

CertiK Ventures **Investment Thesis**



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01 Executive Summary

To understand CertiK Ventures,
we must first delve into its roots: CertiK.

Founded in 2018, CertiK emerged as a pioneer in blockchain security, leveraging formal verification to safeguard smart contracts and decentralized systems. Over the years, it expanded to offer comprehensive security services, audits, and tools, cementing its reputation as a trusted partner in Web3, ensuring resilience, trust, and innovation across the ecosystem.

Today, CertiK has expanded its vision and mission, embracing a diversified approach aimed at **“Elevating Your Entire Web3 Journey.”**

A true Web3 journey begins with establishing a solid foundation. Web3 is more than a technology; it is a transformative paradigm fueled by innovation, expertise, and relentless effort. As pioneers in this ecosystem, it is essential for CertiK to remain at the forefront of this movement, driving the evolution and sustainability of Web3 from its very core.

The central question then arises: what can CertiK contribute to ensure a seamless and robust Web3 experience?

As a Builder. We are developers, engineers, and technologists, who leverage cutting-edge tools and frameworks that have defined and elevated industry standards over the years.

Grown with Builders. Our journey has been intertwined with the industry’s most visionary builders. Together, we’ve shaped and refined Web3’s security, usability, and infrastructure, learning and innovating alongside our collaborators.

Growth with Builders. Guided by our rich history, we are committed to empowering our partners and collaborators. Whether through strategic support, technical development, or shared innovation, we are here to co-create at every level of the Web3 ecosystem.

It was only natural, then, for CertiK to formalize this integral role in the Web3 space by establishing CertiK Ventures. With this initiative, we not only extend our commitment but embody our ethos as captured by CertiK Ventures’ slogan:

“As a Builder, Grown with Builders, Growth with Builders.”

CertiK Ventures, an initiative by CertiK

CertiK Ventures operates as a single General Partner (GP) fund, akin to a corporate venture capital (CVC) initiative, with \$45 million allocated for its inaugural year.

Strategically, CertiK Ventures seeks to establish partnerships with like-minded innovators and initiatives. Through fostering strong alignment between teams and businesses, we create opportunities for joint ventures, leading funding rounds, or even exploring mergers and acquisitions to maximize collaborative potential.

As an integral part of the developer community, CertiK Ventures actively champions blockchain ecosystem development by funding foundational initiatives such as incubators, accelerators, and hackathons. Beyond financial contributions, we provide ecosystem growth advisory, security expertise, and technical deployments to help projects thrive in a competitive landscape.

At a financial level, CertiK Ventures is committed to supporting early-stage Web3 projects across diverse verticals. Our focus is on engaging with teams that present not only innovative technical solutions but also compelling business models and value streams, ensuring a holistic approach to growth and scalability.

By building sustainable, trusted relationships, CertiK Ventures positions itself as a long-term partner for Web3 builders. Our engagement extends beyond traditional investment, encompassing activities like node operations, on/off-chain analytics, and improvement solutions.

These efforts solidify our commitment to fostering deep, enduring technical and business connections that drive the ecosystem forward.

02 Introduction

Cryptocurrency, blockchain, and the broader Web3 industry have often been viewed as a nascent and speculative domain for investment. Both institutional and retail investors are drawn by its groundbreaking innovation and immense growth potential, yet equally cautious due to its inherent uncertainties and volatility.

Over the years, the industry has undergone significant maturation, driven by technological advancements and market cycles that have established a more structured and predictable landscape.

Regulatory frameworks are progressively taking shape, with jurisdictions like the U.S., the EU, and Singapore introducing comprehensive guidelines for digital assets. This regulatory clarity has made the sector increasingly attractive to traditional funds and institutional investors, facilitating the entry of major players such as BlackRock and Fidelity into the crypto space in 2021 and beyond.

The evolution of Web3 has been marked by pivotal waves of innovation. The 2017 surge of Ethereum and Initial Coin Offerings (ICOs) demonstrated blockchain's potential as a fundraising tool, raising over \$6 billion that year alone.

This was followed by the DeFi (Decentralized Finance) boom in 2020, which showcased the viability of decentralized financial systems, locking in over \$230 billion in total value at its peak in 2021.

Similarly, the NFT (Non-Fungible Token) explosion and subsequent “summers” of 2021 brought digital art and collectibles into mainstream consciousness, paving the way for new concepts like the Metaverse, GameFi, and SocialFi.

Each wave not only introduced novel use cases but also unlocked profitable opportunities for venture capital in the Web3 space.

The success of Web3 venture capital has been propelled by a spectrum of strategies. Early entrants like Andreessen Horowitz (a16z), which launched its \$300 million crypto fund in 2018, showcased the value of early conviction. Pantera Capital, one of the earliest crypto VCs founded in 2013, highlighted the importance of long-term vision with its focus on blockchain infrastructure. Paradigm, co-founded by Coinbase's Fred Ehrsam in 2018, combined deep research and technical expertise to back disruptive innovations.

Meanwhile, Asia-based VCs like IOSG Ventures and HashKey Capital have provided critical support to Web3 ecosystems, particularly in emerging markets, demonstrating the global scope of blockchain adoption.

From pioneers who believed in the transformative potential of blockchain when it was considered “too early,” to those who meticulously supported builders with ideas, research, and funding, Web3 venture capital has evolved into a cornerstone of the industry.

By aligning vision with innovation and growth, these VCs have not only contributed to the sector’s resilience but also set the stage for the next era of blockchain-powered advancements.

Empowered by Legacy

As a Corporate Venture Capital (CVC) entity, CertiK Ventures operates within defined strategic parameters. Unlike independent venture capital firms that independently spearhead emerging concepts and trends, CertiK Ventures aligns closely with the strategic priorities and direction set by its parent company, CertiK. This interconnected relationship ensures that its investment thesis is inherently tied to CertiK’s overarching vision and strategic objectives.

Despite the nature of a CVC, CertiK Ventures remains both an empowering force for the Web3 ecosystem and empowered by its affiliation with CertiK. The strength of CertiK Ventures lies in its capacity, as part of the CertiK ecosystem, to establish and uphold robust industry standards. These standards may not claim to be the most innovative but are among the most reliable, providing a solid framework that fosters trust among project founders, institutional partners, and regulators.

This approach addresses the inherent challenges of trustless environments, creating a foundation for compliance, security, and sustainable growth.

Trustworthy Principles within Trustless Environment

In this Investment Thesis, CertiK Ventures outlines not only its investment philosophy, strategic directions, and methodologies but also its proprietary investment grading and scoring metrics. These metrics encompass rigorous requirements across market, business, technical, and legal dimensions, along with supplementary qualitative assessments such as team cooperativeness and professionalism. This comprehensive approach positions CertiK Ventures as the first venture capital entity to openly share its functional and procedural frameworks with the community.

In line with its commitment to transparency, CertiK Ventures has made its Investment Thesis and Assessment Metrics publicly accessible for comments and suggestions. This openness transcends a mere declaration of methodology; it establishes a collaborative platform where investors, researchers, and project founders can critically analyze, refine, and co-create a more inclusive and adaptable framework. By inviting constructive feedback, CertiK Ventures’ framework evolves dynamically, aiming to become a widely recognized and continuously improving standard for assessing Web3 initiatives.

This collaborative approach ultimately strengthens the foundational principles of trust and accountability within the decentralized ecosystem, reinforcing CertiK Ventures' mission to build reliability within a trustless environment.

Visions and Methodologies

With CertiK Ventures' identity defined and its principles continuously evolving, the vision it embraces is inherently inclusive.

Rooted in CertiK's core competencies and leveraging the research-driven insights of its in-house engineering and research team, this Investment Thesis strives to identify and explore untapped opportunities in the security vertical. While many aspects of Web3 security remain in development, CertiK Ventures aims to focus on these unfinished areas, positioning itself as a key contributor to the advancement of secure blockchain ecosystems. The vision is then expanded to encompass broader opportunities where CertiK's expertise can drive significant developer enablement across various sectors of Web3.

Aligned with its focus on developer empowerment, the Thesis delves into the investment and business opportunities within Layer 1 and Layer 2 ecosystems, addressing the different support needs throughout the development lifecycle. This approach aims to catalyze growth in targeted ecosystems while contributing to the broader blockchain landscape.

Above all, this Investment Thesis aims to clarify and consolidate market opportunities across Web3's diverse verticals. By applying the proposed framework, it highlights opportunities that present both short-term and long-term market potential, creating a path toward substantial returns on investment. The goal is to identify areas within Web3 that can drive sustained attention, capital flow, and industry development, reinforcing CertiK Ventures' role as a strategic enabler of Web3 innovation.

I - Strategic Investment

CertiK Ventures: Driving Innovation, Growth, and Security in Web3

At CertiK Ventures, our core philosophy is simple yet powerful:

“As a builder, grown with builder, growth with builder.”

This guiding principle underscores our unwavering dedication to the developer community, supporting innovation, growth, and resilience in the blockchain ecosystem. Our strategic investment thesis is focused on two foundational pillars: **Security Innovation**, and **Developer Enablement**.

We focus on advancing security methodologies such as fuzzing, formal verification, and transaction monitoring, as well as combating phishing attacks. Additionally, we champion collaborative initiatives, including hackathons and educational platforms, to empower and uplift the next generation of builders and developers.

By supporting these areas, CertiK Ventures is committed to creating a resilient and trustworthy Web3 environment, enabling developers to thrive and innovate with confidence. This thesis will be updated as the industry evolves, ensuring it remains an ever-changing document that reflects the latest developments and challenges in the Web3 space.

Security Innovation: Automated Advanced Auditing

General Market Opportunity/Verticals Intro:

The Web3 space, particularly around blockchain and smart contract security, sees substantial activity in automated advanced auditing such as **fuzzing, formal verification** for vulnerability detection. We must also address the potential elephant in the room of AI auditing as that is something inevitable and a direction we potentially see growing in the horizon. The overall market size for these methods within Web3 isn't always clearly delineated, as it is often integrated into broader blockchain security efforts.

Fuzzing:

Fuzz testing has become a standard tool for detecting vulnerabilities in blockchain applications, particularly for smart contracts. Fuzzing works by inputting random, malformed, or unexpected data to smart contracts to identify potential failures or vulnerabilities. Its value lies in its speed and ability to find vulnerabilities in systems with complex interactions.

Formal Verification:

In comparison, formal verification provides a more deterministic and mathematically rigorous method for ensuring that smart contracts adhere to specific properties, such as safety and correctness. While it is computationally intensive, it can ensure that vulnerabilities are identified even before deployment, a key feature for high-risk environments like DeFi.

AI Auditing:

The subtype of AI auditing we mention here will be auditing programs that use artificial intelligence systems to perform auditing. This system could operate in the environment of the users development environment thus potentially increasing efficiency and speed.

Together, these methods form the backbone of security in Web3. The market for blockchain security continues to grow. The demand is driven by the expanding adoption of blockchain technologies especially as more capital flow on chain and security risks can have severe consequences. As the ecosystem matures, more emphasis is being placed on these advanced testing methodologies, ensuring the long-term viability and trust of blockchain solutions.

Market Landscape & Unique problematics vs solutions:

Fuzzing:

As Web3 development advances, automated fuzzing tools are becoming essential for continuous security testing, enabling early vulnerability detection and integration into development workflows.

- **Automated / Continuous Fuzzing Tools:**

Tools such as MythX and Fuzzland are gaining traction due adopting automated or continuous detection. While exact adoption rates may vary, the overall growth trajectory of such technologies indicates that they are rapidly becoming a staple in the Web3 development lifecycle.

- **Increased Automation and Integration:**

Automated fuzzing tools are becoming more advanced, integrating seamlessly into CI/CD pipelines, enabling continuous security testing with each code change, detecting vulnerabilities early in the development process, and scaling testing efforts with minimal human intervention.

- **Enhanced AI and Machine Learning Integration:**

AI and ML are revolutionizing web fuzzing by generating smarter, context-aware payloads and adapting testing strategies based on real-time feedback, focusing on areas with a higher probability of uncovering vulnerabilities.

- **API and Microservices Focus:**

Fuzzing is increasingly targeting APIs and microservices, with specialized tools designed

to test RESTful APIs, GraphQL endpoints, and microservice architectures, addressing complex interactions and distributed data processing challenges.

With improvements in automation, AI, and a focus on APIs and microservices, fuzzing is evolving into a critical tool for enhancing the security and scalability of decentralized applications.

Formal Verification:

Formal verification is a highly specialized discipline that relies on rigorous mathematical and logical frameworks to prove the correctness of systems. Despite its potential to provide unparalleled security guarantees, its adoption in Web3 faces challenges such as:

- **Industry Knowledge Disparity:**

Developers and auditors often lack formal methods training, making it challenging to not only integrate verification into the software lifecycle but also identify the right invariance or properties that needs to be tested for different verticals.

- **Scarcity of Talent:**

The pool of professionals skilled in formal methods is limited, driving up costs, effectiveness and extending timelines.

- **Tool Usability:**

Existing formal verification tools are complex and lack user-friendly interfaces, further alienating non-expert developers. The key to effective use of formal verification lies in beyond identifying the invariance or properties that need to be tested. Thus we see a market for a more intuitive formal verification framework to be developed.

With the above in mind, this presents an opportunity to look outward and explore solutions that tackle effective use cases leveraging CertiK's extensive experience and knowledge base. CertiK's co-founders, who have conducted groundbreaking research on formal verification at Columbia University and Yale, provide a solid foundation to lead advancements in this space. Alternatively, by leveraging our formal verification expertise, we could consider developing an in-house formal verification SaaS product, offering scalable and automated solutions tailored to the unique needs of blockchain projects. This would position CertiK as a leader in delivering accessible, high-assurance tools to the Web3 ecosystem.

AI Auditing:

AI auditing in Web3 is an emerging vertical with significant promise, but it is still in its infancy. While AI has the potential to transform blockchain security, its development faces fundamental challenges, including:

- **Data Scarcity:**

Despite blockchain's transparency, the available data is fragmented and insufficient for training robust AI models. Even if all blockchain data were aggregated, the dataset would remain too sparse and skewed for effective AI training.

- **Complexity of Blockchain Data:**

The diversity of protocols, smart contract languages, and on-chain/off-chain interactions makes it difficult for AI models to analyze blockchain ecosystems

- holistically.

- **Dynamic Threat Landscape:**

Blockchain evolves rapidly, with new protocols and attack vectors emerging regularly, rendering AI models trained on static datasets ineffective against novel threats.

These challenges highlight the early-stage nature of AI auditing in Web3. However, as blockchain adoption grows and datasets expand, AI-driven solutions are expected to become more viable. This vertical warrants close monitoring as advancements in machine learning techniques and blockchain data standardization continue to unfold.

Trends and Niche Services in Blockchain Automated Security Tools

- **Specialization by Ecosystem:**

Many tools are designed specifically for unique blockchain ecosystems or programming environments, such as Ethereum (Echidna) or Solana (Trident). This specialization ensures better compatibility with the nuances of these platforms.

Integration with Broader Security Frameworks:

Tools often combine fuzzing with additional features, such as symbolic execution, debugging, or property-based testing, to create comprehensive security pipelines.

- **Automation and Accessibility:**

There is a push toward making fuzzing and formal verification more automated and user-friendly, catering to both security professionals and developers without extensive blockchain expertise.

- **Support for Emerging Protocols:**

Tools like Tayt highlight the growing focus on newer ecosystems, such as Starknet, catering to their unique requirements and fostering early-stage protocol security.

- **Education:**

Comprehensive education around fuzzing and formal verification are essential for engineers to effectively utilize this tool. It is critical for fuzzing engineers to thoroughly understand how to design tests around invariants and interactions between cross-contracts. Without this foundational knowledge, even the most advanced tools cannot deliver optimal results.

Alignment with CertiK Ventures:

As a leader in the blockchain security space with a mission to secure the Web3 world, CertiK recognizes the significance of advanced auditing technologies like fuzzing, formal verification, and AI auditing. These tools are integral to addressing the evolving challenges in blockchain security, and CertiK Ventures is committed to dedicating half of its \$22 million fund to this effort.

At CertiK Ventures, we remain at the forefront of automated security solutions by actively advancing technologies such as fuzzing and formal verification. Our founders, distinguished PhDs in formal verification from Columbia University and Yale, provide unparalleled expertise in these areas. By aligning our investment strategy with these advancements, we aim to identify and acquire innovative solutions that fortify and secure the Web3 ecosystem.

This approach not only strengthens our mission but also expands our portfolio with cutting-edge technologies that enhance blockchain robustness, scalability, and trustworthiness, ensuring CertiK continues to lead the way in securing the decentralized future.

Risk Analysis:

- **Data Limitation and Bias:**

Though there are no promising AI auditing tools yet, it's important to note the risks. A major challenge is the lack of sufficient data for training AI models, which can lead to bias in the auditing process. Even when data is aggregated, it might not be comprehensive or representative, limiting the model's effectiveness. Additionally, AI auditing tools are often black-box systems, making it hard to interpret how they reach their conclusions, which could undermine trust in their results.

- **Human Intervention and User Error:**

Semi-automated fuzzing and formal verification tools rely heavily on human input, making them labor-intensive and prone to mistakes. Engineers must define properties for contract implementations and guide the generation of mathematical proofs, a task that is time-consuming and critical for detecting vulnerabilities. The quality of these properties directly affects the tool's effectiveness, and manual inputs increase both costs and the risk of errors, limiting the success of the verification process.

- **Adoption Lag:**

Smaller DeFi protocols (<\$10 million TVL) may deprioritize expensive fuzzing or formal verification services, limiting the total addressable market. Looking at opportunities that cater to this market would be helpful. However, this could be an area for AI auditing once mature and reliable.

Security Innovation: Proactive Transaction Monitoring & Prevention

General Market Opportunity/Verticals Intro:

Transaction monitoring is a powerful tool for detecting suspicious activity and potential money laundering attempts. By analyzing transaction patterns, volumes and frequencies, monitoring systems can flag unusual behaviors that may indicate illicit activities, allowing businesses to take prompt action and mitigate risks. Since 2020, ~\$12B have been lost to scams and hacks and being able to detect malicious behavior at the precise time of their occurrence would have prevented a lot of these malicious acts. As more capital and users move on-chain the prize pools for these hackers will only grow bigger, and these hacks will only become smarter.

Current Trends:

Recent trends in **transaction monitoring in crypto** reflect the industry's efforts to enhance compliance, security, and transparency. Key developments include:

- **Increased Focus on Regulatory Compliance**

With tightening global regulations, transaction monitoring tools are integrating features to meet AML (Anti-Money Laundering) and CFT (Counter Financing of Terrorism) requirements, such as identifying suspicious patterns and reporting them in real time.

- **AI and Machine Learning Integration**

Advanced algorithms are being deployed to detect unusual behavior, adapt to emerging fraud schemes, and improve false-positive rates. Predictive analytics is becoming a core feature. Projects such as Forta employ ML to ensure accuracy and speed.

- **On-chain and Off-chain Data Fusion**

Platforms are blending on-chain activity with off-chain metadata (e.g., IP addresses, user profiles) to create more holistic risk assessments.

- **Real-time Monitoring and Risk Scoring**

Speed is critical in crypto. Tools now not only provide instant transaction risk scores, but also enable automated responses like halting suspicious transfers before confirmation. Solutions like cube3.ai and Militeum build that extra layer of firewall for users when making transactions with risky addresses, creating that extra layer of firewall security.

- **Privacy-preserving Solutions**

With increasing privacy concerns, solutions are emerging that balance compliance with user anonymity, using technologies like zero-knowledge proofs.

- **Collaboration with Blockchain Analytics**

Partnerships with blockchain analytics firms such as Chainalysis, Elliptic are growing,

enhancing monitoring tools with more extensive databases and intelligence on wallets, addresses, and illicit networks. We see more partnerships happen such as Chainalysis and Hypernatives' collaboration.

- **Cross-chain and Multichain Tracking**

As multichain ecosystems grow, monitoring tools are evolving to track transactions across multiple blockchains, identifying illicit activity in bridge protocols and beyond.

Alignment with CertiK Ventures:

Investing in transaction monitoring and prevention tools aligns with CertiK Ventures' mission to build a secure and trustworthy blockchain ecosystem. Investing in cutting-edge technology enhances real-time detection and prevention of exploits, fraud, and malicious activity, complementing CertiK's focus on preemptive security measures. By supporting innovative solutions that foster trust and scalability, CertiK Ventures strengthens its security portfolio and drives the safe expansion of Web3 technologies.

Risk Analysis:

- **Balancing Accuracy and Alerts:**

Investing in transaction monitoring and prevention tools involves the risk of false positives and negatives. While no tool can deliver perfect accuracy, it is critical to strike the right balance to minimize unnecessary alerts while ensuring genuine threats are not overlooked.

- **Integration Challenges:**

Implementing these tools requires significant effort upfront, as integration often involves extensive technical work and heavy lifting. This can delay deployment and add to operational complexity.

- **Impact on Censorship Resistance and Decentralization:**

Integrating monitoring tools can inherently compromise the censorship resistance and decentralization principles of protocols. It is essential to be mindful of this trade-off when adopting such solutions.

- **User Perception and Trust:**

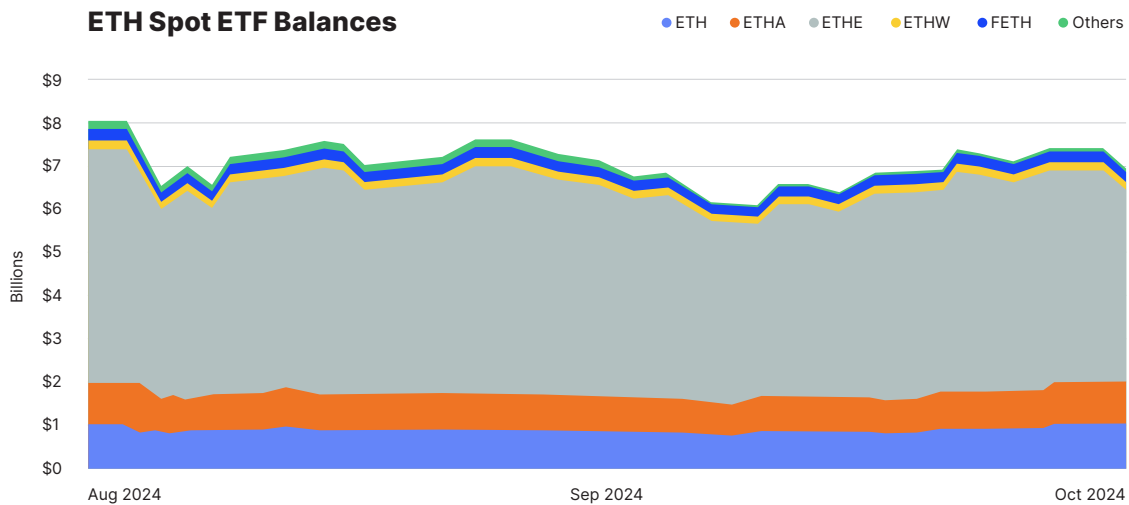
Another potential risk lies in how clients perceive the promotion of these tools. Some may view it as an upsell rather than a necessary enhancement. To address this, it is important to communicate that audits are a foundational layer of security, but they cannot address all vulnerabilities. Complementary tools, like transaction monitoring, provide additional protection and work alongside existing measures. Building trust through transparency is vital to alleviating these concerns.

Security Innovation: Anti-Phishing tools

General Market Opportunity/Verticals Intro:

Phishing attacks are not unique to the crypto space; they are a longstanding type of scam that predates cryptocurrency, but their implications in the crypto world bring new challenges. Phishing is a form of social engineering designed to steal sensitive user information, such as login credentials or wallet details. Attackers typically deceive victims into revealing this data via phishing websites or by convincing them to connect their wallet to a fake browser extension. While phishing attacks may target individuals, the ultimate goal is often to infiltrate larger systems the victim has access to. Although these scams have extended into the crypto realm, they are not confined to it. In fact, global studies revealed that in 2020, 75% of organizations encountered some form of phishing attack, with 96% of these attempts delivered via email.

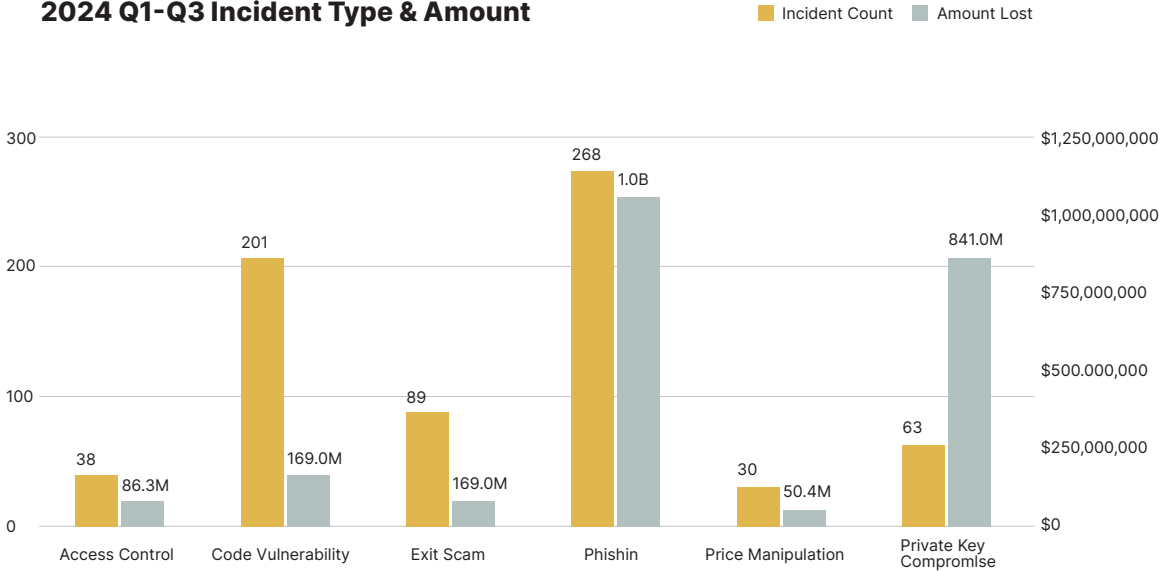
In Q3 2024, we saw a slight decline in the number of hacks but a ~10% increase in total value lost. This shift suggests that attacks on average were more substantial, highlighting the continued need for stronger security measures. This quarter Spot Ethereum ETF was approved which captured \$7.1B after launching in July. With the influx of capital from ETFs driving heightened interest in digital assets, safeguarding both new and existing users against phishing scams becomes increasingly critical to ensure trust and security in the growing ecosystem.



Market size:

According to CertiK's Hack3d Report, phishing scams accounted for approximately 45% of all incidents in 2024, resulting in losses of around \$1 billion as of Q3.

2024 Q1-Q3 Incident Type & Amount



Phishing scams will grow exponentially as more capital and users move on-chain. In 2022, phishing scams amounted to around \$71M, and by Q3 of 2024, we've seen these numbers skyrocket to \$1B. (Note: These figures only account for phishing scams involving amounts over \$10,000, meaning the actual total could be even higher.) This alarming trend highlights a significant opportunity for innovative phishing prevention and detection solutions to emerge, addressing this escalating challenge and safeguarding the growing Web3 ecosystem.

Year on Year Losses due to Phishing Scams



Current trends:

According to CertiK's Hack3d Report, phishing scams accounted for approximately 45% of all incidents in 2024, resulting in losses of around \$1 billion as of Q3.

Wallet Drainer Scams

As Web3 development advances, automated fuzzing tools are becoming essential for continuous security testing, enabling early vulnerability detection and integration into development workflows.

- **Permit Phishing:**

Attackers exploit ERC-20 functions like *“Permit”* or *“IncreaseAllowance”*, tricking victims into unknowingly signing malicious transactions. These phishing attempts often occur through deceptive dApps or fake platforms, leading victims to grant token spending permissions. Once permissions are granted, attackers can transfer assets directly, leaving victims with no recourse.

- **CREATE2 Abuse:**

CREATE2 is an Ethereum opcode allowing developers to pre-calculate the address of a smart contract before deployment. While it enables innovative functionalities like flexible contract deployment and off-chain transactions, it also introduces security risks. Attackers can generate “clean” addresses with no transaction history to bypass blacklist detection in wallets. After tricking victims into signing a transaction, they deploy malicious contracts at these addresses, enabling asset theft in an irreversible manner. This technique has seen a rise in popularity due to its ability to evade standard detection systems.

Address Poisoning Scams

Address poisoning scams exploit users' reliance on their transaction history when copying wallet addresses. Attackers send small transactions using wallet addresses similar to the victim's frequently interacted addresses. These fake transactions populate the victim's wallet history with the attacker's address, increasing the likelihood of victims mistakenly sending funds to the wrong address. While these scams are less direct, they rely on human error and social engineering to achieve their goal.

Alignment with CertiK Ventures:

Investing in anti-phishing tools is essential for CertiK Ventures to reinforce Web3 security and build trust in the blockchain ecosystem. Phishing attacks are among the most prevalent threats in the industry, targeting users and projects to steal assets and sensitive data.

By supporting innovative anti-phishing solutions, CertiK Ventures not only protects end-users but also strengthens the security infrastructure of Web3, fostering safer adoption and growth for blockchain technologies.

Risk Analysis:

Investing in an anti-phishing tool carries inherent risks, including the possibility that the tool may not be able to detect all phishing attempts, as attackers continuously evolve their techniques. Additionally, reliance on such a tool may lead to complacency in user vigilance, potentially exposing investments to other types of cyber threats. Furthermore, the effectiveness of the tool could be impacted by frequent updates and ongoing maintenance, and there is always a risk that the tool itself could have vulnerabilities that could be exploited.

Security Innovation: Decentralized Auditing Model

We've observed some security providers adopting alternative business models, such as decentralized auditing. In our view, this approach diverges from the core objective of being a leader in security within the space for the following reasons:

- **Quality Control and Accountability:**

Decentralized auditing often lacks the rigorous oversight and quality assurance that centralized teams provide, leading to inconsistent results and potentially eroding trust among users.

- **Client Preference for Continuity:**

Many clients value the ability to work with the same trusted auditing team for repeat engagements. This level of personalized service is incompatible with the decentralized model's inherent anonymity and randomness.

- **Conflict with Strategic Vision:**

CertiK aims to become the security standard in Web3, akin to the Big Four in traditional financial accounting. Achieving this requires a foundation of credibility, consistency, and trust—attributes that decentralization and anonymity inherently lack.

- **Controlled Expertise:**

Security auditing requires a controlled group of highly skilled and credible professionals. Decentralization, which opens the process to a wide and variable pool of participants, risks undermining the reliability and integrity that clients demand.

Thus, while the decentralized model has merit in other areas of Web3, such as incentivizing participation or enabling trustless interactions, it falls short in the context of providing a reliable and authoritative stamp of approval. Anonymity and inconsistency are significant weaknesses in the security space, where clients often seek the assurance of working with the same team that possesses prior knowledge of their systems.

Adjacent Business Opportunity Introduction: Developer Enablement

At CertiK Ventures, we are eager to invest in projects that address key areas critical to the growth and success of the blockchain ecosystem. Our slogan, “As a builder, grown with builder, growth with builder,” reflects our commitment to empowering the developer community beyond our security services. We are particularly interested in supporting initiatives that tackle the following fields:

Hackathons:

We are actively seeking investment opportunities in platforms and projects that focus on hackathons as a means to drive innovation and community-building within the web3 space. Hackathons provide developers with an opportunity to collaborate, experiment, and create groundbreaking solutions, and we believe that supporting these events accelerates the development of decentralized technologies. Hackathons have proven to be highly effective in generating real-world use cases and new projects, as evidenced by platforms like **Dorahack**, **ETHGlobal** and **Gitcoin**. We see significant value in backing platforms that host or facilitate hackathons, which not only encourage collaboration but also help identify new talent and foster developer growth.

Education and Mentorship:

We recognize that the learning curve for Web3 is steep, creating a significant barrier for many talented individuals to enter the space. To address this, we are eager to invest in projects that provide streamlined, decentralized, and accessible resources, workshops, or mentorship programs for the next generation of blockchain developers.

As blockchain and Web3 technologies continue to evolve, so does the demand for specialized knowledge and skills. CertiK Ventures is committed to supporting platforms and initiatives that prioritize developer education, ensuring the growth of a skilled and security-conscious development community. Platforms offering developer boot camps or specialized workshops in areas like blockchain security and smart contract development are particularly appealing, as they equip developers with the tools needed to build secure, scalable applications.

While existing Web3 job platforms and ecosystem foundations have provided some resources for engineers entering the space, there remains a lack of a centralized hub for comprehensive learning materials. Furthermore, Web3 blockchain coding often relies on a mentorship-driven model, where much of the learning happens through reviewing documentation, hands-on experience, and shadowing seasoned developers.

Given this, we are especially interested in projects that foster such mentorship and provide broader support for the Web3 developer community. These initiatives play a crucial role in shaping the next generation of developers and advancing the adoption and security of the Web3 world. CertiK Ventures is uniquely positioned to invest in such initiatives due to its

leadership in the security space and access to a team of seasoned engineers, many of whom hold PhDs and maintain strong ties to leading universities. This rich academic and technical foundation enables us to contribute not only financial support but also unparalleled expertise and mentorship, making us a strong partner for initiatives that advance blockchain education and security.

Closing Thoughts Valuation Framework:

In the fast-evolving field of blockchain security, traditional valuation methods often fall short due to limited benchmarks and comparable examples. CertiK Ventures addresses this challenge with a multifaceted approach that blends insights from cybersecurity with Web3-specific metrics. Our methodology considers early-stage market dynamics, technology adoption rates, and the critical role of security innovation to deliver fair and strategic valuations. Below are the key dimensions we use to assess and benchmark project potential:

1. Use Comparable Transactions

Industry Multiples

Cybersecurity companies provide a useful starting point for valuation comparisons. These companies are often valued using revenue multiples, with:

- **Small-scale or early-stage companies:**
Typically valued at 4–8x Annual Recurring Revenue (ARR), reflecting the risk associated with growth-stage companies and their limited market presence.
- **Larger, established firms:**
Valued at 8–12x ARR or higher, particularly for market leaders with strong brand recognition and sustainable revenue streams.

Application in Blockchain Security

While Web3 and blockchain-focused projects may not yet have comparable peers, we focus on identifying companies mature enough to provide some track record. This could include completing successful beta tests, achieving initial revenue milestones, or showcasing traction in key market segments.

2. Market Potential

Key Indicators:

- **Adoption Speed:**
For markets with less direct quantifiable data, adoption speed can be a proxy.

Fast adoption of a specific security technology often reflects significant demand and potential for long-term growth. Tracking developer interest and integration rates can also signal broader market acceptance.

- **Size of Loss:**

Quantifying the potential loss avoided by using the security service. For example, anti-phishing tools can demonstrate their value by preventing millions in phishing scam losses. On the other hand, technologies like fuzzing or formal verification may have less immediately tangible metrics but can still demonstrate value by preventing catastrophic exploits.

3. Customer and Revenue Metrics

- **Customer Base:**

Metrics like the number of customers (both paid and beta users), retention rates, and customer engagement provide critical insights into a project's viability. Retention rates are particularly important as they indicate user satisfaction and the likelihood of recurring revenue.

- **Penetration in Key Verticals:**

Success in high-value verticals, such as DeFi, layer-1 ecosystems, or high-traffic NFT platforms, enhances valuation. Projects that secure adoption by industry leaders or top-tier companies demonstrate strong market credibility.

- **Pipeline of Engagements:**

A healthy pipeline, evidenced by partnerships or contracts with top-tier organizations, signals strong future growth potential. The ability to penetrate competitive markets reflects the project's competitive edge and scalability.

4. Synergy Potential

- **Cost Savings:**

By identifying opportunities for operational efficiencies, we assess how a project could integrate with existing CertiK capabilities or other portfolio investments. Shared resources, such as infrastructure or engineering teams, can result in significant cost reductions.

- **Revenue Synergies:**

For projects with partnership potential, we evaluate the likelihood of cross-selling opportunities, market expansion into new verticals, and enhanced pricing power through collaborative product integration. These synergies are crucial in maximizing the mutual value created through strategic alliances. For projects with M&A potential, we assess the opportunities for market expansion, cross-selling, and increased pricing power post-merger. This analysis helps estimate the total economic value a project could bring when integrated into an existing portfolio or business structure.

5. Technology and Innovation

- **Proprietary Technology:**

Proprietary tools, algorithms, or patents offer competitive advantages and justify premium valuations. The uniqueness of a project's technology can also be a differentiator in crowded markets.

- **R&D Capabilities:**

A strong focus on research and development signals a company's ability to remain innovative and adaptable. Projects with dedicated R&D teams and a track record of launching new features or products are more likely to sustain long-term competitiveness.

Scalability of the Technology

Beyond innovation, we assess whether the technology can be scaled across industries or integrated into existing blockchain ecosystems without significant overhead or complexity.

II - Ecosystem Supports

CertiK Ventures believes Web3 is more than a technological evolution—it's a paradigm shift that empowers developers, builders, and communities, along with the ecosystems they collectively shape, to claim ownership of their digital futures.

As an enthusiastic participant in this transformative journey, not merely as an investor, CertiK Ventures also aims to be partners, incubators, catalysts, and co-creators, driven by a clear vision: to accelerate this transition by equipping founders, builders, and developers within promising ecosystems with the resources and support they need to thrive.

To fulfill this mission, while still acting as a rational VC in a realistic manner given the limited resources, a clear vision of the future blockchain ecosystem landscape, a well-defined profile framework of the ecosystems, and comprehensive investment and risk management methods are needed.

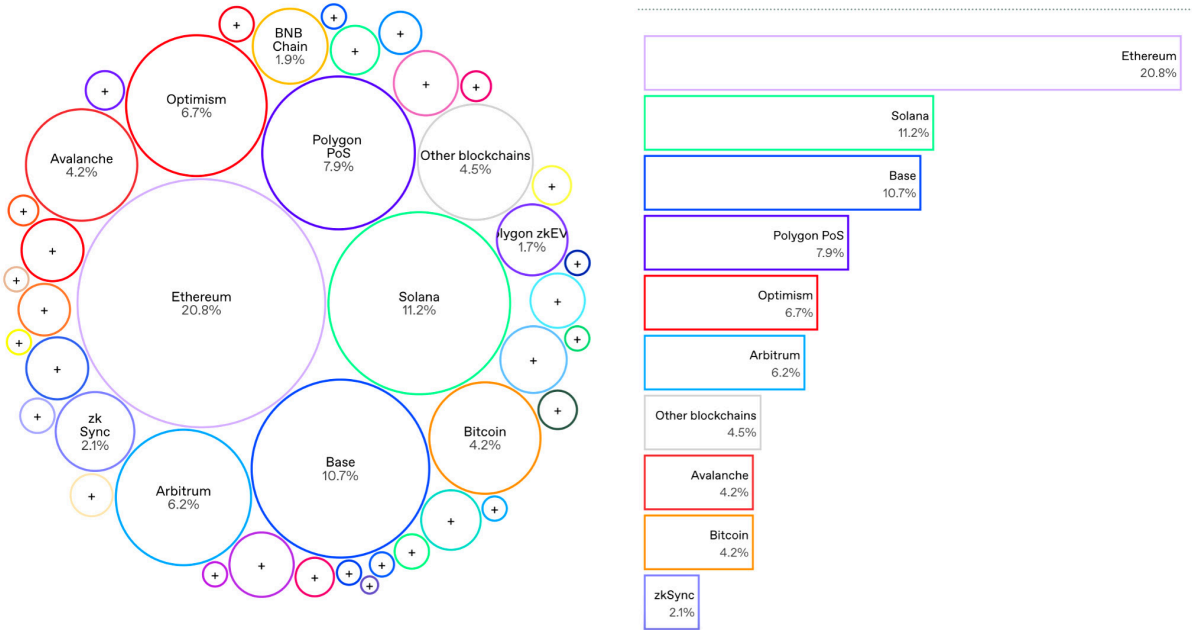
The future will see multi-chain ecosystems.

In [a research paper of Vitalik's](#) that was published as early as 2016, he envisioned a future blockchain ecosystem shaped as "different chains for different industries - and even different chains within the same industry". About 6 years later in 2022, although showed concern over the security of bridges, [he re-emphasized his optimism about multi-chain ecosystem](#), as he believed it's better for different communities to "live separately than all fight over influence on the same thing".

Crypto VC peers also share the multi-chain vision. Paradigm, the renowned research-driven crypto VC already having several leading L2s including Optimism, Starkware, Blast, Aztec in its portfolio, even takes it one step further. In October 2024, [Paradigm announced a \\$20M investment in Ithaca](#), a spinoff from the venture capital firm building a Layer 2 blockchain called Odyssey.

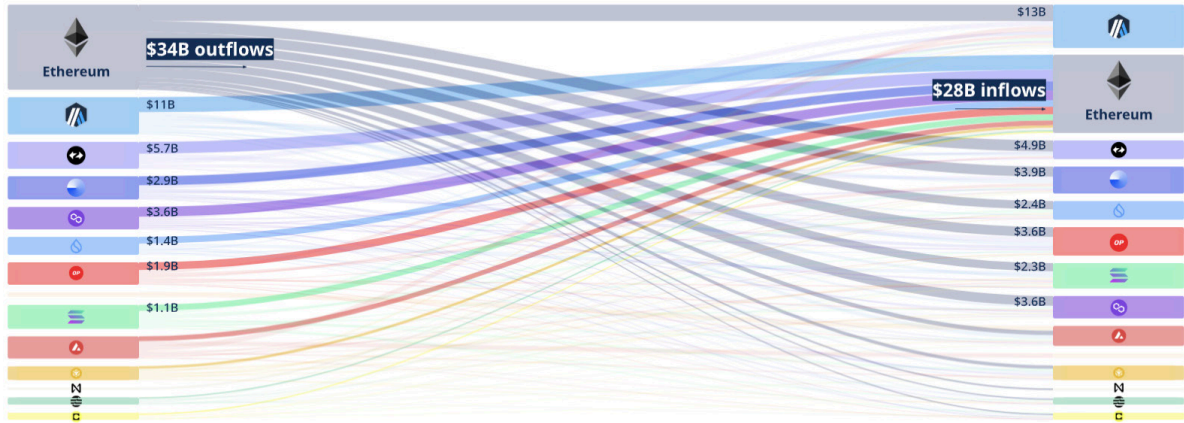
Sharing views with these great minds, CertiK Ventures envision the future blockchain landscape to be highly interoperable, connecting diverse chains seamlessly for a unifiedly intuitive user experience but catering to different needs.

The level of current competitiveness and diversity of the chain ecosystems indicates the inevitability of such a future too. As illustrated by an [A16Z survey on builder energy](#) targeting thousands of projects they track (shown below), although Ethereum attracts the strongest attention from builders, the other chain ecosystems are no less competitive. More importantly, each ecosystem has at least one unique differentiation, which aligns with the industry-tailored feature we envision.



We have to admit, as of now, the biggest pain point (probably one of the very few true pain points) blockchain technology addresses is the inequality and inaccessibility of financial services. Therefore, we believe the competitive landscape will be dynamic, while builders may migrate among ecosystems frequently, money also flows (as shown in [A16Z's State of Crypto Report 2024](#)), as users can only be loyal to returns.

USD flows between various blockchains over last 12 months



©2024 Andreessen Horowitz. All rights reserved worldwide. Some of the above are a16z investments. For a full list see a16z.com/investment-list. This content should not be considered investment advice. Source: Artemis as of 9/30/2024.

A16Z's State of Crypto Report 2024, value flow between multichains

The current phase of blockchain evolution is characterized by financial-centric chain usage, a necessary precursor to the true mass adoption future of the multi-chain ecosystem, when application-specific chains will proliferate, tailored for different industries accordingly, may it be game, social media, science, e-commerce or logistics, among others. It is also the unstoppable trend, presenting abundant opportunities for those able to identify and support robust ecosystem targets.

What qualifies as a good ecosystem?

As discussed above, given a dynamic multi-chain ecosystem landscape, we firmly believe there is ample opportunity for existing chains to evolve and for new rising stars to emerge.

Regardless of their primary applications, robust blockchain ecosystems share key attributes: they foster innovation, empower participants, and ensure sustainability while adhering to the foundational principles of decentralization and transparency. These ecosystems exhibit common strengths that make them well-suited for supporting diverse use cases and driving transformative growth across industries.

Robust infrastructure is basic

Although high TPS cannot be the only performance indicator, the chain needs to be scalable enough to cater to the baseline requirements. Interoperability should also be considered in the chain's architecture, which should facilitate communication with other blockchains and eventually strengthen exposures to their user base. Security is equally important, no matter through employing robust consensus protocols, onboarding distributed nodes, adopting censorship resistance architecture, or encouraging permissionless participation to the network.

Builder-friendly is a must

Where there are developers, there are potential and possibilities. Builder community is the backbone of an ecosystem, and to a certain extent, can help bolster the chain's market value growth, and vice versa. Therefore, comprehensive developer tooling is needed. We need to see well-documented SDKs, APIs, accessible frameworks and programming languages to make the life easier for existing builders as well as to help onboard new developers.

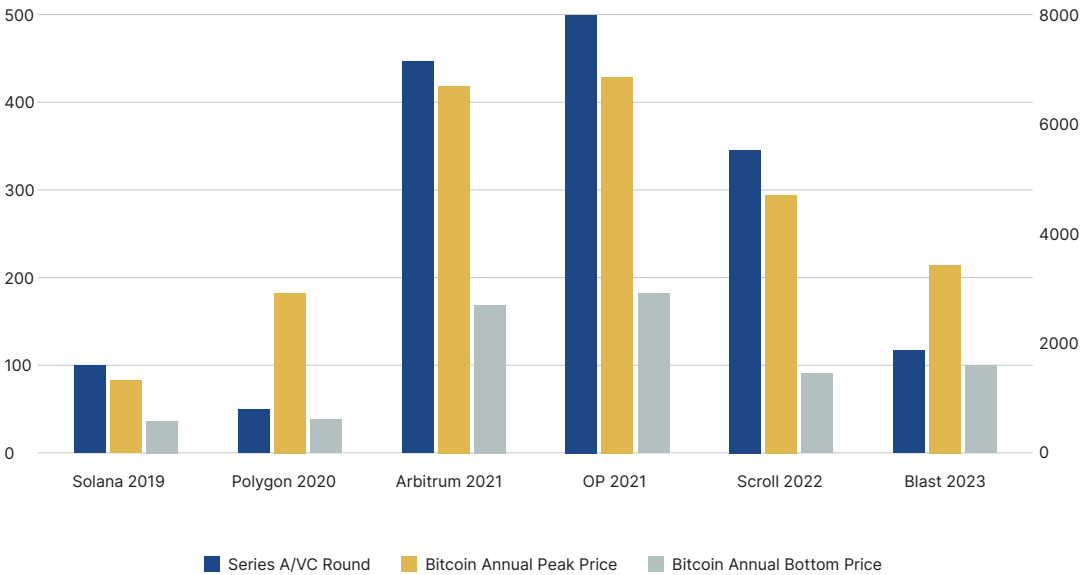
Differentiation is the key

All of the current leading ecosystems have at least one uniqueness that helps them secure a place in the competitive landscape. Needless to say, Bitcoin as a store of value and Ethereum as the pioneer of smart contracts in blockchain gain these two ecosystems top seats. Other chains, while inheriting fundamentals from those two, make unremitting endeavors to make innovations. For instance, both optimistic rollup layer-2, Arbitrum and Optimism employ very different technological implementations and details, each can better serve different types of applications respectively. Elsewhere, there are players like Solana, which not only came up with completely different smart contract framework, but also adopted innovative Proof of History consensus, which significantly boosts transaction speed and lowers cost, and later helps to lay a solid foundation for the meme coin blossom in its ecosystem. There are others such as Polkadot and Cosmos, both emphasize interoperability but take very different tech approaches respectively. Beside tech, traffic could make a strong differentiation too, naming BNB Chain, Base and TON.

Reasonable valuation

For a new blockchain ecosystem, translating parameters like user base, builder engagement, or Total Value Locked (TVL) into precise valuation figures during its early stages can be challenging. Nonetheless, benchmarking against peers at a similar stage provides valuable insights, allowing for informed predictions. It is crucial, however, to contextualize these comparisons by accounting for prevailing market conditions and trends, which can significantly influence valuation dynamics.

2024 Q1-Q3 Incident Type & Amount



Note: stats come from publicly available sources such as media reports, with some by estimation. For instance, Arbitrum and Optimism only disclosed fundraising figures - \$20M and \$25M in Feb and Apr 2021 respectively. Both projects have similar investor allocation, 17.5% and 17%, and their Series A rounds took place in the time with close market conditions.

Other parameters matter as well

Chains that outperform in the aforementioned three criteria, with sustainable tokenomics, reasonably attractive ecosystem incentivize mechanisms, transparent and inclusive governance models, strong builder support technically and financially, capability of collaborations and operations.

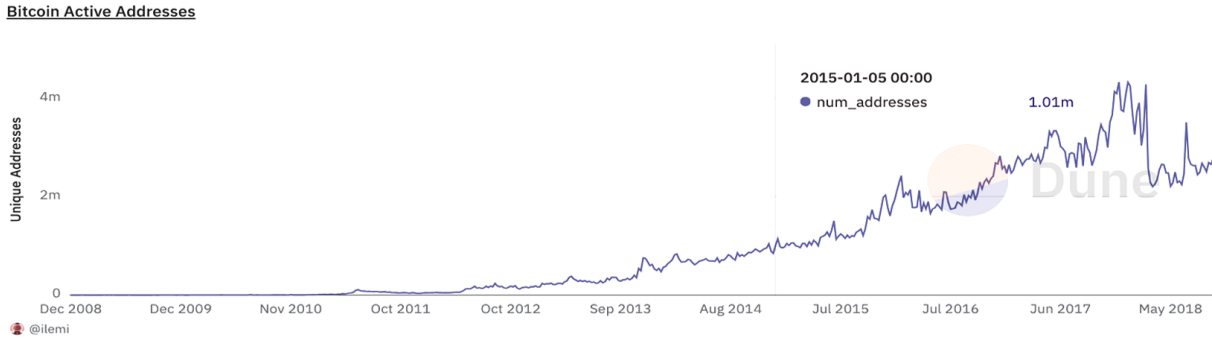
What do the growth stages look like?

We acknowledge that the iteration process of blockchain industry is much faster than Web2, but we still have to admit chain ecosystem’s early-stage adoption to be negligible, while the later fast growth stages are impacted by various factors, internal and external to the ecosystem itself.

Get through the quiet and long 0-1 stage.

Although the little-known or inactive period (0-1 stage) for a public chain ecosystem gets shorter as the world’s recognition of cryptocurrency and blockchain enhances, it still takes at least 12 to 18 months for a chain ecosystem to acquire mainstream attention.

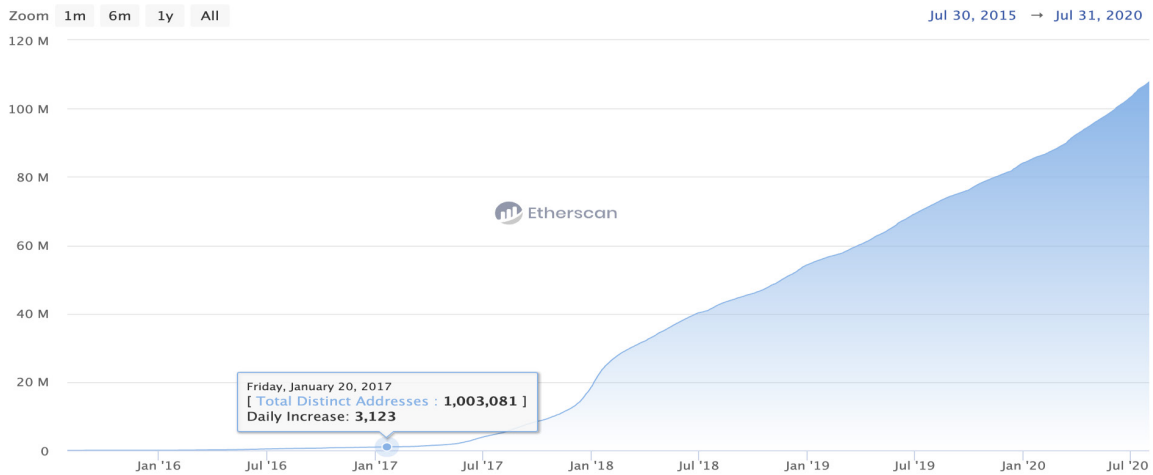
It took about 6 years for Bitcoin to have 1 million active addresses, while for Ethereum, the adoption went much faster, with about 3 years since development began in 2014 to reach 1 million unique addresses, and another 4 months to reach 2 million in May 2017. Builders’ engagement told the same story, with the first 2 Devcon events (Devcon 0 in Berlin and Devcon 1 in London) attracted only a few hundreds attendees.



Bitcoin active address stats by Dune

Ethereum Unique Addresses Chart

Source: Etherscan.io
Click and drag in the plot area to zoom in

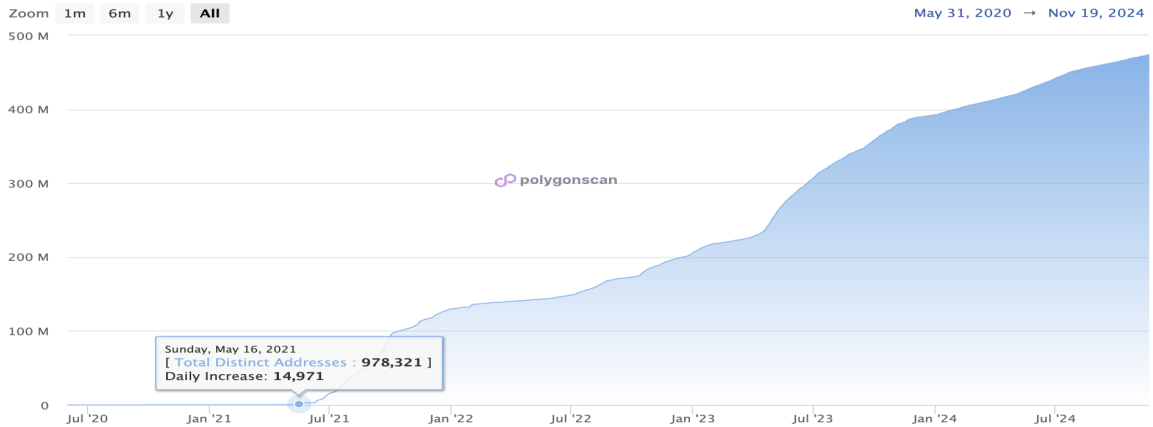


Ethereum active address stats by [EtherScan](#)

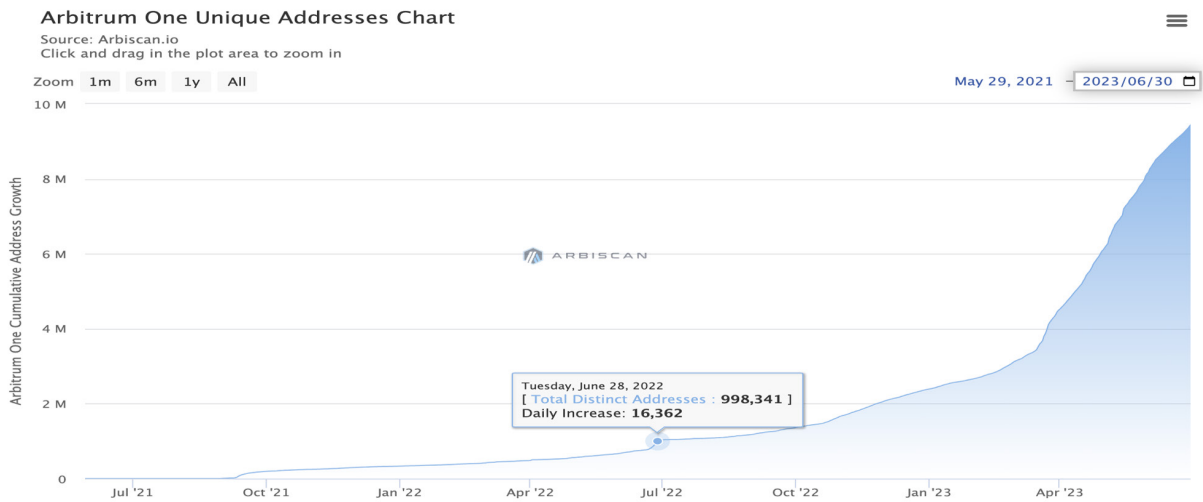
For ecosystems that are even younger than Ethereum, such as Polygon and Arbitrum, the 1 million unique addresses milestone was achieved roughly in 12 months after mainnet launch. But let's not forget, Matic Network (Polygon's predecessor) was launched in 2017, while Offchain Labs (Arbitrum's creator) was founded in 2018.

Polygon PoS Chain Unique Addresses Chart

Source: polygonscan.com
Click and drag in the plot area to zoom in



Polygon Unique Address data from [PolygonScan](#)



Arbitrum Unique Address data from [ArbScan](#)

The 0-1 stage could be a struggling period for new ecosystems, which can also be supported by the [success rate of different funding rounds illustrated in the Financial Investment section below](#). The scenarios vary, with major reasons in common. As experts from [DappRadar](#) and [Alliance DAO](#) pointed out, projects' capability in product-market fit, user retention, resistance to market volatility and regulatory headwind, technology iteration, as well as security strengths, can all contribute to the potential failure, on top of the financial inadequacy.

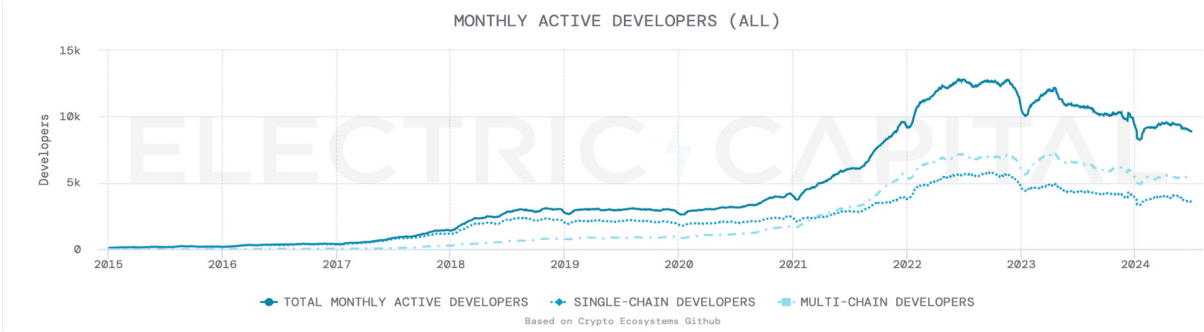
Therefore, from the perspective of a VC with abundant resources while relatively limited funds (<\$15M dry powder), CertiK Ventures tends to support ecosystems in this stage with more technical expertise - inhouse know-how as well as developer community resources from our Strategic Investments, mentorship, infrastructure, marketing and PR resources, as well as networking support. If the ecosystem plans to host hackathons, bounty programs, or offer grants to onboard builders, we connect them to developer communities we back or invest in (as mentioned in the Strategic Investment section). If the ecosystem needs security support, we set up nodes and/or onboard professional node partners to help maintain a stable and robust network. Through tailored resources and hands-on guidance, there must be ecosystems proving to have great potential, which then will be offered the chance of further investment from CertiK Ventures. With this approach, we aim to transform potential into impactful ecosystems that thrive in the Web3 landscape, while securing a sound ROI as a sophisticated VC.

Turning point events open the 1-100 era.

For a chain ecosystem to thrive, it's inarguably critical to have a leading team and a developer community that keep their heads down, devoted to build. However, it is also crucial to have a catalyst.

We can tell from the Ethereum wallet address chart above, the line started to get much steeper in mid-2017. That was about the time of Initial Coin Offerings (ICOs) boom, with the majority of which took place on Ethereum, since smart contracts allow developers to launch protocols and spin up new ERC-20 tokens more easily than any of the other available blockchain networks.

Ethereum



Monthly Active Developer Number by developerreport.com

But of course such soaring cannot be fueled by a single power source. We still remember the crazy bull market between 2020 and 2021, to which there were multiple driving forces that qualify as the turning points to further boost Ethereum ecosystem. During that period, Bitcoin hit ATHs repeatedly (as shown below), thanks to big financial institutions rushing into the cryptocurrency field, the loosened US monetary policy and other macro factors. Meanwhile, DeFi summer and NFT hype also started, both benefited from and further contributed to Ethereum ecosystem growth. Internally, Ethereum 2.0 started to roll out. All factors together, Ethereum market cap, ecosystem growth such as TVL increase and dApps deployments, as well as builder engagement.



Bitcoin price hit ATHs repeated during 2020-2021 (source: [Coinmarketcap](https://www.coinmarketcap.com))

As illustrated in the later [Financial Investment section's success rate chart](#), projects that get through the Seed Round show notably better chances to make it. With a turning point in its favor, the chance may get strengthened. Accordingly, there will be a better chance for more projects in the ecosystem to surface. CertiK Ventures intends to seize such opportunities by proactively engaging in ecosystems' growth.

We can conduct continuous market analysis, leverage data-driven insights, to help ecosystems get a better idea about various metrics such as user adoption curves, developer activity, and liquidity inflows, as well as help them strengthen adaptability to technological breakthroughs, or regulatory shifts.

More importantly, we plan to provide more financial support to their foundations, and incubation or accelerator programs to help ecosystems identify or even cultivate builders and projects with great potential, while securing investment positions in as many undervalued areas as possible.

We can grow via progressive ecosystem support strategy

As ecosystems vary in focuses, approaches and development stages, CertiK Ventures also sees its own growth in stages and according to the differentiations of the ecosystems it supports.

Expand market presence

At the beginning of our journey, we allocate more resources on supporting ecosystems that demonstrate strong qualifications across key metrics such as developer engagement, innovation, and adoption.

Be prudent in early-stage

Once gaining recognition and resources collaborating with leading ecosystems, our support can evolve to include ecosystems that actively seek and are capable of collaborating with our portfolio projects even in different ecosystems. This kind of synergies can foster cross-pollination of ideas and accelerate ecosystem-wide growth.

Ultimate goal of full scope

At maturity, CertiK Ventures aspires to provide equal support to all ecosystems, leveraging its established influence and comprehensive resources to empower blockchain ecosystems universally, and ultimately drive the multi-chain future we envision.

We offer comprehensive support for ecosystem growth

As manifested in CertiK Ventures' tagline - growth with builders - our value extends beyond capital, we offer comprehensive support to blockchains, with the aim to foster strong builder communities, cultivate an environment of innovation, and mutually benefit from the ecosystem growth in financial sense. We employ various instruments and deal structures.

Token & OTC Deals

We provide liquidity and investment through token investment into non-listed projects, or OTC deals targeting projects that are already traded on secondary market, so that early-stage and well-established projects can both get support.

Builder Programs/Grants/Hackathons

Through funding grants and hosting hackathons, CertiK Ventures incentivizes innovation by leveraging its deep technical expertise to support developers. These initiatives attract top talent, accelerate ecosystem adoption, and foster robust growth. Moreover, these programs create a pipeline of promising projects, enriching our deal flow and strengthening ties within the ecosystem. Elsewhere, by supporting large developer communities or platforms (as highlighted in the [Strategic Investment section](#)), we bridge ecosystems with these developer resources. This mutually beneficial approach ensures ecosystems gain access to skilled developers, while communities and platforms see expanded opportunities for collaboration and innovation.

Incubation/Acceleration

We offer strategic mentorship, resources, and networking opportunities to incubate promising startups, accelerating their time-to-market and enhancing product-market fit.

Node Support

Infrastructure investments, such as funding validator nodes or hosting services, strengthen the ecosystem's security and decentralization.

TVL/Bootstrap Support

Newly launched chains often struggle on bootstrapping TVL in early-stage, we can not only offer liquidity to leading DeFi protocols on these new chains by ourselves but also onboard other institutions in CertiK Ventures' inner circle, such as market makers, liquid funds, other VCs and staking service providers. With that, the chains liquidity and user confidence can be boosted, driving ecosystem 0-1 growth.

Security Support

Partnerships with leading security thought partner such as CertiK offer projects with security enhancements such as on-chain monitoring and penetration testing, methods to mitigate risks and foster user trust, as well as higher-level security and technical advisory.

Cross-portfolio collaboration

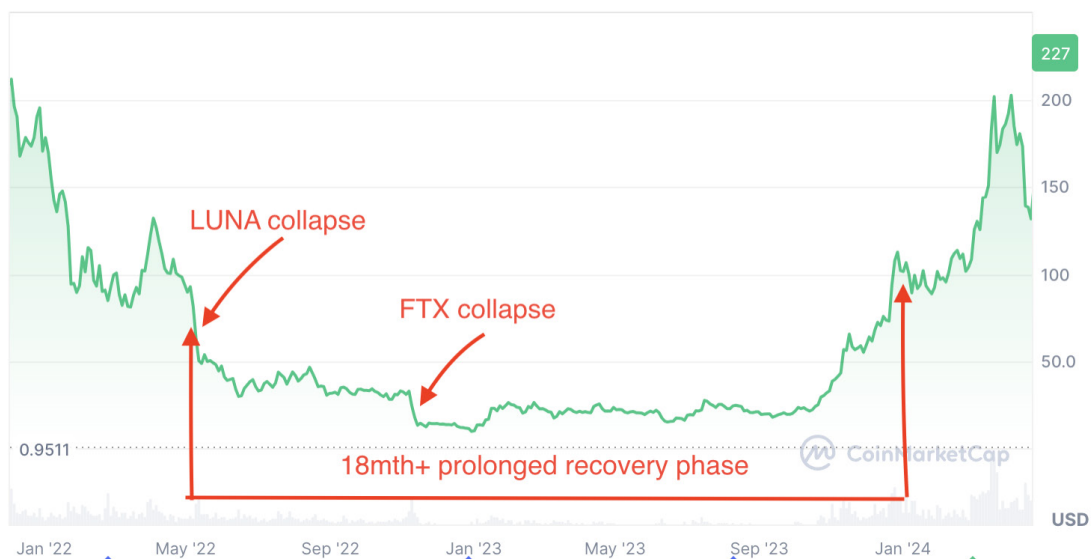
We foster cross-portfolio collaboration to amplify the impact of our investments. Financial investment targets are likely to bring in specialties in certain fields, more likely to be on the consumer side, while M&As may provide inspirations in more fundamental layers to the ecosystem. Together, it can help to enable broader innovation and growth for the ecosystems. This holistic approach ensures that our investments not only thrive individually but also contribute to the collective strength of the Web3 ecosystem.

Challenges ecosystems may encounter

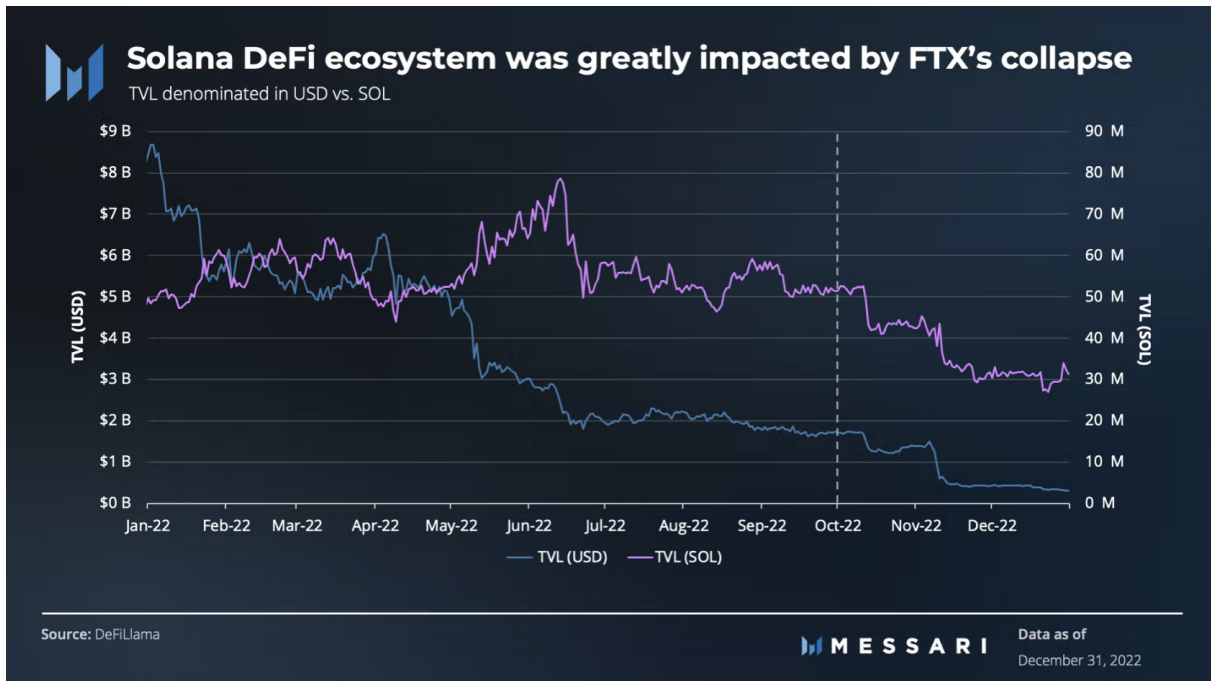
Now that we have thought through how to profile different ecosystems and employ different deal structures or support methods respectively, we want to emphasize that it also matters significantly for us to fully understand the challenges chain ecosystems may face.

Market Conditions and Shifts

We assess market trends, adoption rates, and macroeconomic factors to align investments with promising growth trajectories and mitigate risks. Simply put, the recent momentum and the 2020-2021 bull market would not just be in VC's favor but also notably beneficial for projects' long-term growth, as financial adequacy can largely help the builders to concentrate. On the contrary, black swan events in the secondary market can deliver heavy and prolonged impact to the whole industry, ecosystems making no exception. We still remember the crypto winter triggered by the collapse of LUNA and UST in May 2022, followed closely by the FTX collapse in just 6 months. Solana, given its tight connection with FTX, took both the hits heavily and saw its market cap plunged by over 70%.



[Messari's State of Solana Q4 2022 report](#) not just confirmed the tragedy of market capitalization, but also showed Solana's wounds from close range by revealing the DeFi TVL evaporation - from over \$5 billion in early May to a negligible figure (as shown below).



Tech Trends

Cutting-edge innovation is always the core, but every tech evolution happens in stages, VCs need to step in at the right time and seize the trend. There have always been various tech concepts such as account abstraction, intent-centric, zero knowledge, modular architectures, and cross-chain interoperability. The maturity level differs notably, with derivative ideas popping out frequently, both the venture capital and the ecosystem have to stay agile making decisions to ensure alignment with industry advancements.

Regulatory Headwinds/Tailwinds

Given that the era of full decentralization is not coming yet (if it would ever come), unfortunately we still need to stay alert to the evolving regulations to gauge compliance risks and opportunities, prioritizing ecosystems that demonstrate resilience and adaptability.

These factors complement our core evaluations, enabling informed, forward-looking investment strategies, as well as help us in risk management.

How do we help ecosystems to mitigate risks?

Investing in ecosystems normally requires more time, effort and stronger discretion than pouring money in consumer-side projects, as we set higher standards for every criterion - from fundamental technology to go-to-market strategy. However, we do not rest on these heavy ex-ante work, we apply equally, if not more strict risk management methodologies. Through meticulous evaluation and proactive management, we minimize risks while maximizing the potential for sustainable growth.

Spot major risks

We monitor market volatility, economic trends, and regulatory developments to anticipate potential headwinds to cope with macro risks; on the portfolio side, operational inefficiencies and security vulnerabilities are key areas we scrutinize during due diligence as well as in the post-investment management. What is worth noticing is that CertiK Ventures can leverage tech expertise of the whole engineering team of CertiK to carry out rigorous technical due diligence that covers every possible technical aspect to make sure we limit the tech risk to the minimum level.

Employ comprehensive risk management methods

We could negotiate milestone-based financing deal structure to ensure portfolio's progress aligns with expectations before subsequent funding. We could balance diversification and focus between mature and rising ecosystems, to secure as many partnerships across well-established ecosystems as possible, while investing more resources and support to the new ones we handpicked selectively to guide their developments. Meanwhile, for all the ecosystem partners and portfolio projects, we will actively engage in the post-investment development via regular meetings and reports and offer support in a timely manner to reduce risks of failure. Last but not the least, we also have teams conduct treasury management and hedging, to safeguard capital against adverse market movements.

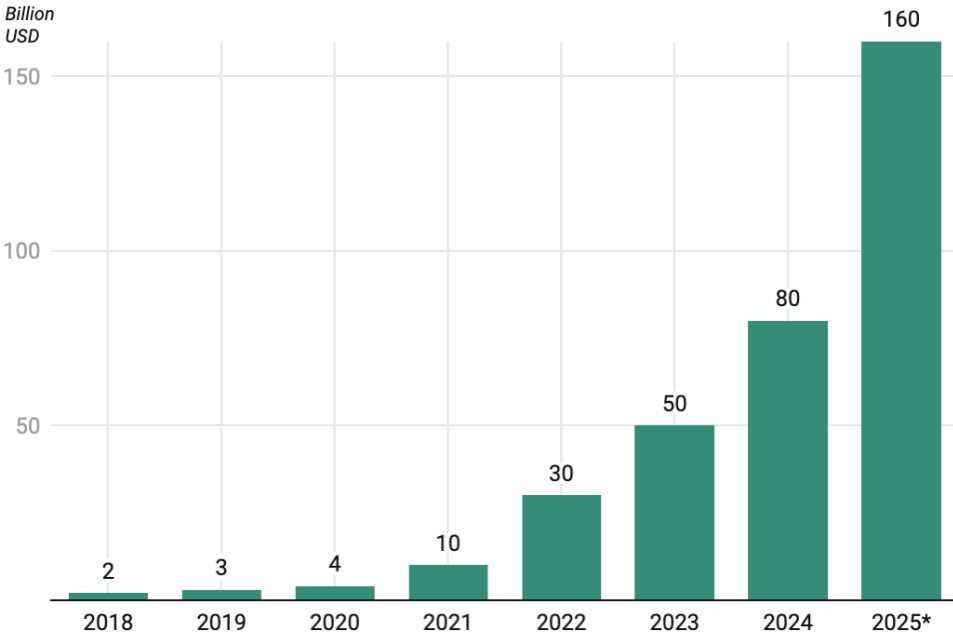
III - Financial Investments

General Market Opportunity

1. Market Overview

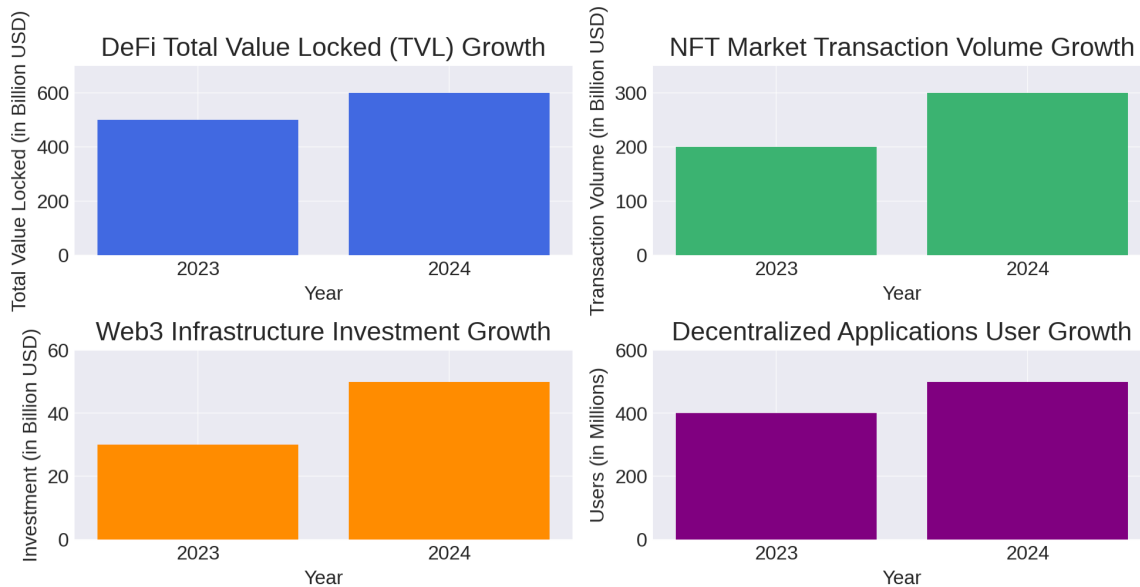
Blockchain technology is in a stage of rapid development. The global blockchain market size is expected to reach USD 160 billion by 2025, growing at a CAGR of over 67.3%. According to Statista, the market value of the global blockchain market has exceeded \$50 billion in 2023.

Global Blockchain Market Size (2018-2025)



2. Current Trends

According to CoinMarketCap, as of November 2024, the total market capitalization of the cryptocurrency market is approximately \$1.1 trillion, showing signs of recovery and growth potential. Statista predicts that the global cryptocurrency market size is expected to reach \$4.94 trillion by 2025, with a compound annual growth rate (CAGR) of 30.7%. According to a report from Crypto.com, the number of global cryptocurrency users exceeded 400 million in 2024, representing a growth of about 33% compared to 2023, indicating increasing participation in the cryptocurrency market.



Overall, the trends in DeFi and NFTs continue to grow strongly, attracting a large number of users and investments. Investments in Web3 infrastructure are accelerating, driving advancements in technology and broader adoption of applications. The user base of decentralized applications continues to grow, reflecting user interest and engagement in the Web3 ecosystem. In 2024, over 70 countries have developed or updated relevant regulations, promoting the development of compliant projects. The gradual clarification of regulatory policies has provided a better environment for the development of the industry and facilitated the rise of compliance programs.

Focused Verticals

The CertiK and its Ventures team will play an important role in the trends within the cryptocurrency and Web3 sectors. As a corporate venture capital, CertiK Ventures focuses not only on the security and compliance of projects but also on financial returns and portfolio performance. CertiK Ventures is focusing on the following verticals:

- **Decentralized Finance (DeFi)**

The rapid growth of the DeFi sector has attracted significant investment, but it also brings security risks. CertiK Ventures not only assesses project security but also financial returns and sustainable portfolio growth.

- **Decentralized Physical Infrastructure Networks (DePIN)**

DePIN, as an emerging vertical, combines blockchain technology with decentralized management of physical infrastructure. CertiK Ventures values the financial potential of these projects, striving to achieve high returns in emerging markets.

- **Social**

With the rise of Web3 social platforms, users are increasingly concerned about privacy and security. CertiK provides security solutions for these platforms, ensuring user data protection and platform safety, enhancing user trust. CertiK Ventures focuses on the business models and profitability of these platforms to achieve financial gains.

- **Gaming**

The blockchainization of gaming has changed traditional game mechanics and economic models. CertiK Ventures actively invests in gaming projects with high growth potential, aiming for substantial financial returns.

- **Artificial Intelligence (AI)**

AI technology is increasingly being used in the blockchain space. CertiK focuses on the security of AI projects to ensure transparency and compliance of their algorithms and data processing, and to facilitate the convergence of AI and blockchain. CertiK Ventures aims at capturing the financial opportunities that arise from technological innovation.

- **Decentralized Science (DeSci)**

From CertiK Ventures' perspective, DeSci offers great potential for the future of scientific research. With traditional scientific research facing issues such as underfunding, DeSci, through tokenization and crowdfunding mechanisms, can attract community funding to support small researchers and labs, thus promoting innovation and equitable funding distribution. CertiK Ventures can promote openness and inclusivity in scientific research by supporting these community-driven projects. Although DeSci is still in its early stages and faces challenges in funding and quality assessment, it has already attracted a wide range of investors and innovative talent, showing great potential to reshape the future of scientific research.

3. Unique Opportunity

The current regulatory and compliance environment in the cryptocurrency and Web3 space offers unique market opportunities for investors. Globally, many countries are actively developing and updating their regulatory frameworks for cryptocurrencies in response to the rapid growth of the industry. For example, the European Union is advancing the Markets in Crypto Assets Act (MiCA), which aims to provide a harmonized regulatory environment for crypto assets and enhance market transparency and stability. In the U.S., the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) have stepped up their regulation of the market, which not only raises the industry's compliance standards, but also creates opportunities for investment in compliant projects. Under certain market conditions, CertiK Ventures is able to capitalize on the opportunities presented in this transition by investing in compliant, technologically advanced projects that will enhance financial returns and profitability.

CertiK Ventures' Unique Advantages:

- **Security Expertise:**

As an industry-leading security auditing company, CertiK has deep technical expertise and rich experience in blockchain security, providing high-quality security audit and consulting services to help clients reduce risks. This expertise not only helps projects reduce risks but also supports CertiK Ventures' investment strategies, ensuring that the projects we support are built on a solid foundation of security and compliance. By leveraging this knowledge, CertiK Ventures can identify and invest in projects that are more likely to succeed in the competitive blockchain landscape.

- **Comprehensive and Synergistic System:**

CertiK Ventures operates through three interconnected pillars: financial investments, strategic investments and ecosystem supports. Each pillar reinforces the other, creating synergies that strengthen our overall investment strategy. On the one hand, our financial investments fund promising projects in the ecosystems we support. On the other hand, strategically invested projects are able to provide collaboration and support towards the financial investment portfolio. By developing this comprehensive and synergistic business system, we facilitate partnerships and resource sharing between projects, increasing their potential for success.

- **Data-Driven Decisions:**

With strong data analysis capabilities, CertiK Ventures with in-house engineering support can gain deep insights into market trends and emerging technologies, providing strong support for investment decisions. This analytical approach allows CertiK Ventures to identify potential investment opportunities and assess the overall landscape of the blockchain industry, ensuring that our investment decisions are informed by the latest developments and innovations.

- **Targeted Investment Approach:**

CertiK Ventures is committed to investing in high-potential blockchain projects, particularly in areas such as DePIN, DeFi, Social, Gaming and AI, contributing to the steady development of the industry.

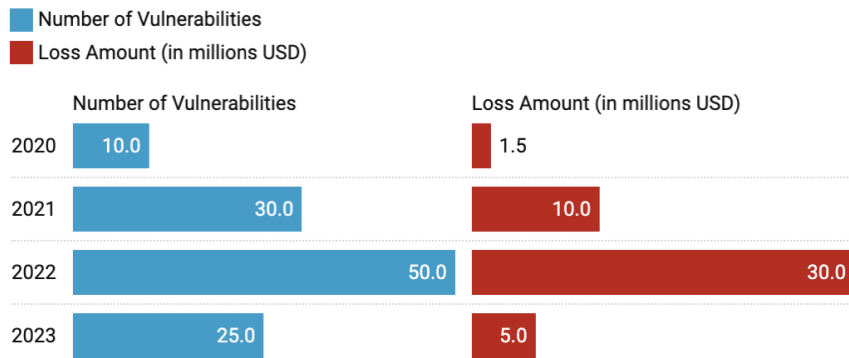
Micro Market Landscapes

This section delves into how each aspect plays into different verticals, highlighting the uniqueness and importance of aspects. By analyzing trends and emphasizing priorities, we aim to provide a comprehensive view of how CertiK Ventures is navigating these aspects to capitalize on emerging opportunities. Each subsection will explore a different aspect, illustrating how our strategic approach aligns with the needs of these markets.

1. Unique Problems and Solutions

In the cryptocurrency space, various verticals have faced unique challenges that provide investment opportunities for CertiK Ventures. For example, DeFi is exposed to smart contract vulnerabilities and liquidity risks. According to CertiK, security breaches in the DeFi result in over \$3 billion in losses in 2022. CertiK Ventures is able to mitigate these risks and enhance the security and stability of its portfolio by investing in programs that provide security auditing and compliance services.

the Trend of Security Vulnerabilities and Associated Financial Losses in the DeFi (2020-2023)



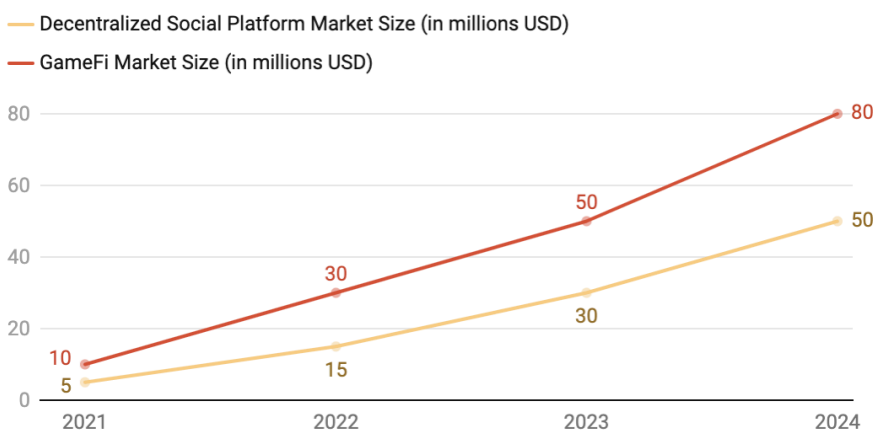
Additionally, resource management inefficiencies in DePIN have prompted CertiK Ventures to focus on projects that provide efficient resource allocation solutions. Such investments not only address industry pain points, but also deliver substantial financial returns.

2. Value Proposition and Creation

CertiK Ventures prioritizes projects that create unique value. For example, social platforms are attracting a large number of users by enhancing user privacy and data control through decentralization. According to Statista, social media users across the globe are expected to reach 4.5 billion in 2023, providing a huge market opportunity for decentralized social platforms, where CertiK Ventures' investments can help these projects to build trust in compliance and security, thus enhancing their competitiveness in the market.

In the gaming field, blockchain technology has created a new economic model by enabling players to actually own game assets. According to DappRadar, the number of users of blockchain games has exceeded 10 million by 2023. CertiK Ventures has been able to capitalize on this growing trend and capture potentially high returns by investing in these projects.

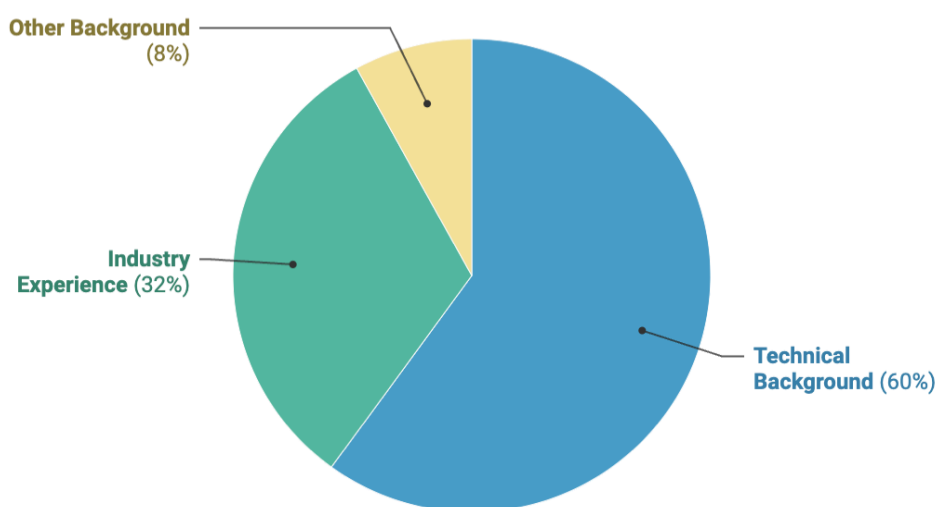
Market Size (2021-2024)



3. Team Background

The specialized background of a team is a vital role in the success of a project. CertiK Ventures specifically focuses on teams that have a strong technical background and industry experience. For example, in the field of AI, many successful projects are backed by team members from top tech companies. According to LinkedIn, the demand for AI expertise has grown by 74% in the last five years. By placing an investment in these teams, CertiK Ventures is able to ensure that the project has the foundation for success, thereby increasing the security and return potential of the investment.

the Background Distribution of Successful Teams



4. Market Positioning

Market positioning is one of the key components of a successful project. CertiK Ventures works to analyze the market positioning and competitive advantages of projects in their respective domains. For example, in the field of DeFi, projects need to define their target user groups and competitive advantages. According to CoinMarketCap, the DeFi market has a Total Value Locked (TVL) of more than \$50 billion by 2023, showing strong growth potential. CertiK Ventures enhances the overall performance of investments in the portfolio through investing in projects with a clear market niche.

In the social platform space, projects are boosting market competitiveness by building strong community governance mechanisms to enhance user engagement and loyalty. CertiK Ventures can help these projects build trust in compliance and security, further strengthening their market position.

5. Product, Service and Business Model Innovation

Innovative products and business models are redefining player experience and revenue models in the gaming space, especially in the GameFi track. According to a recent report by DappRadar, the number of blockchain gaming users has exceeded 20 million in 2023, demonstrating the strong growth potential of this segment. GameFi projects have attracted a large number of players and investors by combining gaming and financial elements. According to ChainPlay, the GameFi market is expected to reach a total value of \$15 billion by 2023, attracting substantial venture capital attention. CertiK Ventures is able to capitalize on this growth trend and capture potentially high returns by making investments in these GameFi projects with innovative business models.

In DePIN, projects with innovative resource management models that enable efficient operations are attracting investor attention. CertiK Ventures is well positioned to capitalize on this fast-growing market by investing in these innovative projects.

6. Technological Trends

As technology trends change to far-reaching effects on the future direction of the market, CertiK Ventures closely observes technological advancements in AI. According to Gartner, the global AI market is projected to reach \$190 billion by 2025, which provides a huge opportunity for investors. CertiK Ventures is in a position to capitalize on this growth trend and enhance the potential returns of its portfolio by venturing into AI-related projects.

In the DeFi space, as blockchain technology matures, projects can deliver more secure and efficient financial services, attracting the attention of more users and investors. CertiK Ventures funding can help these projects stay ahead of the curve technologically, leading to higher financial returns.

Investment Insights/Framework

1. Valuations

In the valuation process of Web3 projects, traditional valuation methods (e.g., DCF and Asset-Based Approach) tend to be difficult to apply. Since these projects usually lack stable cash flows in the early stages and the tokens have no public value until listed, we need to rely on experience and industry consensus for valuation.

Market Approach

- **Valuation of comparable projects:**

Comparing the market performance and valuation ranges of similar projects to determine the relative value of the target project. For example, metrics such as market capitalization and number of users can be examined for different projects within the same track (e.g., DeFi, NFT, infrastructure, etc.).

Key Metrics

- **User Growth:**

The user growth rate of a project is an important indicator for assessing its market potential. A high growth rate usually means that the program is well performing in attracting users and expanding its market share.

- **Transaction Volume:**

Transaction volume can demonstrate the activity and liquidity of a program. Higher volumes are usually associated with higher market interest and user engagement.

- **Token Economic Model:**

To analyze the token economic model of the project, including the issuance volume, circulation volume, and locking mechanism of the tokens, all of which may affect the supply and demand of the tokens and the market value of the tokens.

- **Community Activity:**

Community support and participation of the project can be an equally significant evaluation indicator. An active community usually drives the long-term development and value of the project.

Industry Consensus

- **Industry Standards:**

There are usually certain industry standards for valuation of projects in different tracks. For example, valuation standards may vary for DeFi, NFT and infrastructure.

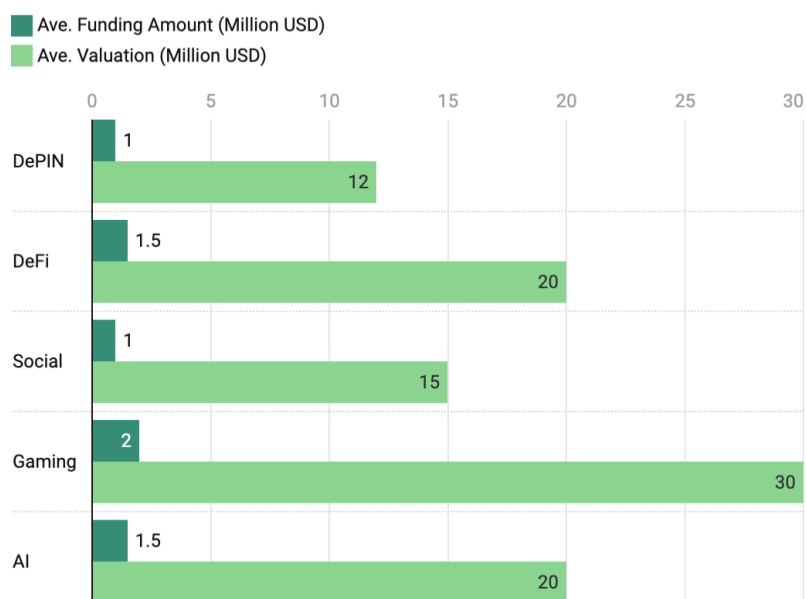
- **Case Studies:**

Accumulate experience by analyzing successful and failed project cases in order to better judge the valuation level of comparable projects.

Overview of Valuation in Focused Verticals (2023-2024)

Extensive data crawling and analysis reveals funding trends and market potential across all segments of the Web3 industry. Early-stage projects in segments such as DePIN, DeFi, Social, Gaming, and AI are showing positive funding activity, with seed rounds and valuations generally trending upward. A large amount of data has been organized and adjusted to be more in line with industry standards and more reasonable. While the data is sourced from authoritative platforms such as Crunchbase and PitchBook to ensure its accuracy, it is still important to note its limitations and is for reference only.

Average Funding Amount and Valuation by Sector in the Early-Stage Projects



2. Upsides

CertiK Ventures' financial investment strategy focuses more on token investments in the Web3 industry, as well as being open to equity investments. CertiK Ventures' financial investment objective is to ensure a higher than market average return on investment (ROI) through in-depth analysis and assessment of the projects, identifying and targeting projects that have a strong team and a sustainable business model. CertiK's security service provides CertiK Ventures with an additional benefit in recognizing and mitigating potential risks. According to CertiK Annual Hacked Report 2023, audited projects outperform unaudited projects in terms of security and stability, reducing the risk of investment loss.

3. Exit Strategies

CertiK Ventures combines a variety of elements such as vesting schedule, secondary market availability, public prices, price forecasts, market sentiment and phased exit strategies in the

development of its exit strategy. Through an in-depth analysis of these elements, a more effective exit strategy can be developed to achieve the best return on investment.

- **Token Release Rules:**

CertiK Ventures closely monitors a project's token release schedule and analyzes each project's vesting schedule to ensure that exits are made at the appropriate time to avoid price declines due to oversupply in the market.

- **Secondary Market Availability:**

Evaluate the secondary trading of tokens, choosing the more liquid exchange to trade on will reduce price slippage and transaction costs, thus optimizing the exit strategy.

- **Public Price:**

CertiK Ventures monitors the public price and current market price of the tokens to develop a reasonable exit timing. We conduct an in-depth analysis of the initial offering price, market performance and relative value of the tokens to ensure that gains are realized at the optimal time.

- **Price Forecasting:**

We utilize technical analysis, market sentiment analysis, and fundamental analysis to forecast the future performance of the tokens. These analyses help CertiK Ventures select the best time to market in order to maximize return on investment.

- **Market Sentiment and Macroeconomic Factors:**

We keep a close eye on market sentiment and macroeconomic factors (e.g., policy changes, market regulation, etc.) as they may affect the price and liquidity of the tokens. CertiK Ventures adjusts its exit strategy in a timely manner based on the market dynamics in response to market volatility.

- **Phased Exit:**

To minimize risk, CertiK Ventures adopts a phased exit strategy. Disposing of tokens gradually at different price ranges, rather than dumping them altogether, allows us to lock in a portion of our profits during market fluctuations while retaining a portion of our tokens for future price increases.

Catalysts

- **Compliance will become a competitive advantage:**

As governments gradually tighten regulations on cryptocurrencies, compliance will become one of the key factors for project success. Projects that can quickly adapt to new regulations and maintain transparency will gain greater trust and support in the market. Investors and users will be more inclined to choose compliant projects, which will drive the growth of these projects.

- The imperative of global regulatory harmonization:**

Regulatory policy differences among countries can lead to market fragmentation, affecting cross-border trading and investment. Going forward, regulatory harmonization on a global scale will become increasingly important to promote healthy markets and investor confidence.
- Users' shift from speculation to practicality:**

As the market matures, a shift is taking place in users' investment behavior from pure speculation to a focus on practicality and long-term value. Users are more inclined to choose projects that can provide practical application scenarios and value. With this trend, project teams will be motivated to focus more on the practicality and user experience of their products.
- Community-driven projects will be more attractive:**

Participation and community activity will become important indicators for evaluating a project's potential. Projects with strong community support will be more likely to gain the trust and loyalty of users, thereby driving their long-term development.

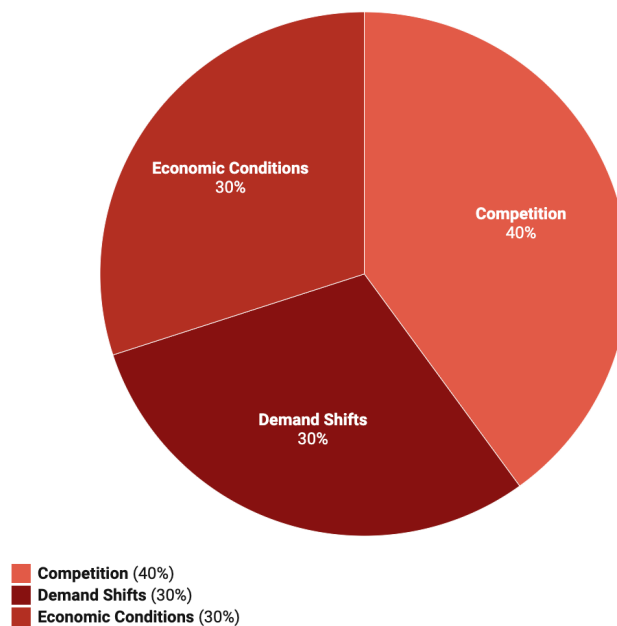
Risk Analysis

1. Risks

- Market Risk:**

Market fluctuations can significantly impact project success. Factors such as competition and economic downturns can lead to reduced demand for products or services. According to recent studies, 60% of startups fail due to market-related issues.

the Distribution of Various Market Risk Factors



- **Technical Risk:**

The blockchain sector faces significant technical risks, as highlighted by CertiK's 2023 report. In total, \$1,840,879,064 was lost across 751 security incidents, a 51% decline from \$3.7 billion in 2022. Private key compromises were particularly damaging, resulting in \$880,892,924 lost in just 47 incidents, despite representing only 6.3% of all incidents. Common reasons for these failures include inadequate testing, lack of skilled personnel, and poor project management.

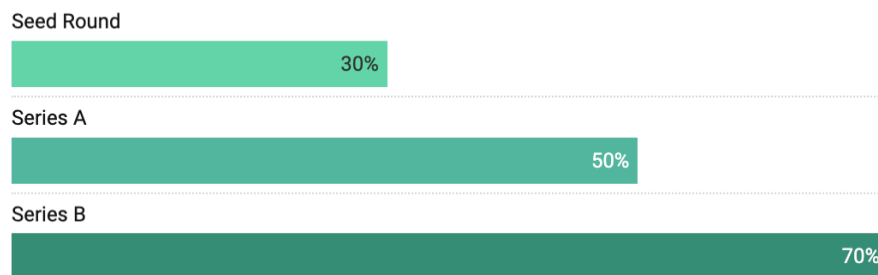
- **Regulatory Risk:**

Changes in laws and regulations can pose significant risks to projects, especially in highly regulated countries or regions. Non-compliance can lead to legal penalties and reputational damage.

- **Financial Risk:**

Insufficient funding or budget overruns can jeopardize project viability. Research shows that projects that secure early-stage funding have a higher success rate compared to those that do not. For example, startups that complete a Series A round have a 50% higher chance of success than those that do not secure funding until later stages.

the Success Rates of Different Funding Rounds



2. Measures

- **Diversified Portfolio Management:**

Investing across various sectors can help mitigate risks. Diversification reduces the impact of a downturn in any single area.

- **Innovation Risk Management:**

Implementing data analytics and artificial intelligence can enhance risk prediction and management. For instance, machine learning models can analyze market trends to identify potential risks before they materialize.

03 Conclusion

This Thesis defines CertiK Ventures' investment philosophy, market vision, and scope, grounded in rigorous market analysis, detailed case studies, and a clear acknowledgment of its current operational constraints. It serves as a strategic framework to identify and evaluate opportunities that align with CertiK Ventures' strengths and limitations. The ultimate goal is to optimize returns for both CertiK Ventures and its partners, while maintaining a pragmatic approach to the potential contributions and outcomes of its investments.

As a Builder: Evolving from Service Provider to Business Partner

Half of CertiK Ventures' capital will be allocated to a Strategic Investment batch, closely aligned with CertiK's core focus on Web3 security and infrastructure. This allocation reflects one of the fundamental objectives behind the establishment of CertiK Ventures: transforming CertiK's role from a service provider to a strategic business partner within the Web3 ecosystem.

Through targeted investments and acquisitions, CertiK Ventures prioritizes strengthening CertiK's market positioning and brand identity. Simultaneously, it seeks to expand and diversify the company's value proposition across services, products, research, and innovation—first within its core security vertical and then across the broader Web3 landscape, specifically focused on giving back to the builder and developer community.

The challenge lies in identifying target companies that not only address general market needs but also integrate seamlessly into CertiK's unique narrative. Propsective investments must align with CertiK Ventures on all fronts: Team, technology, product, profit and roadmap. CertiK remains accountable to its key backers, including Binance, Coinbase, and Goldman Sachs, which necessitates a high level of diligence and strategic alignment in these partnerships and investments.

Given the complexity of aligning with security-focused founders and teams, as well as the significant resources required, which will require rigorous due diligence, CertiK Ventures anticipate only executing a maximum of 2-3 investments in its first operational year. Among these, 1-2 deals may lead to potential mergers and acquisitions (M&A), contingent on favorable opportunities.

The anticipated outcomes of these investments are projected between Q3 2025 and Q1 2026. By then, CertiK and its key partners are expected to realize measurable benefits, including financial gains and enhanced market branding, stemming from at least one successfully executed Strategic Investment.

Grown with Builders: Giving Back to Developers

A quarter of CertiK Ventures' fund allocation is dedicated to Ecosystem Support. Historically, as a leader in Web3 security, CertiK has been at the forefront of developer support, acting as the gatekeeper of blockchain ecosystems by addressing security challenges and solving technical issues. With the launch of CertiK Ventures, this role has evolved into a more proactive and contributive approach, aimed at strengthening the foundational ecosystems of Web3 from the ground up.

By providing financial resources, technical expertise, and access to its extensive network, CertiK Ventures actively supports the growth of public chain ecosystems. This initiative not only helps CertiK maintain its longstanding relationship with the developer community but also solidifies its role as a key contributor to the expansion and innovation of the Web3 landscape.

One challenge inherent in this batch is balancing return on investment (ROI) expectations with realistic timelines. CertiK Ventures addresses this by employing a pragmatic and empirical strategy to align investment opportunities with achievable milestones, ensuring that each investment is both impactful and sustainable.

Over the first year, CertiK Ventures aims to construct a pyramidal ecosystem portfolio, comprising:

- **Premature ecosystems:**

A select few high-potential ecosystems that represent a strategic focus for CertiK Ventures' intensive resource allocation.

- **Middle-tier ecosystems:**

Ecosystems with specific, well-defined challenges that directly benefit from CertiK Ventures' specialized technical and strategic support.

- **Mature ecosystems:**

The majority of the portfolio, consisting of established ecosystems actively seeking financial and network resources to accelerate growth and scalability.

The mature ecosystems in this portfolio are expected to generate financial returns to sustain CertiK Ventures' operations through Q4 2025. This approach provides the necessary runway for middle- and premature-tier ecosystems to reach their full potential, delivering competitive maturity and financial returns by 2026.

Grown with Builders: Inspiring Innovation Across Web3

The remaining quarter of CertiK Ventures' funds is allocated to the Financial Investment batch, positioning CertiK Ventures as an active and professional investment entity rather than solely a subsidiary of CertiK. This allocation prioritizes financial engagements aimed at capitalizing on current opportunities and fostering future returns, with a clear focus on achieving measurable financial goals.

While the objective of the Financial Investment batch is straightforward—maximizing returns—it demands significant agility, in-depth research, and robust networks. CertiK Ventures targets community- and consumer-focused projects that drive Web3 and cryptocurrency adoption, fostering groundbreaking innovations and broadening the reach of decentralized technologies.

Our strategy focuses on gaining exposure across various sectors, enabling us to deepen our collaboration with current partner institutions and reinforce our long-term alliances within the industry. These partnerships not only support innovation but also help us to navigate the increasingly intricate regulatory landscapes across global markets.

Despite the wide range of verticals and asset classes available, CertiK Ventures maintains a disciplined focus on initiatives that uphold the core principles of innovation, security, decentralization, and accountability.

The success of the Financial Investment batch is designed to be highly quantifiable, with a target return on investment (ROI) of at least 140% by Q4 2025. This clear metric underscores the commitment to delivering tangible value while championing the growth and evolution of the Web3 ecosystem.

Outlooks

The success of CertiK Ventures' investment strategy lies in the interconnected nature of its three investment batches, each designed to complement and enhance the others. These synergies, both within the portfolio and with CertiK itself, will be continuously cultivated as CertiK Ventures progresses.

- Strategic Investment represents the foundational commitments that reinforce the value of Financial Investments by fostering long-term partnerships and delivering enduring benefits to portfolio projects.
- Ecosystem Support targeted investments in public chains not only to fortify blockchain infrastructure but also serve as a catalyst for CertiK Ventures' Strategic Investments, enabling the accurate and relevant expansion of products, services, and business models.

- Financial Investment diversifies exposure across verticals and protocols, provides a fertile ground for identifying projects suited for integration into supported ecosystems.

Through this dynamic and interdependent approach, CertiK Ventures ensures its investments are not standalone but instead part of a cohesive and mutually reinforcing strategy.

This Investment Thesis outlines a theoretically robust and practical methodology, providing CertiK Ventures with a roadmap for seamless operations through at least 2025. However, given the rapid evolution of the Web3 space, adjustments to the strategy will inevitably be required to align with shifting market dynamics.

CertiK Ventures encourages internal and external stakeholders—including researchers, engineers, investors, and practitioners—to engage with this thesis. By fostering open dialogue, critical review, and collaborative innovation, CertiK Ventures aspires to contribute meaningfully to a thriving and prosperous Web3 industry and community.

CertiK Ventures Team

December 2024, From all over the World.

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