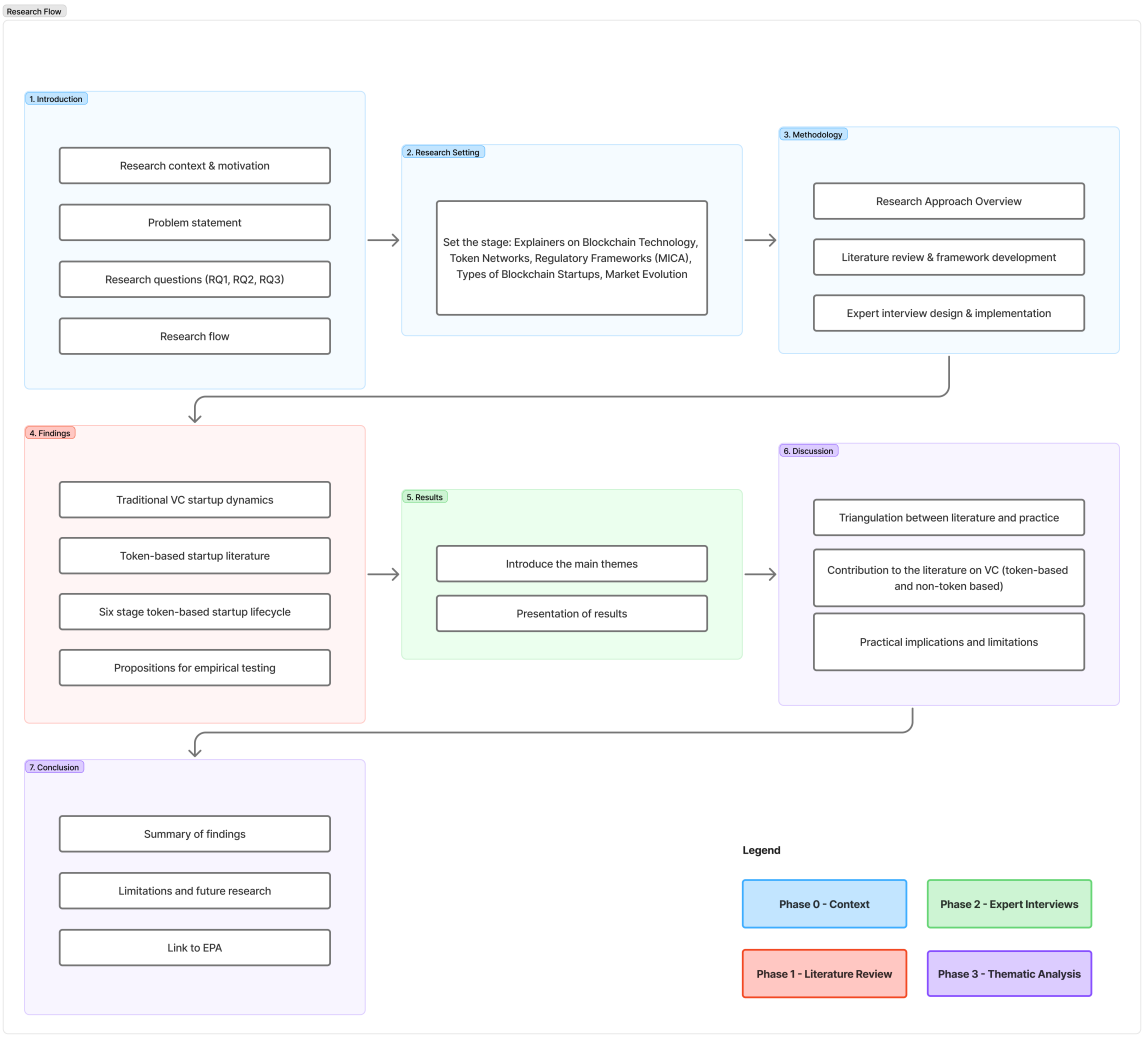


Figure 2: Research Flow

2 Research Setting

2.1 Blockchain Technology

Blockchain, as defined by Feng, Li, Wong, and Zhang (2019), is a digital distributed ledger that stores transaction records in blocks, which are then shared across a network of computers running open-source software ("OSS"). Computers validating blocks are geographically diversified around the world and must reach agreement on the current state of the ledger before new blocks are added. In this context, the "state" refers to the participants' balances and transactions at a specific point in time.

The most influential implementation of Blockchain was introduced by Nakamoto (2008) through Bitcoin, being the first practical solution to the problem of double spending. Although blockchains such as Bitcoin, Ethereum, and Solana differ in their construction, they share a common feature: participants are discouraged from attacking the system because doing so is costly. In Bitcoin's case, the proof-of-work consensus requires participants to expend significant computing power and electricity to validate transactions, making it expensive and unattractive to propose fraudulent blocks.

Bitcoin's primary role has been to act as a scarce digital asset, often compared to gold. Ethereum, introduced by Buterin (2014), expanded the concept by creating a platform for smart contracts. As (Raskin, 2017) argues, smart contracts are agreements whose execution is automated by code. Smart contracts became the foundation for decentralised applications (dApps), decentralised finance (DeFi), and many innovations that go beyond simple value transfer. One early example of their use was the Initial Coin Offering (ICO), a fundraising mechanism in which startups raised capital by selling utility or security tokens to participants. ICOs offered a low-cost alternative to traditional fundraising methods, including crowdfunding, equity, and debt, but their unregulated nature also made them vulnerable to abuse. Many projects failed to deliver, and some were outright fraudulent, highlighting that existing financial regulations were not equipped to deal with this new asset class.

Understanding these technological foundations is crucial for this research, as they form the basis of the unique economic and governance models found in token-based startups. These features directly influence how founders design their business models and how VC investors assess risk, growth potential, and strategic involvement.

2.2 Token Networks

Token networks represent one of the most important innovations of blockchain technology. At their core, they allow tokens to function as programmable digital assets. Tokens can represent different types of value, such as payment for services, rights to participate in governance, or even the fuel/currency that powers transactions (Boreiko & Sahdev, 2018). Unlike traditional financial records that are maintained by central authorities, tokens exist on blockchains and therefore inherit properties such as transparency, verifiability, and the ability to transfer without requiring permission from an intermediary. Like traditional money, tokens are also

subject to rules of issuance, supply, and dilution, which together make each token network operate as a small economy.

Within these networks, tokens often serve multiple purposes at once. They can act as a currency for transactions while also aligning incentives among participants by rewarding contributions such as development, security, or community growth. In these digital economies, the utility of a token, the rights it grants in governance, and its potential economic value are closely linked to the growth and operation of the network itself. Smart contracts further extend this model by enabling automatic enforcement of both economic and governance rules, which allows token networks to operate with levels of complexity that go well beyond traditional startup structures.

In the context of this research, token networks provide the foundation for the interaction between VC investors and founders. They influence the milestones that startups aim for, the incentives that attract and retain community participation, and the ways in which value is distributed among investors, teams, and users. These features directly connect to all three research questions guiding this study.

2.3 Regulatory Framework

The European Union's Markets in Crypto-Assets Regulation (MiCA) (Parliament & Council, 2023) is the most comprehensive framework for digital assets introduced so far. It came into effect in 2024 and significantly influences how token-based startups operate, raise capital, and engage with their stakeholders. MiCA establishes a harmonised set of rules across all EU member states, covering token issuance, trading, and custody of digital assets. A central feature of the regulation is its classification system, which places tokens into specific categories, each with its own requirements for authorisation, disclosure, and oversight. This classification matters because it directly influences how startups issue tokens, structure their offerings, and engage with investors, including VCs.

Under MiCA, **asset-referenced tokens (ARTs)** are designed to keep a stable value by being tied to one or more external assets such as fiat currencies or commodities. They require approval from national regulators and must hold adequate reserves, making them suitable for payments and store-of-value use cases. **Electronic money tokens (EMTs)** represent a direct claim on a single fiat currency and are mainly used for payments. **Utility tokens** serve as the fuel for a network, covering transaction costs and functioning as the medium of exchange within that system. Ether (ETH), the native token of Ethereum, is an example of a utility token under this framework. Finally, while not regulated directly under MiCA, **security tokens** represent traditional financial instruments such as equity or debt in digital form. These tokens fall under existing securities laws, which makes them more complex to manage because those frameworks were not designed with tokens in mind.

Each of these categories plays a distinct role in blockchain ecosystems, from supporting payments and maintaining stable values to enabling network governance or representing traditional financial assets. This classification system provides clarity for token issuers, users, and investors while ensuring that appropriate oversight applies to each type of token.

For this research, regulations like MiCA are not treated as passive background conditions but as active factors that shape startup strategy and VC involvement. They influence the milestones that startups plan for, the way tokens are distributed, and the governance structures they adopt. These elements also determine how VCs can provide strategic support and how founders balance equity, token value, and community participation. However, the purpose of this research is only to outline the regulatory environment rather than to explore all its practical implications in detail.

2.4 Types of Blockchain Startups

Not all blockchain-related businesses are designed to create or use token networks. For this research, a distinction is made between equity-based startups and token-based startups, following a classification originally proposed by Electric Capital (Electric Capital, 2024) with some modifications to reflect the categories most relevant to venture funding.

1. **Token-based: Middleware and Applications.** These startups build solutions on top of existing blockchain networks such as Bitcoin, Ethereum, or Solana. Examples include OpenSea, which provides a marketplace for non-fungible tokens using Ethereum's smart contracts, or companies that offer developer tools and services for building decentralised applications.

2. **Token-based: Blockchain Networks and Protocols.** These ventures create entirely new blockchain networks or protocols that serve as the foundation for decentralised applications. Examples include Solana, which developed a high-performance blockchain, Avalanche, which focused on scalability for financial use cases, and Near Protocol, which prioritises developer-friendly design. Such projects require complex technical development, extensive testing, and token-based systems to incentivise participation and security.

3. **Equity-based: Enterprise Blockchain Solutions.** These companies apply Blockchain to improve existing business processes, particularly in areas like financial transactions, supply chains, or auditing. Chainalysis, which provides blockchain analysis tools, Fireblocks, which offers custody infrastructure, and R3, which builds distributed ledger solutions, are examples. Their focus is typically on bridging traditional industries with Blockchain while meeting compliance and security requirements.

4. **Equity-based: Centralised Financial Services.** These firms provide financial infrastructure for digital assets, such as exchanges, custody, and trading platforms.

Coinbase, which operates a regulated cryptocurrency exchange, and BitGo, which provides institutional custody services, are representative examples. These companies are centralised in their operations but interact with decentralised networks.

Distinguishing between these categories is essential for this research, since VC strategies and startup milestones differ substantially between equity-based and token-based models. The thesis focuses on token-based startups in the middleware, application, network, and protocol categories, where decentralised governance and token value capture are central to business strategy and investor involvement.

2.5 Market Evolution

The development of token-based startup ecosystems has unfolded in several distinct phases, each shaped by technological advances, regulatory responses, and evolving levels of market maturity. A clear understanding of these phases requires separating the contributions from academia, which analysed and theorised the changes, from the parallel industry developments that defined practice.

Phase 1: Initial Coin Offerings (2017–2018). *Academic contributions.* This period was framed in scholarship as the first large-scale experiment in token-based fundraising. Research examined determinants of ICO success such as disclosure quality and whitepaper detail (Adhami, Giudici, & Martinazzi, 2018; Chen, 2018), transparency and incentive alignment (Catalini & Gans, 2018), and the legal design of token contracts, including critiques of early SAFT agreements (Cohney, Hoffman, Sklaroff, & Wishnick, 2019). Scholars also explored governance vulnerabilities, including the role of community-led development (De Filippi & Loveluck, 2016), progressive decentralisation (Hsieh, Vergne, Anderson, Lakhani, & Reitzig, 2018), and the risks associated with blockchain launches (Davidson, De Filippi, & Potts, 2018). Collectively, this work positioned ICOs as both a financial innovation and a governance challenge, highlighting tensions between openness and investor protection.

Industry developments. In practice, ICOs became the first major wave of token-based fundraising, enabling startups to raise capital directly from global markets without intermediaries (Adhami et al., 2018). Key events included the U.S. SEC's DAO Report (25 July 2017), which clarified that certain token sales could be treated as securities offerings under the Howey test (*Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO*, 2017); China's ban on ICO fundraising (4 September 2017) (People's Bank of China et al., 2017); and the SEC's halt of Munchee's "utility token" sale (11 December 2017) (*Munchee Inc. — Cease-and-Desist Order*, 2017). Switzerland's financial regulator (FINMA) also published one of the first token classification frameworks (16 February 2018), establishing the payment/utility/asset categories (FINMA, 2018). Mega-raises such as EOS ($4.1 billion across a year-long sale concluded in 2018) (Foxley, 2019) demonstrated the potential scale of token markets but also amplified governance and regulatory risks. Ultimately, this period showed both the appetite for novel fundraising and the dangers of unregulated capital flows,

with widespread scams and failed projects (Momtaz, 2021).

Phase 2: Regulatory Response and Market Correction (2018–2020). *Academic contributions.* After the ICO boom, academic attention shifted toward regulation, compliance, and the changing dynamics of token finance. Scholars examined how transferability restrictions affected liquidity and valuations (Momtaz, 2020), how tokens altered incentives compared to equity (Lyandres, Palazzo, & Rabetti, 2019), and how fragmented jurisdictional approaches complicated compliance (Hacker & Thomale, 2020). Research on disclosure quality and cross-listings further documented the maturing of token markets (Ante, 2019; Fisch, 2019), while critiques of legal structures continued (Cohney et al., 2019). This literature framed the period as a regulatory correction phase, but also as fertile ground for experimentation with decentralised finance (DeFi).

Industry developments. Regulators worldwide responded decisively. In the U.S., courts granted the SEC a preliminary injunction against Telegram's $1.7 billion "Grams" distribution (24 March 2020), leading to a settlement requiring Telegram to return $1.2 billion to investors (26 June 2020) (*Securities and Exchange Commission v. Telegram Group Inc. — Preliminary Injunction Granted*, 2020; *Telegram to Return $1.2 Billion to Investors and Pay $18.5 Million Penalty*, 2020). Similarly, Kik's 2017 "Kin" token sale was ruled an unregistered securities offering, with final judgment in October 2020 (*SEC Obtains Final Judgment Against Kik Interactive*, 2020; *SEC v. Kik Interactive Inc. — Summary Judgment*, 2020). As enforcement tightened, issuers adopted more compliant structures such as Security Token Offerings (STOs) and private placements. At the same time, the market narrative began shifting from issuance to usage. This culminated in "DeFi Summer" (2020), when Uniswap v2 launched (May 2020) (Uniswap Labs, 2020a, 2020b) and Compound introduced liquidity mining (June 2020) (Dale, 2020), kickstarting token-incentivised on-chain activity. Although ICOs declined, investment into infrastructure components such as custody, scalability, and developer tooling accelerated, providing the groundwork for more stable ecosystems.

Phase 3: Institutional Adoption (2020–Present). *Academic contributions.* This phase has been framed in research as a period of institutionalisation and integration with traditional finance. Studies examined hybrid equity–token financing models (Howell, Niessner, & Yermack, 2020), multi-entity legal structures for risk management (Zetzsche, Arner, & Buckley, 2020), and the growing role of compliance in determining token value (Auer & Claessens, 2022; Koenraadt, 2024). Governance became a focal point, with reviews documenting accountability gaps (Liu, Lu, Zhu, Paik, & Staples, 2021) and empirical work exploring hybrid on-chain/off-chain decision-making (Schädler et al., 2023). Technical research also grew, focusing on testnet coordination and consensus validation (Cong, Li, & Wang, 2021; Lal & Marijan, 2021; Ma, Wu, Xu, & Wolter, 2022). Together, these studies show an ecosystem moving toward institutional credibility supported by maturing governance and infrastructure.

Industry developments. Several events defined institutional adoption. Coinbase's direct listing (April 2021) (*Coinbase Announces Effectiveness of Registration Statement and Anticipated Listing Date*, 2021) provided public-market exposure to a crypto-native company. Corporate treasury experiments followed, most prominently Tesla's $1.5 billion Bitcoin purchase (February 2021) (*Tesla, Inc. Form 10-K (FY 2022)*, 2023). Mainstream cultural adoption surged with Christie's $69.3 million sale of Beeple's NFT artwork (March 2021) (*Beeple's Purely Digital NFT-Based Work Achieves $69.3 Million at Christie's*, 2021). High-profile failures also shaped the market: Terra/UST's collapse (May 2022) (Kessler et al., 2022) and FTX's bankruptcy (November 2022) (Jones et al., 2022) exposed systemic risks in stablecoins and centralised exchanges. Regulatory milestones included MiCA's approval in Europe (2023–2024) (Autorité des marchés financiers (AMF), 2024; European Securities and Markets Authority, 2023) and U.S. enforcement against Binance and Coinbase (June 2023) (*SEC Charges Coinbase for Operating as an Unregistered Securities Exchange, Broker, and Clearing Agency*, 2023; *SEC Files 13 Charges Against Binance Entities and Founder*, 2023). Institutional access expanded through U.S. approval of spot Bitcoin exchange-traded products (January 2024) (Gensler, 2024) and Ether ETFs (May 2024) (Lang & McGee, 2024; *Spot Ethereum ETFs Begin Trading*, 2024; *Spot Ethereum ETFs to Begin Trading July 23: Cboe*, 2024).

Recent Developments: 2024–2025. *Academic contributions.* At the time of writing, academic analysis of 2024–2025 developments remains limited, and this research treats insights for these years as industry evidence rather than peer-reviewed findings.

Industry developments. In 2024, infrastructure and regulation advanced further. Ethereum's Dencun upgrade (March 2024) lowered costs and improved scalability (a16z crypto, 2024; CoinMarketCap Academy, 2024; *Ethereum's Dencun Upgrade And Proto-Danksharding (EIP-4844) Explained*, 2024); Bitcoin's fourth halving (April 2024) reduced block rewards to 3.125 BTC, impacting miner economics (Binance, 2024; CoinLedger, 2024; CoinWarz, 2024); and Circle became the first global issuer to comply fully with MiCA's stablecoin provisions (June 2024) (*Circle becomes first global stablecoin issuer to become compliant under new EU laws*, 2024; *Circle is First Global Stablecoin Issuer to Comply with MiCA*, 2024; Goodwin Procter LLP, 2024; Stibbe, 2024). New protocols also launched, including EigenLayer, which created secondary markets for Ethereum security (Blockdaemon, 2024; *EigenLayer and EigenDA Launch on Ethereum Mainnet*, 2024; Messari, 2024). In 2025, institutional integration deepened. BlackRock's Bitcoin ETF surpassed $70 billion in assets and over 700,000 BTC (BlackRock, 2025; *BlackRock's bitcoin ETF becomes fastest ever to hit $80 billion as BTC tops $118,000*, 2025; *BlackRock's IBIT hits $70B AUM faster than any US ETF*, 2025; *BlackRock's Bitcoin ETF blows past $70B in record pace for ETFs*, 2025). Regulated staking products emerged, such as the first U.S. Solana + staking ETF (July 2025) (Exchange, 2025; *REX-Osprey Launches First U.S. ETF with Solana Exposure plus Staking Rewards*, 2025; *REX-Osprey SOL + Staking ETF (SSK) Surpasses $100 Million AUM in Just 12 Trading Days*, 2025; Shares, 2025). MiCA implementation continued with transitional arrangements extending into 2026,

consolidating liquidity around compliant EMT and ART tokens (*Coinbase to delist some stablecoins in Europe ahead of new regulations*, 2024; Fortris, 2025; InnReg, 2025; *MiCA, entre la protección al usuario y la soberanía monetaria*, 2024). Payment infrastructure integration accelerated, with Meta, PayPal, and Stripe embedding stablecoins for cross-border commerce (Ciccomascolo, 2025). Stripe also acquired Bridge to expand fiat–crypto functionality (*How Fintech Stripe Is A Big Headache For PayPal, Adyen, Fiserv*, 2025; Khan, 2025; *Stripe's John Collison lays out crypto strategy*, 2023), and PayPal launched a "Pay with Crypto" feature for U.S. merchants (July 2025) (*PayPal Drives Crypto Payments into the Mainstream, Reducing Costs and Expanding Global Commerce*, 2025; *PayPal will now let you pay in Bitcoin and other cryptocurrencies—but with one crucial condition*, 2025).

Taken together, these developments illustrate the structural transformation of token markets: from speculative fundraising in the ICO era, to regulatory correction and DeFi experimentation, and finally toward regulated financial products and integrated infrastructure. This research focuses on the institutional adoption phase, when VC involvement became more specialised, regulatory conditions clearer, and startup strategies increasingly shaped by lessons from earlier cycles.

3 Research Methodology

Following Yin (2018), this study adopts an inductive research approach, using multiple sources to examine token-based startups in their real-world context. Rather than testing predefined hypotheses, the research builds understanding from diverse sources, allowing patterns to emerge from the data itself. This approach is well-suited to token-based startups, which represent a new field where established assumptions may not apply and flexibility in interpretation is essential. By allowing theory to develop from the data rather than imposing existing frameworks, the study is able to capture unexpected insights and better reflect the distinctive characteristics of this ecosystem.

The research design is qualitative, combining a literature review with semi-structured expert interviews. This combination is appropriate for three reasons. First, because token-based startups are a novel phenomenon, existing theoretical frameworks may not adequately capture their characteristics (Catalini & Gans, 2018). Second, the rapid pace of technological and regulatory change in this sector requires methods that can identify emerging patterns rather than test fixed models (Howell et al., 2020). Third, there is a lack of reliable quantitative datasets on token-based startup performance, both public and private, which makes practitioner insights an essential source of evidence. Using both literature and interviews provides breadth through academic and industry perspectives, and depth through detailed engagement with practitioners. This dual approach also helps to mitigate the limitations of studying emerging concepts where no established benchmarks exist.

The research proceeds sequentially. It begins with a literature review across VC, blockchain,

and token-based startup domains to establish a theoretical foundation and identify knowledge gaps. From this synthesis, a conceptual framework is developed, including research propositions about how VCs interact with token-based startups. These propositions are used to inform the questions that will be asked to VC professionals and startup founders, allowing for triangulation of perspectives between theory and practice. This sequential design ensures that empirical findings build directly on existing knowledge while remaining open to new and unexpected results. An overview of the methodology is presented in Figure 3.

Figure 3: Research Methodology Framework

3.1 Literature Review and Framework Development

The literature review establishes the foundation for this study and provides a lens through which interview findings can be interpreted and contextualised. By clarifying the current state of knowledge, the review makes it possible to identify where practitioner insights extend, contradict, or confirm existing theory. It also guides the design of interview questions, ensuring that they build on rather than duplicate what is already known.

Addressing RQ1: Lifecycle Differences. The review first examines literature on the lifecycle of VC-funded startups, including objectives, milestones, and financing events. This is then extended to blockchain-based startups, which are included alongside token-based startups due to the limited research focused specifically on tokens (Adhami et al., 2018; Chen, 2018).

Particular attention is paid to the temporal aspects of venture development, recognising that token-based startups may progress differently from their generalists VC-backed counterpart. The comparative approach allows the research to draw conclusions on aspects that are unique to token-based startups and identify similarities with the generalists VC-backed lifecycle.

Addressing RQ2: Investment Mechanisms. The review then considers the evolution of investment mechanisms. The literature review begins with research from generalists VC approaches (Kaplan & Strömberg, 2004; Neher, 1999) and then focuses on blockchain-native financing such as crowdfunding and ICOs (Fisch, 2019; Momtaz, 2021). Special focus is given to how these mechanisms structure capital and the degree of investor protection they provide. Because academic literature in this area is still limited, reputable industry reports from banks, fund administrators, and independent research organisations are also included.

Addressing RQ3: VC Value Addition. Finally, the review analyses VC value-add mechanisms. Traditional functions include strategic guidance, operational support, network effects, and organisational professionalisation (Hellmann & Puri, 2002; Hsu, 2004). These are then examined in the token-based context, where additional expertise is required in areas such as token economics, network bootstrapping, and governance design (Cong et al., 2021). The review suggests that while some traditional competencies adapt to this new environment, token-specific areas such as community building and protocol governance represent new domains of VC involvement that require capabilities not previously emphasised.

3.2 Literature Review Protocol

Sources were identified using Scopus (via TU Delft access) and Google Scholar, with priority given to peer-reviewed journals and reputable industry reports. To ensure broad coverage across disciplines, large language models were also used to identify and organise relevant literature. These tools served as aggregators, helping to capture the interdisciplinary nature of token-based startups. Their use is described in detail in a separate methodological note provided to the investment committee via OneDrive.

3.3 Expert Interview Design and Implementation

Participant Selection Criteria. Participants were selected from two groups: VC fund professionals and founding team members of VC-funded token-based startups. This dual perspective made it possible to examine the VC–startup relationship from both sides, identify where their views aligned or diverged, and validate claims made by one group against the experiences of the other.

The sample consisted of seven participants, which is appropriate for exploratory research in a field with relatively few experienced practitioners. Given the novelty of token-based startups,

the pool of experts with hands-on experience in both investment and operational roles is small. In this context, a carefully selected group of seven provided a good balance: it was large enough to capture variation across roles, stages, and startup types, yet small enough to allow for in-depth interviews that uncovered detailed accounts of decision-making processes. This design prioritises depth over breadth, which is widely considered appropriate for exploratory research where rich, contextual insights matter more than statistical generalisation.

For VC professionals, the inclusion criteria required employment at a firm that invests in token-based startups, direct experience supporting such ventures, and involvement in at least two token-related investment decisions. For founders, inclusion criteria required being part of the founding team of a VC-funded token-based startup and having been involved throughout the company's development. The sample included founders of both successful and failed ventures, since incorporating unsuccessful cases is important in an ecosystem with high failure rates and provides insights often overlooked in studies that only examine surviving firms.

Table 2: Expert Interview Participant Overview

ID	Position
VC_001	Research Partner at VC Fund
VC_002	General Partner at VC Fund
VC_003	Investment Manager at VC Fund
Founder_001	Founder, VC-funded Startup
Founder_002	Founding Team Member, VC-funded Startup
Founder_003	Founder, VC-funded Startup (defunct)
Founder_004	Founder of Two VC-funded Startups

3.4 Data Collection and Analysis

All interviews were conducted online via Microsoft Teams, since participants were based outside the Netherlands. Calls were recorded and transcribed using the platform's built-in tools, and summaries were stored securely on TU Delft's OneDrive. Interviews were conducted in English under standardised conditions, using role-specific interview guides for founders and investors. The study received approval from TU Delft's Human Research Ethics Committee, and all participants provided informed consent and completed risk assessments due to the commercial sensitivity of the subject matter.

Data analysis followed the thematic analysis procedures outlined by Braun and Clarke (2006). The process began with repeated readings of the transcripts, followed by coding of relevant features combining a data-driven and theory-driven approach. Codes were then grouped into themes, which were reviewed and refined against the literature review and explicitly linked to the research questions. Analysis combined manual review with qualitative software to ensure coverage and to capture unexpected insights. Themes were refined through multiple iterations, with efforts to identify and test evidence that challenged emerging

interpretations.

3.5 Triangulation and Integration of Findings

The research applies triangulation in an exploratory way, not to validate findings statistically, but to bring together different perspectives and highlight convergences and divergences. Triangulation in this study refers to combining insights from the literature review with those from expert interviews, and then interpreting their relationship to the research questions. In practice, this means that the literature provided the initial conceptual lenses and informed the research propositions, while interviews supplied practitioner perspectives that could either extend, contradict, or refine those ideas. The relative weight between literature and interviews is deliberately unbalanced across different research questions. For questions on lifecycle differences (RQ1), literature on generalists VC lifecycles provides a strong starting point, while interviews extend this by highlighting where token-based startups deviate. For questions on investment mechanisms (RQ2), both literature and interviews contribute more evenly, as the academic work is limited and practitioner input adds critical detail. For VC value-add (RQ3), the emphasis leans toward interviews, as practical cases of token-related support are only sparsely documented in the literature. This approach makes clear that the study does not seek to establish definitive evidence, but instead to explore emerging dynamics by drawing connections across sources. Literature and interviews are therefore not treated as competing forms of evidence, but as complementary inputs that, when interpreted together, reveal how theory and practice intersect in this evolving field.

3.6 Research Quality and Ethics

The study applied several measures to ensure research quality, following Yin (2018). Multiple sources were used, combining literature with interviews from both VCs and founders. Patterns that emerged from both sources were compared, and records for these were maintained. In order to enhance accuracy, participants were given the summary of their interviews to give them the chance to omit or change their answers.

The research followed TU Delft's ethics protocols. Participants in the interviews gave a signed consent form and were informed that they could stop the interview at any time. Identities were anonymised (e.g., VC_001), and all identifying details were removed from quotations. Data were stored securely on TU Delft's OneDrive and will be destroyed within a year of the final delivery of the research.

3.7 Researcher Background and Limitations

The researcher has working experience in VC, technology, and finance, including experience with token-based investments. This background is problematic as it acts as a double-edged sword. On the one hand, it introduces the risk of bias by shaping expectations. On the other hand, it provides a strong foundation for understanding technical concepts and conducting targeted questions during the interview. The research mitigates this by ensuring that it only

incorporates academia or interview-backed information rather than industry perspectives from the researcher.

Several limitations should also be acknowledged. First, the small sample size of seven participants limits the extent to which findings can be generalised, though it is appropriate for exploratory research in a field with few experienced practitioners. Second, most participants (86%) were "crypto-native," meaning they had extensive prior experience in blockchain-specific ventures. This concentration may not fully reflect how more generalists VCs approach token investments. Third, because the ecosystem is rapidly evolving, findings represent practices at the time of data collection and may not capture subsequent changes. Fourth, while participants had global experience, regional differences in regulation and market structure are only partially represented. Finally, the limited availability of peer-reviewed academic literature required reliance on industry sources. Although these sources provide valuable practical insights, they lack the validation of scholarly peer review.

Taken together, the use of a structured literature review, expert interviews, and thematic analysis reflects a deliberate strategy of methodological triangulation. To preserve source separation, the *Results* chapter first develops the literature-derived framework and propositions, and subsequently reports interview evidence in distinct thematic subsections, with cross-source integration deferred to the *Discussion*. The literature review provides conceptual breadth, while the interviews offer practitioner-level depth that helps contextualise theoretical assumptions. Although integrating these approaches increases the interpretative complexity of the research, it also strengthens the robustness of the findings by allowing themes to emerge across independent sources.

4 Results

As outlined in the methodology (Section 3), this research uses multiple evidence sources to develop an understanding of token-based startup dynamics through triangulation (Yin, 2018). Following the literature review process described in Section 3.2, this section presents the first phase of triangulation: insights from existing literature and theoretical framework development. This literature review was done before the interviews to inform all three research questions and guide the interview's content and design. This approach allows for the research to build on the literature while enabling gap identification and the emergence of new themes. Chapter structure and source delineation. This chapter is organised in two parts to avoid conflating evidence sources. First, Sections 4–4.2 synthesise prior academic work and develop a theoretical framework that culminates in testable propositions (P1–P8). Second, Section 4.6 reports interview-derived evidence only, organised thematically. Integration across sources (i.e., where literature expectations and interview evidence align or diverge) is addressed in the *Discussion* (Section 5), not here. My original contribution in this chapter consists of (i) the framework operationalisation into propositions (P1–P8) and (ii) the systematic coding and analysis of expert interviews against those propositions.

The section combines findings from generalists VC literature with emerging research on token-based startups to develop a theoretical framework . By comparing established VC theory with the limited but growing literature on token-based startups, the analysis identifies areas where practitioner input is needed. To streamline this process, the output of this section will include a set of propositions derived from literature, which will serve as input for the semi-structured interviews and the triangulation process described in Section 3.

4.1 Five-Stage Traditional Startup Lifecycle

According to (Gompers & Lerner, 2000b), VC-funded startups typically follow a multi-stage lifecycle, with each stage characterised by distinct development activities, risk profiles, and funding requirements. This staged progression provides a structured pathway from idea generation to maturity, and has become a foundational reference point in the VC literature. The stages also implicitly define the roles and expectations of investors at different points in the entrepreneurial journey, ranging from early-stage risk-taking to later-stage scaling and profitability.

This taxonomy has been widely adopted in subsequent research (Bergemann, Hege, & Peng, 2008; Gompers & Lerner, 2000a; Gompers, 2002; Gompers, Kovner, Lerner, & Scharfstein, 2006; Gompers & Lerner, 2004; Paik, 2010), largely due to the accessibility of the VentureOne (later VentureSource) database, which classified portfolio companies into stages such as Start-up, Development, Beta, Shipping, Profitable, and Re-start. As VentureOne was the primary dataset for many influential empirical studies, its stage definitions became embedded in academic literature. However, despite the framework's widespread usage, the stages described are rarely described or substantiated in detail. In fact, most academic papers refer to this framework only in appendices or footnotes without much discussion. It is the intention of this research to further expand on this framework, mixing other relevant literature.

Start-up Stage: This is the earliest point in the startup's life. At this stage, the founders have a basic business plan and an initial concept for a product or service. The typical activities a startup requires include forming a legal entity, setting up basic operations, and building initial prototypes. Typical costs include founder salaries, technical setup, legal fees, and minimal workspace. Because there is no operating history and few tangible assets, the information gap between founders and investors is large (Berger & Udell, 1998). As a result, financing is typically limited to the founders' resources, friends and family, angel investors, or very early-stage VC (GOMPERS, 1995). Failure rates are considerably high at this stage; the business model remains unproven.

Development Stage: The company moves into active product or service development but is still far from generating revenue (Gompers & Lerner, 2000b). Funding is used to expand the core team, invest in infrastructure, and cover professional services such as legal and accounting support. Early signs of product feasibility may emerge, but commercial viability is not yet proven. Rapid hiring is common following an initial funding round (Davila, Foster, & Gupta,

2003), and VCs often push for greater organisational structure and formal processes (Hellmann & Puri, 2002). Financing still comes primarily from angels and early-stage VCs (Berger & Udell, 1998), who are betting on the team's ability to turn an idea into a market-ready product.

Beta Stage: At this stage, the product is ready for limited release to customers for testing and feedback. In the technology sector, this is known as beta testing. In life sciences, it might correspond to clinical trials (Gompers & Lerner, 2000b). The aim is to validate performance, fix problems, and explore product market fit before a full-scale launch. Costs at this stage include customer support, additional infrastructure, compliance requirements, and trial operations. With a tangible product and early customer feedback, the company may now access a broader range of financing options, including some forms of debt (Berger & Udell, 1998). VCs typically provide active operational and strategic support during this stage (Gorman & Sahlman, 1989), helping the company prepare for commercial rollout.

Shipping Stage: The product or service has some early signs of product market fit and is now commercially viable and generating revenue, but the company is still not profitable (Gompers & Lerner, 2000b). The focus shifts to building sales and marketing capabilities, scaling customer support, and improving internal systems. VC involvement pivots towards improving efficiency, optimising the cost structure, and scaling operations (Chemmanur, Krishnan, & Nandy, 2011). Financial modelling and valuation metrics take on greater importance (Gompers, Gornall, Kaplan, & Strebulaev, 2020). Research shows that VC-backed firms in this stage have lower failure rates than those in previous stages and a higher chance of acquisition compared to their non-VC-backed peers (Puri & Zarutskie, 2012). With financial metrics already available, the startup can access a wider variety of financing, which might include a Series A, Series B, or venture financing.

Profitable Stage: The company has reached positive net income and can fund at least part of its own growth (Gompers & Lerner, 2000b). The focus moves to market expansion, advanced research and development, strategic acquisitions, hiring senior executives, and preparing for potential exit events such as an IPO. VC influence often shifts from day-to-day operations to high-level strategic guidance (Gorman & Sahlman, 1989; Hellmann & Puri, 2002), and funding at this stage usually comes from later rounds (Series C and beyond).

Restart Stage: Not all companies follow a straight path to growth; some must undergo a significant reset. A restart involves recapitalisation at a lower valuation and a substantial change in product direction or market focus (Kaplan & Strömberg, 2003). This can include restructuring teams, paying severance, pivoting to a new business model, or reorganising the company (Gompers & Lerner, 2000b). Founder replacement becomes more likely at this stage (Hellmann & Puri, 2002), and investors often tighten capital deployment, linking funding to strict milestones (GOMPERS, 1995). Contract terms may be renegotiated to separate cash

flow rights from control rights (Kaplan & Strömberg, 2003).

While the five-stage lifecycle framework of a venture-backed company has become deeply entrenched in generalists VC academic research, there is no comparable framework for token-based startups. This absence makes it difficult to directly compare lifecycle dynamics between the two models. To address this gap, this research draws on emerging literature to construct an analogous framework for token-based startups. The proposed model adapts and expands on the traditional five-stage VC framework to specifically account for the unique operational and structural characteristics of token-based startups, enabling direct comparison of the development pathways and facilitating clearer analysis of where these lifecycles overlap and diverge.

4.2 Six-Stage Token-Based Startup Lifecycle

The research findings propose a six-stage token-based startup lifecycle that shares similarities with the traditional five-stage VC framework while expanding, incorporating and adapting elements that are unique to the token-based startup.

Whitepaper Stage aligns with the traditional start-up phase but emphasises technical documentation and token economics. A whitepaper is a document that explains the idea, technology, and economic model of a project. These documents are somewhat analogous to the prospectus of an IPO. In token-based startups, it often covers how the token-based network will work, how tokens will be distributed, and how governance will be handled. Whitepaper quality is a key fundraising signal (Chen, 2018), complemented by source code availability (Adhami et al., 2018), team disclosures, technical design (Benedetti & Kostovetsky, 2021; Fisch, 2019), and team credentials (Howell et al., 2020), allowing investors to verify that the team can deliver on its promises. Besides being a key document for investor due diligence, the whitepaper is also a core tool for aligning expectations among other ecosystem stakeholders, such as developers and community contributors. These alternative stakeholders are more relevant in token-based startups than in generalists VC-backed startups during their early stages.

Open Development Stage extends the development phase to incorporate open-source and community-led practices (De Filippi & Loveluck, 2016; Fisch, 2019). This is when the project starts building its product in a way that is visible to the public, often through public code repositories using tools like GitHub. Many blockchain startups operate as open-source, meaning anyone can view the code and sometimes contribute to it. This approach helps build a community early on but also requires managing outside contributions and feedback. Research on open-source software ("OSS") ecosystems shows that early and diverse participation fosters long-term sustainability (Jiang, Lee, Davis, & Zomaya, 2018; Xiao, He, Xu, Zhang, & Zhou, 2023), while governance lessons from OSS, such as community coordination and forkability, are increasingly relevant for token-based startups (Lindman et al., 2021). VC support at this stage may include helping to set up governance frameworks, funding independent code audits,

and providing advice on effective community engagement.

Testnet Stage is analogous to beta testing but with open participation and sometimes token incentives (Cong et al., 2021). A testnet is a public trial run of the blockchain—before launch and without real-world token value—used to uncover bugs, test performance, and observe network interaction. Token rewards can skew activity metrics; however, testnets provide valuable opportunities to stress-test both technology and governance under near-real-world conditions. While literature directly on testnets is sparse, surveys on blockchain testing emphasize the need for structured evaluation techniques, which testnets fulfill in practice (Lal & Marijan, 2021). Simulator-based research further highlights how controlled environments help validate consensus mechanisms and network behavior, mirroring many testnet objectives (Ma et al., 2022). VCs can use this stage to assess technical readiness, participant quality, and distinguish genuine adoption from hype, while recognizing the limits of incentive-driven test participation.

Market Preparation Stage includes exchange listing, liquidity planning, and regulatory compliance (Momtaz, 2020). This is the stage where the team prepares the token for public trading by securing exchange listings, arranging liquidity provision with market makers, and ensuring compliance with relevant regulations. These preparations are critical because, in token markets, success often depends on market infrastructure as much as on the underlying technology. Listing on exchanges enables immediate liquidity and can improve real economic outcomes, such as employment growth, for token issuers (Howell, Niessner, & Yermack, 2018; Momtaz, 2020). However, exchange listings may also increase volatility and encourage cross-listing behaviors as token strategies evolve across markets (Ante, 2019). Regulatory clarity regarding token transferability and securities classification is essential, as transferability is a key determinant of token value and legal treatment (Fuchs & Momtaz, 2025; Koenraadt, 2024). VC involvement often includes introductions to exchanges, liquidity partners, and legal counsel to navigate these critical market launch considerations.

Mainnet Launch Stage parallels product launch but involves initiating a live, decentralised network. The mainnet launch is when the blockchain goes live, validators are onboarded, tokens begin circulating, and the network becomes fully usable. This stage also involves public communications and often coincides with increased market attention. Academic studies highlight that the transition from testnet to mainnet is particularly critical, as it introduces operational risks and makes governance choices irreversible in practice (Davidson et al., 2018). Launches often serve as symbolic milestones that attract user communities, signal legitimacy, and generate heightened speculative activity in token markets. Security audits and stress testing are essential to prevent early failures, since vulnerabilities at this stage can permanently undermine adoption and trust (Lal & Marijan, 2021). VC contributions may include coordinating launch activities, overseeing security reviews, supporting exchange integrations, and leveraging networks to connect the project with strategic partners and

ecosystem participants.

Progressive Decentralisation Stage covers the transition from centralized to community governance (Hsieh et al., 2018). After launch, most token-based startups aim to gradually hand over decision-making power to the community, often through on-chain mechanisms or governance councils. The pace of this transition must balance network stability with community expectations: moving too quickly can invite governance attacks; moving too slowly may undermine trust. Governance research highlights that decision-making in blockchains frequently combines off-chain leadership with on-chain participation, rather than achieving instant, full decentralization (Schädler et al., 2023). Systematic reviews have also noted that governance often lacks clearly defined decision rights, accountability frameworks, or ecosystem-level participation, even though these are critical for credible decentralization (Liu et al., 2021). VCs must therefore manage their influence while promoting governance structures that are inclusive, resilient, and capable of withstanding long-term community dynamics.

Table 3: Comparison of Generalists VC and Token-Based Startup Lifecycles (framework synthesis based on literature; see Sections 4–4.2)

Stage	generalists VC-backed Startup	Token-based Startup	Key Differences
1	**Start-up:** Founders form a company, draft a business plan, and build prototypes. Financing comes from founders, friends and family, angels, or early-stage VC.	**Whitepaper:** A whitepaper sets out the idea, token economics, and governance. Functions like a prospectus and is a key fundraising signal.	Traditional startups validate ideas with prototypes; token ventures use whitepapers to convince investors and communities before building.
2	**Development:** Focus on product development, team expansion, and infrastructure. Early feasibility emerges, but no revenue. Angels and early VCs provide funding.	**Open Development:** Development happens openly, often in public repositories, with community contributions. VCs may support governance and audits.	Traditional startups develop internally; token ventures emphasise open-source, transparency, and community participation.
3	**Beta:** Product enters limited release for customer testing. The aim is to validate performance and product–market fit. VCs provide strategic and operational support.	**Testnet:** Blockchain launches in a public test environment, with no real token value. Used to stress-test technology and governance.	Beta is closed and user-focused; testnets are open, incentive-driven, and include governance experiments.
4	**Shipping:** Product achieves early product–market fit and generates revenue. Focus on scaling operations, marketing, and customer support.	**Market Preparation:** Project prepares for token trading by securing exchange listings, arranging liquidity, and ensuring compliance.	Traditional ventures scale operations once revenue begins; token startups prepare for token liquidity and exchange readiness before revenue.
5	**Profitable:** Company reaches positive net income, expands markets, hires executives, and prepares for exits (e.g., IPO). The VC role shifts to strategic guidance.	**Mainnet Launch:** Network goes live, validators onboard, and tokens circulate. Security audits and public communications are critical.	Profitability signals success in traditional ventures; mainnet launch is the symbolic and functional milestone for token startups.
6	**Restart:** Some companies pivot or restructure, involving recapitalisation, founder replacement, or product redirection.	**Progressive Decentralisation:** Governance shifts from the founding team to token holders and the community. Balance is needed between stability and inclusion.	Traditional ventures reset through restructuring; token ventures evolve by gradually decentralising governance.

By contrasting the six-stage token-based startup lifecycle with the five-stage VC model,

this thesis establishes a comparative baseline. The next sections review VC mechanisms and token literature to contextualise and validate the framework. The study formulates propositions to be empirically tested:

- Given the distinct stages identified in the six-stage lifecycle model, the research proposes that **P1: Token-based startups follow fundamentally different lifecycle progression than generalists VC-backed ventures**.
- Given the central role of whitepapers as signaling devices for both investors and non-investor stakeholders, the research proposes that **P2: Documentation and communication strategies in token-based startups serve different stakeholder evaluation criteria than traditional startup contexts**.
- Given the emphasis on open-source development, testnets, and community participation, the research proposes that **P3: Token-based startups adopt transparency strategies that differ fundamentally from traditional startup confidentiality approaches**.
- Given the decisive role of exchange listings, liquidity provision, and regulatory clarity in token-based startups, the research proposes that **P4: Market infrastructure dependencies in token-based startups differ substantially from traditional startup distribution and scaling requirements**.

4.3 VC Value-Add Mechanisms

Value-add means non-financial investor support beyond capital. In generalists VC, this includes operational advice, strategy, recruiting, and networks. Well-connected VCs help with customers, partners, and future funding, while staged funding aids monitoring and lowers agency costs. Board seats or vetoes give VCs strategic control.

In token-based startups, VCs adapt value-add approaches to suit decentralised networks. They go beyond typical operational advice, offering expertise in tokenomics, smart contract review, and governance. Network access covers more ground, including validators, exchanges, liquidity providers, and regulators (Hochberg, Ljungqvist, & Lu, 2007). Community building, transparency, and open-source engagement are also vital, shifting VC support from just firm operations to growing the ecosystem.

This distinction is important for the research because it highlights how VC value-add extends beyond traditional operational and financial contributions when applied to token-based startups.

- Given the broader requirements of token-based startups, the research proposes that **P5: VC value creation extends beyond traditional capabilities to address token-based startup-specific requirements**.

4.4 Investment Structures

Alongside value-add, venture investment outcomes are shaped by capital structures. In traditional startups, investment structures are mostly equity-based, combining cash-flow rights and control rights (Kaplan & Strömberg, 2003). Mechanisms such as preferred shares, convertible notes, and SAFEs help protect against downside risk. They also preserve upside potential. Governance evolves over time. Series A boards are typically small. Later rounds expand representation and independence. Debt, when used, introduces covenants that further restrict managerial discretion (Aghion & Bolton, 1992; Roberts & Sufi, 2009).

Token-based startups blend equity and token-specific instruments, unlike traditional startups that only issue equity. This difference creates tension between equity value and token value (Howell et al., 2020). Tokens may capture most of the network's economic upside, which can reduce the importance of equity stakes. To address this, token supply schedules, vesting arrangements, and immutable smart contract terms act as commitment devices (Cohney et al., 2019; Cong et al., 2021). The Simple Agreement for Future Tokens ("SAFT") helps align token issuance with accredited investor requirements (Batiz-Benet, Clayburgh, & Santori, 2017). Multi-entity structures, like foundations for token issuance and separate operating companies, address regulatory risks across jurisdictions (Zetzsche et al., 2020). Staging remains relevant, but for token-based startups, it is tied to technical milestones (e.g., testnet completion, mainnet launch, governance transitions), rather than just to financial objectives.

This comparison matters for the research because it shows how token-based capital structures require adaptations to control mechanisms and are evolving toward hybrid models that partially align with generalists VC frameworks.

- Given the hybridisation of equity and token-based financing, the research proposes that **P6: VC investment mechanisms and structures adapt significantly for token-based startup contexts compared to traditional equity models**.
- Given the need to balance decentralisation goals with investor protections, the research proposes that **P7: VC control and governance mechanisms adapt to accommodate decentralisation goals unique to token-based startups**.

4.5 Regulatory Alignment and Industry Evolution

A persistent challenge for token-based startups is the absence of clear, global and standard regulatory frameworks. While generalists VC-backed startups operate within established corporate and securities law, token-based startups face legal uncertainty regarding the classification of tokens as securities, commodities, or utilities. This uncertainty complicates fundraising, secondary trading, and governance design (Lyandres et al., 2019; Zetzsche et al., 2020). Jurisdictional fragmentation further increases compliance complexity, with different countries imposing divergent requirements on disclosure, investor eligibility, and token transferability (Hacker & Thomale, 2020).

Academic research has highlighted that regulatory clarity is a critical determinant of token value. Momtaz (2020) finds that transferability restrictions imposed by regulation directly affect liquidity and pricing. Similarly, Auer and Claessens (2022) argue that regulatory announcements produce significant abnormal returns in crypto markets, underscoring the centrality of compliance to investor confidence. In response, token ventures increasingly adopt hybrid structures—such as offshore foundations coupled with operating companies—to mitigate legal risks and accommodate multi-jurisdictional requirements (Zetzsche et al., 2020).

This evolution suggests that the token-based ecosystem is converging toward greater alignment with traditional business and regulatory frameworks. Regulatory compliance has shifted from a reactive concern to a design feature embedded at venture inception, shaping decisions about corporate form, governance, and revenue models (Howell et al., 2020).

- Given the increasing salience of compliance and jurisdictional structuring, the research proposes that **P8: The token-based startup ecosystem is evolving toward greater alignment with traditional business and regulatory frameworks**.

Table 4: Literature-Derived Propositions Overview (author's operationalisation of the framework into P1–P8)

Proposition	General Prediction	Full Proposition Statement
P1: Lifecycle	Different progression than traditional startups	Token-based startups follow fundamentally different lifecycle progression than generalists VC-backed ventures
P2: Documentation	Different stakeholder evaluation criteria	Documentation and communication strategies in token-based startups serve different stakeholder evaluation criteria than traditional startup contexts
P3: Transparency	Different from traditional confidentiality	Token-based startups adopt transparency strategies that differ fundamentally from traditional startup confidentiality approaches
P4: Infrastructure	Different dependencies than traditional	Market infrastructure dependencies in token-based startups differ substantially from traditional startup distribution and scaling requirements
P5: Value-Add	VC capabilities extend beyond traditional	VC value creation extends beyond traditional capabilities to address token-based startup-specific requirements
P6: Investment	Mechanisms adapt for token contexts	VC investment mechanisms and structures adapt significantly for token-based startup contexts compared to traditional equity models
P7: Governance	Control adapts to decentralization goals	VC control and governance mechanisms adapt to accommodate decentralization goals unique to token-based startups
P8: Evolution	Alignment with traditional frameworks	The token-based startup ecosystem is evolving toward greater alignment with traditional business and regulatory frameworks

4.6 Empirical Interviews

Scope note—This subsection and the thematic subsections that follow report *interview-derived evidence only.* References to the literature are included solely for brief anchoring; full integration across sources is reserved for the *Discussion* (Section 5).

This section presents the raw findings from expert interviews with seven participants (four founders, three VCs) in the token-based startup ecosystem, completing the second phase of the triangulation approach outlined in Section 3. The interviews validate the literature-derived propositions developed in Section 4 while revealing relevant nuances, implementation challenges, and emerging practices that extend the existing theoretical framework introduced in Section 4 for the six-stage token-based startup lifecycle. The findings show that while token-based startups share structural characteristics with their generalists VC-backed counterparts, their operational realities are more complex and varied than current literature suggests.

The participant sample reflects the distinctive characteristics of the emerging token-based startup ecosystem. Six of seven participants (86%) are "crypto-native," having developed their expertise exclusively within digital asset markets, while one participant (14%) transitioned from a generalists VC background. The average professional experience across the sample is 3.6 years (range: 1.25-5 years), reflecting both the sector's youth and the concentration of expertise among early adopters. Just by the demographics composition of the interview sample, the research notes that the token-based startup ecosystems might require specialised knowledge that is difficult to transfer from traditional contexts (VC or startups).

Table 5: Participant Demographics and Experience Distribution

Participant	**Role**	**Experience (Years)**	**Background**
VC			
VC_001	Investment Partner	4.5	Crypto-native
VC_002	General Partner	5.0	Traditional → Crypto
VC_003	Research → GP	3.75	Crypto-native
Founders			
Founder_001	Founding Team	2.0	Crypto-native
Founder_002	Founder	5.0	Crypto-native
Founder_003	Founder	1.25	Crypto-native
Founder_004	Founder	4.5	Mixed Experience
Sample Characteristics			
Average Experience	**3.6 years**	**86% Crypto-Native**	**Range: 1.25–5.0**

Scope note—Evidence in the following subsections are drawn from expert interviews. Literature expectations are not repeated here and are integrated in Section 5.

4.7 Token-based Startup Lifecycle Patterns

The interviews revealed that token-based startups develop along trajectories that diverge substantially from generalists VC-backed models. Participants emphasised phases unique to token contexts, particularly Testnet and Progressive Decentralisation, which are absent from conventional lifecycles. Moreover, progression was described as iterative rather than linear, with startups repeatedly cycling between development and testing. Evidence from participants illustrates these dynamics. VC_001 highlighted "genuine validator participation" as a key readiness indicator, while Founder_001 prioritised "curated app cohorts and depth of engagement rather than just wallets or transactions." Two founders (Founder_003 and Founder_004) described repeated development–testing loops, reflecting a departure from linear timelines. These findings directly connect to the theoretical expectations outlined in Section 4, particularly regarding the distinct developmental stages and ecosystem dependencies proposed in the six-stage lifecycle model, confirming the divergence from traditional linear progression described in the generalist VC literature. Founder_003 further explained how incentives were structured so that speculative actors "inadvertently serve our purposes," integrating market behaviour into the development process itself. These findings suggest that lifecycle progression in token-based startups differs fundamentally from traditional ventures, extending prior literature by underscoring iteration, ecosystem readiness, and governance as core developmental milestones.

4.8 Communication and Stakeholder Strategy Evolution

Participants consistently described shifts in communication strategies, highlighting how token-based startups must satisfy diverse stakeholder audiences. Unlike traditional ventures, where communication focuses primarily on investors, token ventures must simultaneously engage sophisticated investors, developers, and community members. The interviews highlighted this divergence. VC_001 observed that conventional documentation, such as whitepapers, has "declined materially" in investor evaluation, while VC_003 noted authenticity concerns with standard materials. VC_002 emphasised direct technical assessment as the primary validation criterion. Founders, however, underlined the continued importance of communication for community trust. Founder_004 stated: "White paper quality was not important for getting us our early investors (...) the live product had users," whereas Founder_002 argued: "For the community, a well-written whitepaper is crucial." Taken together, the findings show that token-based startups face dual communication challenges: delivering credible technical validation for investors while maintaining accessible narratives for community stakeholders. This dual-audience complexity distinguishes them from traditional startups. This theme aligns with the theoretical discussion in Section 4, where documentation and communication were identified as serving different evaluation functions for investors versus community stakeholders, and the interview data substantiates these dual-role dynamics in practice.

4.9 Transparency Strategy Implementation

Interviewees described transparency strategies that differ significantly from traditional norms of confidentiality. Six out of seven participants reported adopting structured disclosure practices, balancing openness with competitive protection. Transparency emerged as both a strategic necessity and a source of operational tension. Illustrative quotes highlight these nuances. Founder_001 explained: "We're open by default but stagger disclosures—major innovations are shipped with some lead time before full transparency." Founder_004, in contrast, found transparency to be counterproductive: "It has not been beneficial (...) it's more of a headache," citing coordination costs and unhelpful feedback. Interestingly, VCs expressed a strong preference for transparency, with VC_001 emphasising its importance for validating founder credibility, suggesting potential tensions between investor expectations and founder experiences. These findings indicate that transparency in token ventures is neither binary nor absolute. Instead, it is strategically staged, context-dependent, and shaped by the trade-offs between openness, control, and stakeholder alignment. These insights reinforce Proposition 3 and the associated literature, which predicted that transparency in token-based ventures operates through staged and context-dependent mechanisms that contrast with traditional confidentiality norms.

4.10 Market Infrastructure Dependencies

Participants unanimously emphasized the crucial role of market infrastructure in determining the success of token ventures. Exchange listings, liquidity provision, and market maker relationships were identified as critical to viability, creating dependencies not seen in generalists VC-backed firms. Evidence demonstrates both the importance and the risks associated with these relationships. Founder_001 characterised exchange access as "vital and [able to] either make or break the TGE," while VC_003 remarked that "exchange relationships often determine the success of token launch more than the technology itself." VC_001 described asymmetric dynamics: "Sometimes exchanges ask for 5% token supply and like a million bucks up front. They have all the power, and there's no regulation around this." The findings suggest that market infrastructure dependencies introduce power imbalances and strategic vulnerabilities unique to token-based startups. These dependencies represent viability prerequisites rather than growth accelerators, marking a fundamental departure from traditional scaling models. This set of findings supports the theoretical predictions in Section 4 regarding the pivotal role of market infrastructure in shaping outcomes, extending prior literature by highlighting the structural power asymmetries in within exchange and liquidity relationships.

4.11 VC Value Creation Evolution

Interview data revealed that VC value creation extends into domains rarely observed in traditional ventures. Participants emphasised tokenomics design, smart contract audits, and ecosystem-building activities as critical contributions, reflecting an expansion of the VC role. Quotes from participants highlight these specialised forms of support. VC_002 explained: "We

focus heavily on technical due diligence and ongoing technical support, which is different from generalists VC, where it's more about business metrics." Founder_004 contrasted specialist and generalist investors, crediting specialists with comprehensive support across product design, legal structuring, and infrastructure access, while generalists contributed little beyond capital. These findings indicate that value creation in token-based contexts depends heavily on specialist expertise and blockchain-specific capabilities, extending generalists VC roles to accommodate the unique demands of decentralised networks. These observations closely mirror the theoretical expectations developed in Section 4 around expanded investor value-add, validating the proposition that token-based startups require specialised forms of support beyond the scope of traditional venture capital capabilities.

4.12 Investment Structure and Mechanism Adaptation

The interviews showed that investment mechanisms adapt substantially in token contexts, often blending equity with novel token-based structures. Participants described hybrid approaches as well as radical departures from equity altogether. Founder accounts reveal this diversity. Founder_001 explained: "Equity investors are offered token exposure through warrants and SAFEs with mapped out conversions." Founder_004 described bypassing equity entirely: "We don't have equity investors. Everything has gone through the token (...). We did two priced rounds, and they were all token purchase agreements." VC_002 observed that staging metrics had shifted: "In crypto: dilution typically doesn't happen because the token supply is fixed (...) the only metric that matters is fees per user, revenue." Taken together, these findings demonstrate how investment mechanisms in token ventures are reconfigured to align with fixed-supply economics, token distribution requirements, and technical milestones, marking a significant departure from equity-dominated models. This evidence corresponds directly with Proposition 6 and the theoretical discussion of hybrid financing structures, demonstrating how token-specific mechanisms reshape incentives, staging, and investor protections relative to equity-focused models.

4.13 Governance and Control Mechanism Adaptation

Interviewees described diverse approaches to governance transitions, highlighting adaptations designed to balance decentralisation with stability. Control mechanisms were seen as evolving gradually, often staged to avoid governance failures. The data illustrate this balancing act. Founder_001 outlined structured governance handovers, explaining how "DAO mechanisms would progressively take over treasury, grants, and roadmap governance." VC_002 warned against premature handovers: "Complete decentralization from day one is a recipe for chaos." Founder_003 sought to limit investor governance influence, criticising investors who prioritise "speculation and narrative over value creation." These findings suggest that governance adaptations are complex and contested. They require careful calibration between decentralisation ideals, investor interests, and ecosystem sustainability. These findings substantiate the theoretical claims in Section 4 that governance in token-based startups evolves through staged

decentralisation, while also revealing practical tensions between decentralisation ideals and investor control not fully elaborated in existing literature.

4.14 Industry Evolution Patterns

All participants recognised that token ventures are evolving toward closer alignment with traditional frameworks, particularly around regulatory compliance and revenue generation models. Unlike early-stage ventures that emphasised token launches as endpoints, current startups integrate legal structuring and business fundamentals from inception. Participants illustrated this adaptation. Founder_001 described building structures to address securities law risks across jurisdictions, while Founder_004 explained using offshore operations to navigate regulatory constraints. Founder_003 highlighted revenue diversification, aligning business models with enterprise services to "avoid being hostage to token market cycles." VC_002 emphasised financial discipline, predicting that "only the ones that can maintain a strong income statement and balance sheet succeed." These findings indicate that the token-based ecosystem is converging toward traditional business and regulatory models, as compliance, corporate structuring, and sustainable revenue emerge as critical design considerations from the outset. This theme reinforces Proposition 8 by empirically confirming the trend toward convergence with traditional organisational and regulatory models, expanding upon literature that highlights compliance as a decisive determinant of long-term viability.

Integration note—A synthesis of how the interview evidence supports, nuances, or challenges the literature-derived propositions (P1–P8) is provided in the *Discussion* (Section 5).

4.15 Emergent Themes and Cross-Proposition Insights

Three overarching patterns stand out beyond the research's initial propositions introduced in Section 4. First, token-based startup development is characterised by iterative progression patterns, extended timelines, and infrastructure dependencies that function as viability prerequisites rather than growth accelerators. Second, there is a dual-audience requirement for documentation sharing, which creates operational complexities about traditional ventures, requiring sophisticated stakeholder management. Third, effectiveness in token-based startup contexts depends heavily on specialist expertise, suggesting that generalists VC capabilities may be less transferable than conventional theory assumes.

Table 6: Summary of Empirical Insights by Proposition

Prop.	Empirical Insights	Interpretation
P1	Startups follow unique stages (e.g., Testnet, Progressive Decentralisation). Progression is iterative, not linear, with ecosystem readiness (tech, community, governance) central.	Confirms divergence from VC lifecycles; extends literature by stressing iteration, ecosystem dependencies, and readiness.
P2	Communication must address multiple audiences. Investors focus on tech validation, while communities value whitepapers and narrative, creating dual-audience complexity.	Confirms differences in documentation; extends by highlighting dual-audience demands absent in traditional startups.
P3	Transparency managed via "staggered disclosure" balancing openness and protection. Benefits vary: some find it effective, others burdensome. VCs prefer more openness.	Supports transparency differences; extends by showing staged, contested, and context-dependent strategies.
P4	Exchange and market maker ties are decisive for token launches. These dependencies often involve power asymmetries (e.g., token supply concessions, large upfront fees).	Confirms unique infrastructure dependencies; extends by revealing power imbalances shaping outcomes.
P5	VC roles expand to tokenomics, smart contract audits, and ecosystem building. Specialists deliver more value than generalists, supporting across legal and infra areas.	Confirms expanded VC value-add; highlights specialisation as critical to effectiveness.
P6	Investment mechanisms adapt: hybrid equity-token models common, some ventures token-only. Staging linked to technical milestones (testnet, mainnet) vs. revenue.	Confirms adaptations; extends by documenting token-only models and milestone-driven staging.
P7	Governance adapts gradually toward decentralisation. DAO transitions are staged; tensions arise between investors seeking control and founders prioritising ecosystem health.	Confirms governance adaptations; extends by revealing misalignments and implementation challenges.
P8	Ventures converge with traditional frameworks. Compliance is considered from inception, multi-entity structuring is common, and revenue is diversified beyond token markets.	Confirms convergence trend; extends by showing proactive adaptation in legal structuring and revenue models.

5 Discussion

This chapter turns to the discussion of findings in light of the research framework. The purpose is to interpret the results, highlight how they align with or diverge from existing literature, and provide alternative explanations where deviations occur. In doing so, the discussion connects theoretical expectations with practical observations, offering insights into both the validity of established models and the novel dynamics introduced by token-based startups.

5.1 Financing Lifecycle Differences and VC Positioning (RQ1)

Evidence from the interviews has validated **Proposition P1**, confirming the six-stage token-based lifecycle model and the differences with the generalist VC lifecycle model. In particular, interviewees recognised the Testnet phase as a critical point that makes-or-breaks venture progression in this context. These findings expand the traditional five-stage lifecycle model previously described in Gompers and Lerner (2000b) by incorporating technical and governance milestones noted in token literature (Adhami et al., 2018; Hsieh et al., 2018). This iterative and ecosystem-based logic reFlsonates with blockchain research, which emphasizes open experimentation and multi-stakeholder governance (De Filippi & Loveluck, 2016; Fisch, 2019).

Lifecycle Validation and Iteration Patterns. Results strongly support the mapping from the generalist VC model to the six-stage token-based startup model, as well as expanding with the addition of phases unique to this lifecycle, the Testnet, and Progressive Decentralisation. Unlike traditional startups, where Beta testing occurs behind closed doors, Testnets involve a rich ecosystem of stakeholders, including investors, teams, users, validators, and developers. This creates coordination challenges beyond the traditional venture model. VC_001 emphasizes the importance of "genuine validator participation" as a critical readiness signal, while Founder_001 highlights the value of launching curated cohorts of applications, thereby generating meaningful engagement rather than superficial wallet transactions. However, as VC_002 noted, incentive-driven participation inflates activity and makes it impossible to discern between genuine adoption and "farming". From a VC perspective, these dynamics create opportunities to capture upside in a zero-sum fashion, incentivising complexity and opacity that limit industry transparency.

Another important finding was that progression between lifecycle stages is rarely linear in token-based startups. Founder_003 and Founder_004 shared that their token-based startups iterated repeatedly between Open Development and Testnet phases, refining both technical architecture and community engagement before advancing. Founder_003 described designing incentives so that speculative actors "inadvertently serve our purposes," using their activity as a "free" stress test for the system. The iterative pattern in the token-based startup ecosystem is unique as it includes economically motivated stakeholder feedback. Token holders, developers, and users all have direct economic incentives in the network's performance, creating pressure for ongoing feedback and improvement. One might also imagine that the level and quality of

feedback change in relation to the price expectations of the token. Therefore, the optimal design of incentives is of utmost importance to foster high-quality feedback and faster iteration rates than what is experienced in generalist VC-backed startups. This extends prior OSS governance work that highlights feedback loops and forkability as central to innovation dynamics (Lindman et al., 2021).

Transformation of Evaluation Metrics. The data reveals a shift: from traditional venture KPIs (revenue, revenue growth, customer acquisition cost) to network KPIs (ecosystem health indicators), supporting **Proposition P1** 's call for redefined VC evaluation frameworks. Across the sample, readiness criteria had evolved from customer acquisition metrics toward validator retention, application diversity, and liquidity. VC_001 and VC_003 explained the monitoring of validator reliability, community engagement, and developer activity, rather than focusing on churn or acquisition rates. This by no means implies that token-based startups are not interested in traditional monetisation, but rather an understanding that future monetisation will be orders of magnitude higher if network effects are achieved before. Token incentives are instrumental in aligning incentives for long-term ecosystem growth, allowing token-based startups to achieve network effects quickly and in a more capital-efficient way. This finding aligns with token economics literature that highlights incentive alignment as key to early adoption (Lyandres et al., 2019).

Market Preparation as Risk Management The Market Preparation phase emerged as a critical component of the six-stage token-based startup lifecycle. The insights from Founders and VCs strongly supported **Proposition P4**. Participants universally described exchange and market-maker relationships as critical for the success of token-based startups, with Founder_001 stating they can "make or break the token generation event," and VC_003 observing they often determine outcomes "more than the technology itself." This is a large departure from traditional startup literature, where distribution channels rarely exert such gatekeeping power. Founder_002's work with market makers to "minimise sell pressure". An early-stage VC in traditional finance is rarely involved in the inner mechanics of financial market microstructure. Still, in the token-based startup ecosystem, it is a prerequisite to understand these dynamics intimately. The universal agreement on the criticality of infrastructure relationships reflects the literature's emphasis on market infrastructure dependencies in token contexts (Howell et al., 2020; Momtaz, 2020). These dependencies are consistent with event studies showing that exchange listings and liquidity access directly affect valuation and volatility (Auer & Claessens, 2022).

Documentation Evolution and Dual-Audience Tensions. Supporting **Proposition P2**, documentation practices reveal a misalignment between VCs and founders in a token-based startup. All three VCs reported a decline in whitepaper popularity for investment decisions. VC_003 explicitly coined the term "GPT-ified" as the risk of AI-generated content making its way into technical whitepapers. On the other hand, Founder_002 stressed their

ongoing importance for community trust and legitimacy. This finding complicates the earlier results of Chen (2018) and Adhami et al. (2018) on whitepaper quality and source code availability as positive fundraising signals, indicating that the signaling value of these factors is decreasing. Founder_004's observation that active network usage outweighs whitepaper quality in attracting institutional capital reinforces a shift toward performance-based due diligence. The dual-audience challenge is not unique to token-based startups, but public communications in private markets rarely carry the same immediate price action (24/7 price feeds). This inevitably creates different dynamics (and higher stakes) for public-facing communication than generalist VC-backed startups face. This reflects the insight of (Catalini & Gans, 2018) that community legitimacy is as important as investor-facing credibility in blockchain ecosystems.

5.2 Investment Mechanisms and Engagement Strategies (RQ2)

The findings reveal a sophisticated financing ecosystem that fundamentally challenges traditional VC theory, providing strong empirical support for several key propositions while uncovering significant variations in implementation. The data demonstrate that token-based startup financing represents a distinct paradigm rather than merely an adaptation of conventional models, characterised by hybrid structures, network-anchored staging, integrated liquidity provisioning, and unprecedented investor operational involvement. These results build on the literature, noting that token ventures often adapt VC structures but face unique governance and market challenges (Catalini & Gans, 2018; Howell et al., 2020).

The Unresolved Challenge of Value Accrual in Token–Equity Structures. The evidence strongly supports **Proposition P6**, but reveals that there is no consensus on how to resolve the tension between value accrual to tokens versus equity. Most participants described hybrid arrangements that combine equity with token exposure through warrants or SAFEs, as Founder_001 explained: "Equity investors are offered token exposure through warrants and SAFEs with mapped out conversions." While this approach theoretically captures value from both the company and its network, interviews revealed confusion about how this works in practice. The complexity becomes apparent when considering competing mechanisms for value capture. In traditional equity models, company success is directly translated into shareholder value through profits, exits, or asset appreciation (Kaplan & Strömberg, 2003). In token-based startups, however, network value may accrue primarily to token holders through appreciation, utility, or governance rights, potentially leaving equity holders with claims on an entity whose most valuable assets exist outside the traditional corporate structure. VC_002 acknowledged this challenge, noting that fully tokenised models require "a higher standard of product–market readiness" since "investors cannot fall back on equity value" if the token underperforms. Notably, no participant could provide a clear framework for how value allocation actually works between these two mechanisms, reflecting the literature gap noted by (Howell et al., 2020). Commitment devices, such as vesting schedules and immutable contracts (Cohney et al., 2019; Cong et al., 2021), mitigate some risks, but the lack of consensus on optimal structures suggests that this remains an area of active experimentation.

The Shift to Network Milestones and Information Asymmetries. Capital staging in token-based startups reveals a fundamental break from traditional venture financing, but also creates new opportunities for information arbitrage that benefit sophisticated VCs. Instead of linking funding tranches to revenue targets or profitability milestones (Gompers & Lerner, 2001; GOMPERS, 1995), both hybrid and fully tokenised models tie capital injections to network health KPIs, like developer adoption, testnet launches, or mainnet activation—milestones aligned with the six-stage model in Section 4.7. However, as highlighted in the literature review, there is no consensus on what these metrics mean or how to measure them (Momtaz, 2020). While all VCs and founders agreed that network health is the most important factor for success, interviews revealed inconsistency in definitions. While some emphasised validator participation, others emphasised developer activity or community engagement. This non-standardisation creates substantial information asymmetries between investor types, echoing (Hochberg et al., 2007) on the competitive advantage of network-specific expertise. This finding also extends staged financing theory by showing that milestones are no longer purely financial but incorporate technical and governance indicators, reshaping the monitoring function of staged capital (Gompers & Lerner, 2000b).

The Strategic Logic and Risks of Progressive Decentralisation. The preference for gradual decentralisation, identified by six participants and captured in **Proposition P7**, reflects both practical need and strategic risk management in systems designed to be permissionless. Phased governance transitions can safeguard against instability while preparing communities for self-management. Interviews here confirmed that governance milestones are often embedded directly into financing structures, with token unlocks or capital releases tied to specific decentralisation benchmarks. The progressive approach makes strategic sense in pursuit of permissionlessness. Still, premature decentralisation introduces vulnerabilities, as Founder_002 calls it "a recipe for chaos", including governance capture and treasury mismanagement, especially in early-stage protocols lacking robust community capacity. These findings align with the governance paradox described by (De Filippi & Loveluck, 2016), where decentralisation aims can unintentionally lead to centralisation if not carefully planned. They are also consistent with broader governance studies, noting that decentralisation unfolds gradually and often requires transitional authority structures (Liu et al., 2021; Schädler et al., 2023).

Additionally, this process also creates critical tensions absent in traditional ventures. Unlike private VC-backed startups, which remain non-traded during development, token-based startups often have tradable assets from an early stage. This constant liquidity introduces short-term price pressures that can misalign investors' and founders' priorities—some investors may prioritise speculative token price gains over sustainable network value creation. This mirrors the liquidity-driven misalignment risk identified in your literature gaps, extending (Hellmann & Puri, 2002)'s observations on control rights into a token context. Founder_003's decision to limit investor control in governance reflects a strategic response to these pressures, aiming to protect long-term network objectives against short-term speculative interests.

5.3 VC Value-Add Beyond Capital and Industry Evolution (RQ3)

The findings reveal a fundamental transformation in VC value creation that extends beyond traditional operational support, exposing significant variations in investor capability and strategic alignment. The data provided evidence that token-based startup investing demands specialised expertise that fundamentally differentiates effective from ineffective capital providers, with implications for both venture success and industry evolution. This aligns with (Gorman & Sahlman, 1989; Hellmann & Puri, 2002) on VC operational involvement but extends their frameworks to include token-specific, technical, and governance expertise, consistent with the sector-specific findings of (Fisch, 2019).

Specialist Value Creation and Technical Engagement. The evidence strongly supports **Proposition P5**, confirming that VC support in token-based startups goes beyond traditional help with operations and networking (Gorman & Sahlman, 1989; Hellmann & Puri, 2002; Hochberg et al., 2007). The quality of support depends on whether the VC has specific expertise in this sector, creating a clear split between specialist and generalist investors. Founder_004 provided a clear comparison, noting that while some investors contributed little beyond money, their lead VC delivered valuable help across multiple areas: product design advice, design team hiring, engineering talent recruitment, legal structure guidance, and introductions to liquidity providers. VCs themselves described major changes in their involvement, with VC_002 emphasising intensive technical review before investing, followed by "ongoing technical support" throughout development, a level of engagement that exceeds normal VC involvement. VC_001 outlined evolving support from early-stage technical documentation help and co-lead attraction to later-stage exchange listing and market maker selection guidance. These activities reflect the operational expansions described in (Catalini & Gans, 2018; Fisch, 2019), where token-based startup investing requires an understanding of cryptoeconomics, consensus mechanisms, and network effects far beyond the knowledge base of traditional software startups. This supports prior findings that investor network centrality and domain expertise drive startup outcomes (Hochberg et al., 2007).

Industry Evolution and Regulatory Alignment. The interviews also revealed strong evidence for **Proposition P8**, showing that the token-based startup ecosystem is evolving toward greater alignment with traditional business and regulatory frameworks. Regulatory compliance emerged as a design consideration from the venture's inception, with founders describing the need for comprehensive structuring to address securities law risks across jurisdictions and the use of offshore entities to navigate constraints. Revenue model evolution also featured prominently, with some ventures aligning business models with enterprise services to reduce reliance on volatile token markets. These adaptations reflect academic observations that regulatory uncertainty and classification ambiguity are defining challenges for token ventures (Hacker & Thomale, 2020; Zetzsche et al., 2020). Empirical finance research also shows that regulatory announcements directly influence liquidity and valuation in crypto markets (Auer & Claessens, 2022; Momtaz, 2020), underscoring why compliance has become a

proactive design feature rather than a reactive necessity. Together, these insights suggest that token-based startups are converging with traditional startup frameworks by incorporating compliance, diversified revenue streams, and corporate structuring from the start.

6 Conclusion

This research shows how token-based startups differ from generalist VC-backed ventures. These changes range from financing, development, to governance and exit. In this section, the research will present its findings, practical implications and the relevance to the EPA MSc programme.

6.1 Key Findings

Answering the first research question revealed that token-based startups tend to follow a six-stage development process. While some stages can be mapped one-to-one to the generalist VC-backed lifecycle, new stages such as Testnet and Progressive Decentralisation were frequently mentioned as critical phases by participants in the study. The Testnet phase was recognised as a make-or-break stage, where token-based startups have to prove that their technology works. This test is not happening behind closed doors but rather in front of real users, validators and developers before launching publicly. Unlike generalist VC-backed startups, token-based startups also tend to iterate between the development and testing phases, constantly refining and implementing feedback in real time. Success metrics also shift from traditional financial metrics to ecosystem health, such as the number of validators staying engaged and the number of applications building on the ecosystem.

While tackling RQ2, it became clear that token-based startups operate in hybrid investment structures, combining equity and tokens. There is no consensus among industry participants on how value should be split between these two components. VC investment decisions no longer rely on fixed sequential milestone achievement, but instead on network metrics. Given that there is no consensus on what these network metrics are in the first place, there are material information asymmetries that sophisticated VCs exploit to their advantage. A key strategic innovation is the progressive decentralisation, where investors' control gradually decreases over time as the network matures and the community takes over.

Exploring RQ3 sheds light on the fact that crypto-native VCs provide different services when compared to their traditional counterpart. Crypto-native VCs offer technical expertise that can be handy for technical hiring, smart contract security audits, interoperability, compatibility, and system architecture decisions. There are essential drawbacks in operating in this market, including the 24/7 price feeds, which might temporarily misalign VC's incentives and founders in ways that would not occur in generalist VC-backed startups. This research's findings have learnings for VCs, startups, regulators and the broader startup ecosystem. This section will explore practical implications for each stakeholder.

6.2 Practical Implications For Policymakers and Regulators

Adaptive Regulation is Necessary Token-based startups highlight blind spots in existing venture finance frameworks, especially around token distribution, progressive decentralisation, and governance responsibilities. Policymakers must design adaptive regulatory frameworks that balance innovation with investor protection. Overly rigid rules risk stifling experimentation, while regulatory gaps leave retail investors exposed to speculative risks.

Infrastructure Design Shapes Markets Policy decisions extend beyond compliance and directly affect how market infrastructure develops. Exchange listing standards, custody requirements, and definitions of network health determine who can participate in token markets and on what terms. These choices influence the incentives of developers, communities, and investors, and therefore the long-term success of token-based startups.

Accountability in Decentralised Governance Gradual decentralisation raises important accountability gaps: who is responsible when community-run networks fail, and how can users be protected without undermining decentralisation? Addressing these questions requires governance frameworks that blend legal, technical, and economic perspectives. Policymakers should therefore engage not only with investors but also with developers, validator communities, and civil society organisations to ensure that regulation reflects the diversity of stakeholders involved.

6.3 Practical Implications For VC Investors

Investment Strategy Must Evolve. VCs exploring the token-based startup ecosystem might need to revisit their diligence approach to evaluate potential investments. As mentioned previously, traditional metrics like revenue growth, customer acquisition costs, and burn rates become less relevant when compared to ecosystem/network growth and usage. There is value in creating an investment thesis around which network metrics are appropriate, given the lack of consensus among practitioners, implying that there is still some Alpha to be generated. This temporal lack of standardisation requires VCs to develop new expertise that most generalist VC investors lack in areas like network economics, token design and community dynamics.

Due Diligence and Monitoring Requires Specialisation Whitepapers' popularity has decreased dramatically. VCs now focus on actual product performance and network results rather than written documentation. While developments in AI have sped up the development of many of these technologies, they have also democratised access to information and professional writing, which further exacerbates information asymmetries between VCs and token-based startups. Similarly, token-based startups require earlier and more hands-on support when compared to their generalist VC-backed counterpart. VCs must help establish connections with exchanges' listing teams, market makers, validators and recruitment. The operational complexity increases and requires more active ongoing involvement throughout the token-based

startup's lifecycle.

Expect Non-Linear Development Cycles. VCs must be in it for the long-term. While token networks sometimes are associated with earlier liquidity promises, the reality is that token-based startups tend to follow a more iterative development process. Traditional milestone-based staging does not work when startups need to step back to earlier stages, given the high volume of stakeholders' feedback. This back-and-forth requires capital with a longer-term view and a flexible milestone structure to accommodate the iterative nature of token-based startups. To further complicate this, once launched, token networks trade on a 24/7 price feed. While a traditional company only deals with its debt and equity holders, a token-based startup must align its economic interests with a rich ecosystem of stakeholders, including developers, communities, users, validators, and investors: any communication misstep triggers an immediate price response.

6.4 Practical Implications For Token-based Startups

Investor Selection Becomes Critical Choosing the right VCs may be more important in token-based startups than in traditional ventures. Token-based startup founders must prioritise investors with expertise in a variety of themes outside of generalist VC theory, including token economics, network design, and ecosystem development. While it might be difficult for founders to benchmark VC's future contributions to the token-based startup, the familiarisation with these concepts is already an improvement over passive capital. The quality gap between a crypto-specialist and a generalist investor can also impact the ability of the token-based startup to secure listing partners and market makers.

Pre-Launch Planning The intensive and iterative pre-launch process previously mentioned takes a larger toll on token-based startups than it does on their investors. The teams must be prepared for more extended development cycles, community building and market infrastructure preparation. Launches will also come with the public scrutiny of code, documentation, applications and even token price if already available. Token incentives will also introduce malicious actors. Therefore, understanding these actors' incentives is critical to exploiting them to the token-based startup's advantage.

Build Community Before Decentralising For token-based startups seeking to decentralise governance fully, it is essential to curate the community and design incentives around positive ecosystem contributions. Complete decentralisation from day one creates vulnerabilities that malicious actors can exploit. Therefore, gradual decentralisation allows for the token-based startup to experiment with incentive alignment to ensure the long-term survival of the ecosystem and a material decrease in the teams' dependency.

Experiment with Hybrid Business Models no blueprint tackles the tension between value accrual to tokens versus equity. Nonetheless, this creates the perfect opportunity to

explore business models that traditionally capture value while leveraging the benefits of token networks. This business model exploration can be an essential way to build robustness in the token-based startup and reduce reliance on the general market health.

6.5 Research Limitations and Critical Future Directions

The study's relatively small sample size and crypto-native participant concentration limit generalisability, particularly regarding traditional investor experiences outside of token-based startups. Similarly, while most interviewees could acknowledge the multiple phases of the six-stage token-based startup lifecycle, there was no participation of a Founder who has gone the whole way to progressive decentralisation. On the other hand, all VCs had experience navigating all steps of the lifecycle. This imbalance results in an overabundance of opinions in the early stages of the lifecycle and may explain why the Testnet stage appeared to be so nuanced. In future iterations of this study, it is critical to enrich the participants' experience in multiple stages of the lifecycle. It became apparent that each stage of the lifecycle also has its unique nuances and requires further exploration of separate issues. Moreover, interview insights reflect the perspectives of highly engaged industry participants and may therefore amplify practitioner narratives that are just partially captured in the academic literature. The thematic analysis mitigates this risk (to some extent), but interpretation requires judgement when aligning experiential evidence with theoretical constructs. These considerations should be kept in mind when evaluating the generalisability of the findings.

A natural evolution from this exploratory research is to draw on a more diverse and cross-disciplinary sample. Future studies would benefit from including institutional investors, regulators, and policymakers, as well as technical contributors such as developers or validator community representatives. Each of these actors brings distinct perspectives on financing, governance, and ecosystem development that extend beyond the VC–founder relationship examined here. Incorporating these groups would enable a more complete picture of how token-based startups interact with their wider environment and how risks and responsibilities are distributed across stakeholders.

Other future directions for this study can tackle the quantification of services added by VCs in the context of token network performance. Then, it would be easier to discern whether the services provided by crypto-specialists tend to result in stronger token networks. Needless to say, further exploration into network metrics standards would be incredibly beneficial for the general ecosystem.

Relevance to the MSc EPA Programme

This thesis showcases the interdisciplinary nature of the EPA Master's programme at TU Delft, combining technical analysis of blockchain systems with strategic and policy-oriented perspectives on governance, regulation, and investment. By placing token-based startup

dynamics within a broader socio-technical framework, the research demonstrates how EPA graduates can bridge the gap between innovation and governance, applying structured analysis to complex, high-uncertainty domains. Blockchain and token-based startups represent what researchers call a "wicked problem". There is no clear definition of what needs fixing; many different groups want different things, there is no obvious correct answer, and the consequences of any decision only become clear years later. The technology changes rapidly, the rules are unclear, markets operate globally, and companies organise themselves in entirely new ways. This rapidly growing environment creates a governance puzzle that traditional policy approaches cannot solve. But that does not mean effective policy is not possible; it just requires the kind of systematic thinking that EPA training provides. This research reveals several urgent policy needs that EPA graduates can address. First, the constant uncertainty about what is legal and what is not stops exceptional companies from innovating while potentially helping bad actors hide. Policymakers need flexible rules that can adapt as technology evolves, rather than rigid laws that become outdated quickly. Second, the basic infrastructure of these markets, like how exchanges work and what standards tokens must meet, shapes what kinds of innovation can happen. These infrastructure decisions are policy choices that will affect the industry for decades. Third, when companies gradually hand over control to their communities, it raises serious questions about who is responsible when things go wrong and how to protect regular users. Effective policy in this area requires EPA graduates who understand both the technology and the principles of governance. They need to write rules that protect people without killing innovation. Effective policy means grasping the technical details of how blockchain systems operate while also understanding the economic incentives, social pressures, multi-stakeholder contexts, and political realities that determine whether policies get implemented. Token ventures sit at the crossroads of computer science, economics, law, and business, precisely the kind of complex challenge EPA education prepares students to handle. By creating clear rules and reliable market infrastructure, EPA graduates can help innovative founders build products that benefit society while managing the real risks that come with new technology.

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A Consent Form

You are being invited to participate in a Master's research study titled The dynamics between VCs and Token-based Startups. Leopoldo Alberto Ochoa Diaz is doing this study at the TU Delft.

The purpose of this research study is to elaborate on the dynamics of token-based startups in relation to traditional venture capital, and it will take you approximately 45 minutes to complete. The data will be used to expand the body of knowledge and to triangulate with other data sources such as document reviews and literature. We will be asking you to provide your input as an industry expert on VC participation throughout the lifecycle of a token-based startup.

As with any online activity, the risk of a breach is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimise any risks by anonymising your information and destroying recordings and transcriptions within one year of the study's finalisation. The repository where these documents will be held is only accessible via 2-Factor Authentication, and participants' names are anonymised.

Your participation in this study is entirely voluntary, and you can withdraw at any time. You are free to omit any questions.

CONSENT FORM

PLEASE TICK THE APPROPRIATE BOXES

Statement	**Yes**	**No**
A: GENERAL AGREEMENT		
1. I have read and understood the study information dated *[DD/MM/YYYY]*, or it has been read to me. I have been able to ask questions about the study, and my questions have been answered to my satisfaction.	☐	☐
2. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	☐	☐

Statement	Yes	No
3. I understand that taking part in the study involves: • A video call via Teams, which will be recorded and transcribed. The recording and transcription will be destroyed automatically 1 year after the fact. • An interview during the video call • A follow-up approval on the output of the video call to ensure the interview reflects the participant's views accurately	☐	☐
4. I understand that there will be no compensation associated with my participation.	☐	☐
5. I understand that the study will end in August 2025	☐	☐
B: POTENTIAL RISKS OF PARTICIPATING (INCLUDING DATA PROTECTION)		
6. I understand that taking part in the study involves the following risks: discomfort while reflecting on their company's or employer's views. These will be mitigated by allowing participants to stop the interview at any point in time and ensuring their identity is anonymised.	☐	☐
7. I understand that taking part in the study also involves collecting specific personally identifiable information (PII) [such as Name and date of birth] and associated personally identifiable research data (PIRD) [such as Associated Organisation] with the potential risk of my identity being revealed.	☐	☐
8. I understand that some of this PIRD is considered sensitive data within GDPR legislation, specifically: • religion, political views • Data concerning criminal activities will/may be collected and processed • Research has a Data Processing Impact Assessment (DPIA) in place	☐	☐

Statement	Yes	No
9. I understand that the following steps will be taken to minimise the threat of a data breach and protect my identity in the event of such a breach: • (1) Anonymisation of data • (2) Use of randomised identifiers • (3) Identifiers lookup tables stored in different locations • (4) Disposal of recordings and transcriptions	☐	☐
10. I understand that personal information collected about me that can identify me, such as my name and experience, will not be shared beyond the study team.	☐	☐
11. I understand that the (identifiable) personal data I provide will be destroyed by August 2026.	☐	☐
C: RESEARCH PUBLICATION, DISSEMINATION AND APPLICATION		
12. I understand that after the research study the de-identified information I provide will only be stored in a thesis repository and is not eligible for reports, publications, websites or other form of content.	☐	☐
13. I agree that my responses, views or other input can be quoted anonymously in research outputs	centring ☐	centring *square* ☐
D: (LONGTERM) DATA STORAGE, ACCESS AND REUSE		
14. I permit the de-identified data (such as anonymised answers and a summary) that I provide to be archived in the interviewer's OneDrive so it can be used for future research and learning.	☐	☐
15. I understand that access to this repository is restricted only to the interviewer and first supervisor of this thesis	☐	☐

Participant Name:	**Signature:**
_____	_____
Date:	
_____	

B Interview Protocol

Interview Process

All interviews will be conducted virtually using Teams and will be recorded with participant consent. Interviews are expected to last 60-90 minutes. Prior to the interview, participants will:

- Receive and review the glossary of key terms to ensure consistent understanding of terminology
- Receive and review the question list prior to the interview
- Review and sign a consent form outlining the research purpose, data handling procedures, and participant rights

The interviewer may ask follow-up questions not listed above to pursue relevant topics that emerge during the conversation. All questions are designed to validate the research framework while remaining open enough to capture novel insights and practical knowledge not represented in existing literature.

Data Management

- All interview recordings will be transcribed using appropriate transcription software
- Interview data will be stored in a secure OneDrive, accessible only to the researcher and the supervisor
- All data will be anonymised during analysis and reporting, with identifying information removed
- Corresponding lookup keys connecting participant identities to anonymised data will be stored separately and securely
- All research data, including transcripts, notes, and recordings, will be permanently destroyed one year after the completion of the research

Participant Protection

- The interview questions have been specifically designed to provide generalised inputs without (to the best of our knowledge) resulting in triangulation and identification of study participants
- Participants will be assigned pseudonyms in all research outputs
- Direct quotes used in the research will be carefully reviewed to ensure they do not contain identifying information
- Participants will have the opportunity to review any direct quotations attributed to them (even anonymously) before publication
- Participants retain the right to withdraw from the study at any point before the final publication of results

Data Analysis Approach

Interview data will be analysed using a thematic analysis approach:

- All transcripts will be coded using a combination of predetermined codes (derived from the theoretical framework) and emergent codes
- Initial coding will identify key themes and patterns across interviews
- Secondary analysis will compare responses between VC and founder groups to identify areas of alignment and divergence
- Findings will be triangulated with existing literature and theoretical frameworks
- Preliminary findings will undergo peer review with experts in blockchain venture capital

C Research Context and Motivation

The venture capital landscape has been fundamentally transformed by the explosive growth in blockchain startup funding, which surged over 1,200% between 2017 and 2023. This rapid evolution has attracted major VC firms into uncharted territory, forcing them to adapt their traditional playbooks to navigate this new landscape. Despite this shift, the adaptation process has remained largely undocumented, creating a significant gap between academic understanding and practitioner reality.

The structural differences between token-based and traditional startups appear to fundamentally reshape how VCs interact with their portfolio companies. Where traditional ventures progress through familiar stages of development, token-based startups navigate unique phases including whitepaper development, open-source building, testnet deployment, and progressive decentralisation. These differences extend beyond mere technical milestones to encompass governance evolution, financing mechanisms, and value creation models that challenge established VC frameworks.

D Primary Research Objectives

These interviews serve a dual purpose of validation and discovery. The research seeks to validate whether the theoretical framework accurately reflects practitioner experiences, particularly our proposed six-stage lifecycle model for token-based startups. Do VCs and founders recognise these distinct phases, or does real-world experience suggest alternative patterns that academic research has missed? 0.5cm The interviews also address critical knowledge gaps around investment mechanisms and timing dynamics. The legal and contractual ambiguity surrounding token investments has forced VCs to develop new approaches for structuring deals and managing risk. Similarly, the non-linear nature of token development may require fundamentally different staging approaches compared to traditional equity investments.

This research examines how token-based startups differ from generalist VC-funded ventures in their lifecycle, financing mechanisms, and investor relationships. The findings are based on a comprehensive literature review and aim to validate key differences observed in academic research.

E Key Findings

This research examines how token-based startups differ from generalist VC-funded ventures in their lifecycle, financing mechanisms, and investor relationships. The findings are based on a comprehensive literature review and aim to validate key differences observed in academic research.

E.1 Lifecycle Differences

Token-based startups follow a distinct six-stage lifecycle that differs significantly from traditional ventures. Projects begin with a **Whitepaper Stage** where public technical documentation replaces private business plans, with transparency serving as a strategic advantage for community building. This transitions into **Open Development**, which embraces transparent, community-involved development versus the private/proprietary product development typical of traditional startups. The **Testnet Phase** provides open testing environments with broader participation than traditional closed beta testing, allowing for more comprehensive validation of network mechanics and community engagement. **Market Preparation** involves complex market-structuring activities such as exchange partnerships and token distribution design that have no direct parallel in traditional ventures. The **Mainnet Launch** features complex technical, economic, and governance considerations that extend far beyond conventional product launches, requiring careful coordination of network security, monetary incentives, and community readiness. Finally, **Token Network Activation** and the Decentralisation Process represent a fundamental departure from traditional models, where success is measured by distributing rather than consolidating control, transitioning governance from founding teams to broader token-holder communities.

E.2 Investment Mechanism Differences

The investment mechanisms employed in token-based startups differ fundamentally from traditional equity-based approaches across multiple dimensions. Staging approaches are transformed by fixed token supplies, which create certainty around dilution dynamics and shift the focus from conventional milestone-based equity rounds to vesting schedules and token release mechanisms. This structural difference affects how investors plan capital deployment and assess ownership positions over time.

Capital structure presents a fundamental tension between equity value and token value, particularly when tokens capture most of the network's economic value. Token-based projects typically allocate 30-50% of supply to community and ecosystem development, compared to the traditional 10-20% employee equity pools, representing a significant shift in value distribution approach. Monitoring approaches are revolutionised by on-chain transparency and smart contracts, which reduce traditional monitoring costs while simultaneously requiring new forms of technical expertise to evaluate protocol security and network health.

Governance structures evolve from traditional board oversight to active participation in transparent, on-chain governance systems, fundamentally changing how investors exercise control and influence strategic decisions throughout the project lifecycle.

E.3 Value-Add Evolution

The value-addition role of VCs in token-based startups requires developing specialised capabilities that differ significantly from traditional board representation and strategic guidance. VCs must develop expertise in tokenomics design to help projects create sustainable economic models that align incentives across all stakeholders. Technical validation becomes crucial, requiring a deep understanding of protocol architecture, consensus mechanisms, and smart contract security that extends beyond traditional technology due diligence.

Ecosystem bootstrapping represents a new category of value-add services, where VCs help projects build network effects through strategic partnerships, community development, and liquidity provision mechanisms. Governance participation evolves into an active, ongoing responsibility rather than periodic board oversight, requiring VCs to engage directly in on-chain governance processes, proposal creation, and community consensus-building activities that have no parallel in traditional venture investing.

F Glossary of Key Terms

F.1 Lifecycle and Development

Whitepaper Quality The technical documentation standard that serves as a quality signal to attract investors and community interest, balancing technical detail with accessibility while outlining project specifications, token economics, and vision.

Technical Transparency The degree of openness in sharing code, development progress, and technical decisions, creating tradeoffs between competitive advantage and community trust through public development processes.

Testnet Phase The deployment of a testing environment that simulates mainnet conditions with broader participation than traditional beta testing, where decisions about decentralisation and consensus mechanisms are tested in practice with often financially incentivised participants.

Exchange Partnerships Strategic relationships with trading platforms for token listings that significantly influence startup success, requiring specialised connections and technical integration capabilities for market access.

Market-Maker Relationships Strategic partnerships to ensure token liquidity and price stability through professional trading entities, involving different considerations than traditional financial partnerships and affecting project launch success.

Token Distribution Model The approach to allocating tokens across different stakeholders (investors, team, community, ecosystem development), with structured presales before main launches showing higher success rates and significantly impacting project sustainability.

F.2 Investment and Capital Structure

Equity-Token Value Relationship The fundamental tension in value distribution when tokens capture most network value while equity investors seek returns, requiring strategic balance between traditional equity investor returns and token-based value capture.

Staging Approach The method of providing capital in phases that shifts focus from traditional milestone-based equity rounds to vesting schedules and token release mechanisms, adapted for fixed token supplies that create certainty around dilution dynamics.

Fixed Supply Nature The predetermined total number of tokens that will ever exist, creating certainty about future dilution compared to traditional equity, where new shares can be issued indefinitely, affecting investor sizing and timing decisions.

Structured Presales Private token sales conducted before public launch, with evidence showing projects organising presales before main token events achieve higher success rates (81%) and better community engagement.

Community Allocation The percentage of token supply dedicated to community and ecosystem development (typically 30-50%), representing a fundamental shift from traditional 10-20% employee equity pools toward broader stakeholder value distribution.

Vesting Schedules Token release timelines are typically longer than traditional equity vesting to align with extended development timelines and network maturation, countering premature exit incentives in volatile markets.

F.3 Governance and Control

On-chain Governance Transparent, blockchain-based decision-making systems where proposals, discussions, and voting occur in open digital spaces with all stakeholders able to observe and participate, contrasting with traditional closed-door board meetings.

Progressive Decentralisation The planned transition from founder/investor control to community governance, where success is measured by decreasing rather than consolidating control, requiring careful timing to maintain project stability while achieving decentralisation goals.

Board Oversight Transition The shift from traditional board structures with fiduciary duties and confidential decision-making to community-driven governance through public forums and transparent processes enabled by blockchain technology.

Token Governance Investor participation in protocol governance through voting, proposal creation, and community engagement, requiring specialised governance teams and ongoing resource allocation different from traditional board representation.

F.4 Operations and Technical

Smart Contract Implementation Programmable agreements that execute automatically and create algorithmic constraints on founder behaviour, reducing agency costs by making certain actions technically impossible rather than just contractually prohibited.

Technical Expertise Requirements Specialised knowledge needed for blockchain development, protocol design, and security considerations, including protocol architecture, consensus mechanisms, and smart contract security that extends beyond traditional startup technical needs.

On-chain Data Monitoring Using blockchain transparency to track real-time network usage, token flows, and economic activity as alternatives to traditional financial reporting, providing verifiable metrics that reduce traditional monitoring needs.

Market Volatility Management Strategies for managing token price fluctuations' impact on operational planning, team motivation, and project sustainability, requiring different approaches than traditional revenue-based business planning.

F.5 Growth and Community

Community Engagement Building and maintaining engaged user communities is critical for token project success throughout different lifecycle stages, involving different strategies than traditional customer relationships due to the participatory nature of token networks.

Network Effects Token-based growth mechanisms that leverage network participation and token incentives to drive adoption differently from traditional customer acquisition, where value increases with more participants in the network.

Tokenomics Design The creation of token economic models, including supply schedules, utility functions, and incentive structures that align all stakeholders toward sustainable project growth, requiring specialised expertise in economic mechanism design.

G Interview Questions

G.1 General Questions

1. How many years of experience do you have as a founder?
2. Have you previously founded traditional (non-token) startups?

G.2 Lifecycle and Development Approach

- How important was whitepaper quality and technical transparency in attracting early investors and community interest?
- Has maintaining transparency throughout development (open-source code, public forums) been beneficial or challenging for your project?
- How do you balance technical transparency with competitive advantages in your development approach?
- What were the key success metrics you tracked during your testnet phase, and how did you distinguish genuine engagement from incentive-driven participation?
- How critical were exchange partnerships and market-maker relationships to your project's success at launch?
- What token distribution model did you choose and why? How effective was it for building sustainable community engagement?

G.3 Fundraising and Capital Structure

- How do you manage the relationship between your equity investors and token value, especially when tokens capture most of the network value?
- What staging approach did your investors take, and how did milestones differ from traditional startup funding rounds?

- How did the fixed supply nature of your tokens affect investor interest and deal structuring?
- Did you conduct structured presales or private rounds before your main token launch? What was the impact on overall success?
- How do you view allocating 30-50% of token supply to community and ecosystem development compared to traditional customer acquisition spending?
- How do longer vesting schedules (compared to traditional startups) affect team motivation and retention?

G.4 Governance and Investor Relations

- How has your relationship with investors evolved as you've moved toward on-chain governance and progressive decentralisation?
- What role do your investors play in token governance, and how do you balance their influence with community decentralisation goals?
- How do you manage the transition from traditional board oversight to community-driven governance?
- What unique value-add services have your crypto-native investors provided that differ from generalist VC support?
- How has investor monitoring changed since mainnet launch, particularly with access to real-time on-chain data?

G.5 Operational and Strategic Differences

- How do smart contracts and programmable token mechanisms reduce operational complexity or agency issues compared to traditional legal agreements?
- What technical expertise did you need to build internally that differs from traditional startups?
- How do you measure success and key performance indicators differently from traditional startups?
- What regulatory considerations have most significantly shaped your capital structure and operational decisions?
- How do market cycles and token price volatility affect your operational planning compared to traditional revenue-based planning?

G.6 Community and Network Effects

- How important is community engagement to your project's success, and how do you maintain it throughout different lifecycle stages?

- What role does community governance play in your long-term strategy, and how do you prepare for progressive decentralisation?
- How do network effects and token incentives drive growth differently from traditional customer acquisition?
- What challenges do you face in building sustainable tokenomics that align the community, investor, and founder interests?

H Glossary of Key Terms

H.1 Development and Launch Strategy

Whitepaper Quality and Technical Transparency The importance of creating comprehensive technical documentation that effectively attracts early investors and community interest while establishing project credibility through public specification sharing.

Open Development Approach The strategic decision to maintain transparency throughout development (open-source code, public forums) and how to balance this with competitive advantages, affecting community engagement and investor confidence.

Testnet Success Metrics Key performance indicators tracked during the testnet phase to measure project readiness, including methods to distinguish genuine community engagement from purely incentive-driven participation.

Exchange Partnerships and Market-Maker Relationships The strategic importance of securing relationships with trading platforms and liquidity providers for project success at launch, requiring specialised connections and coordination.

Token Distribution Model Selection The founder's choice of token allocation strategy across stakeholders and its effectiveness for building sustainable community engagement and project growth.

H.2 Fundraising and Capital Management

Equity-Token Value Relationship Management How founders balance satisfying traditional equity investor returns with token-based network value capture as projects evolve, managing potential conflicts between different stakeholder interests.

Investor Staging Approach The milestone-based funding approach taken by investors in token projects and how it differs from traditional startup funding rounds in terms of triggers and expectations.

Fixed Supply Impact on Deals How predetermined token supplies affect investor interest, deal structuring negotiations, and the overall fundraising process compared to dilutable equity structures.

Structured Presales Implementation Founder decisions around conducting private token sales before public launches and measuring their impact on overall project success and community perception.

Community Allocation Strategy The rationale for dedicating 30-50% of token supply to community and ecosystem development compared to traditional customer acquisition spending approaches.

Extended Vesting Schedule Effects How longer token vesting periods compared to traditional startups impact team motivation, retention, and alignment with project development timelines.

H.3 Governance and Investor Relations

Investor Relationship Evolution How founder-investor dynamics change throughout the transition from traditional oversight to on-chain governance and progressive decentralisation processes.

Investor Token Governance Role The specific role investors play in token governance and how founders balance investor influence with community decentralisation objectives.

Board to Community Governance Transition Founder strategies for managing the shift from traditional board oversight to community-driven governance structures while protecting stakeholder interests.

Crypto-Native Investor Value-Add Unique services provided by specialised blockchain investors that differ from generalist VC support, including technical expertise and industry-specific guidance.

Post-Mainnet Monitoring Changes How investor oversight and involvement evolve after mainnet launch, particularly with access to real-time on-chain data and transparent network metrics.

H.4 Operations and Strategic Implementation

Smart Contract Operational Benefits How programmable token mechanisms and automated agreements reduce operational complexity compared to traditional legal agreements and manual processes.

Technical Expertise Building Specialised blockchain knowledge that founders need to build internally, differing from traditional startup technical requirements, including protocol design and security considerations.

Success Measurement Differences How founders measure and track project success using different key performance indicators compared to traditional startup metrics, focusing on network adoption and token utility.

Regulatory Impact on Operations How regulatory considerations shape capital structure decisions and day-to-day operational approaches, often requiring specialised legal structures and compliance strategies.

Market Volatility Operational Planning How token price fluctuations and market cycles affect founder operational planning compared to traditional revenue-based business planning approaches.

H.5 Community and Network Development

Community Engagement Importance The criticality of community engagement to project success throughout different lifecycle stages and strategies for maintaining it as projects evolve.

Progressive Decentralisation Planning Long-term strategic approach to community governance and preparation for gradual control distribution to token holders while ensuring project sustainability.

Network Effects vs. Traditional Growth How founders leverage token incentives and network effects for growth compared to traditional customer acquisition approaches, emphasising participatory rather than transactional relationships.

Tokenomics Alignment Challenges Founder challenges in building sustainable token economic models that effectively align community, investor, and founder interests throughout project development.

I Interview Questions

I.1 General Questions

1. How many years of experience have you had in investing in startups?
2. What percentage of your portfolio is allocated to token-based versus equity investments?

I.2 Token-Based Startup Lifecycle

- How much weight do you give to whitepaper quality and technical transparency when evaluating early-stage blockchain investments?
- Has the importance of whitepaper quality changed over time in your investment decisions?
- How do you balance the need for transparency (i.e., technical specification, whitepaper and code base) with potential IP protection concerns?
- Have you noticed different outcomes for projects that adopt closed vs. open development approaches?
- How do you distinguish between genuine user interest and financially incentivised participation?
- How important are exchange partnerships and market-maker relationships to a token project's success?
- How do you advise projects to structure market-making arrangements?
- What token distribution models have proven most effective?
- How does your role as an investor change during and after a mainnet launch?
- How do your return expectations and timelines differ between token-based and traditional equity investments?

I.3 Staging in Token-Based Startups

- What metrics or milestones do you use to trigger subsequent investment rounds in token projects?

- Has your staging approach for token investments evolved?
- How do you evaluate your ownership position over time in token projects compared to traditional equity investments?
- Does the fixed supply nature of many tokens affect your investment size or timing decisions?
- Do you see higher success rates with projects that conduct structured presales before main token launches?
- What role does community allocation play in your token investment decisions?
- How do you determine optimal timing for token liquidation without negatively impacting the project?

I.4 Monitoring and Agency Costs

- Do you find on-chain data and code quality more effective for monitoring token projects than traditional business metrics used in equity investments?
- To what extent do smart contracts reduce agency costs compared to legal agreements?

I.5 Capital Structure

- How do you manage the tension between equity value and token value in your investments, particularly when tokens capture most of the network value?
- How do you view the significantly longer vesting schedules typically implemented in token-based startups compared to traditional equity investments?
- What are your thoughts on community airdrops and ecosystem development (30-50% of token supply) versus more traditional customer acquisition mechanisms?

I.6 Governance and Value-Add Services

- How has your governance participation changed from traditional board representation to on-chain governance in token-based projects?
- What specialised capabilities has your firm developed to effectively participate in token governance (e.g., dedicated governance teams, technical expertise)?
- How do you balance your influence as a major token holder with the principles of decentralisation and community governance?
- What unique value-add services do you provide throughout the lifecycle of token-based startups?