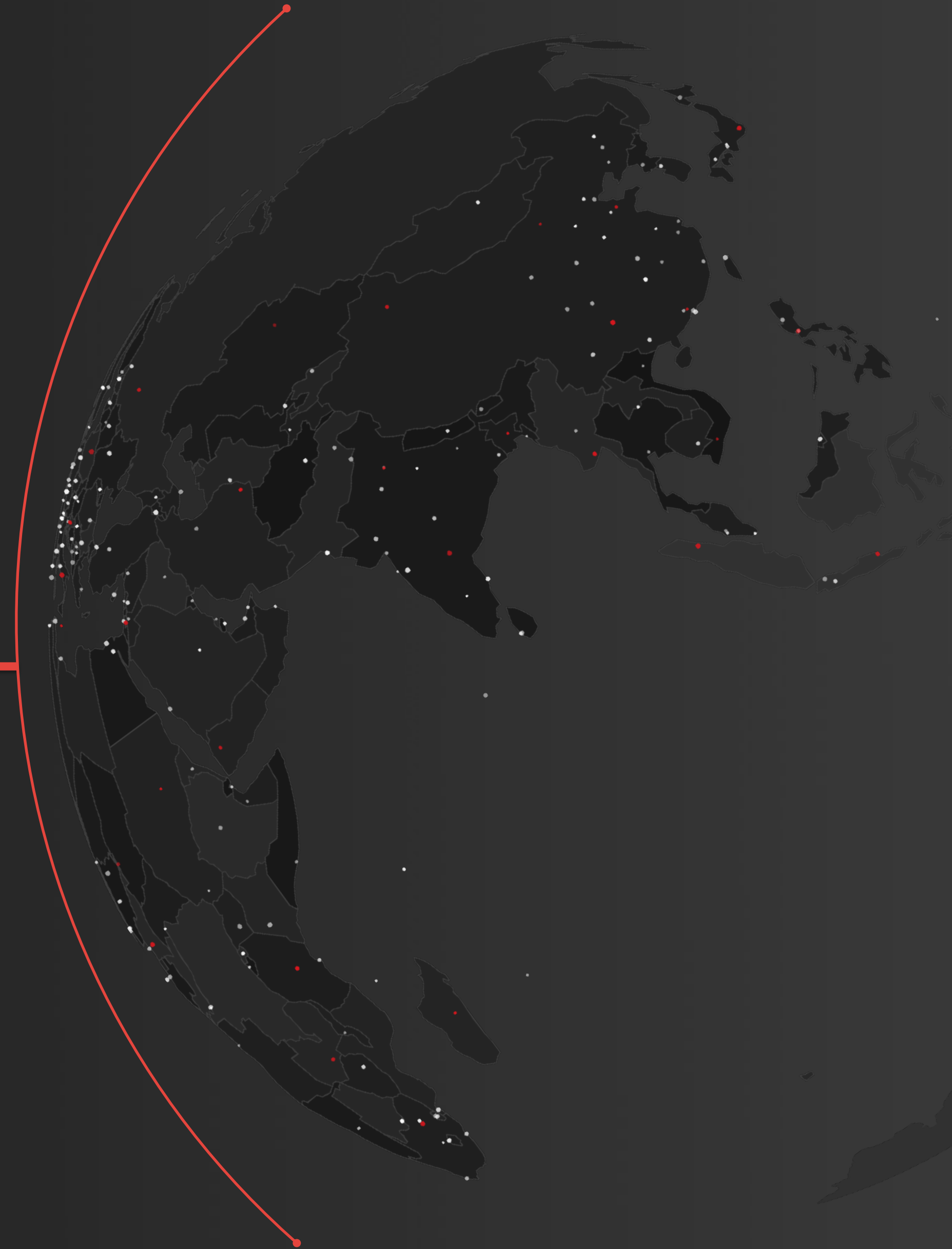




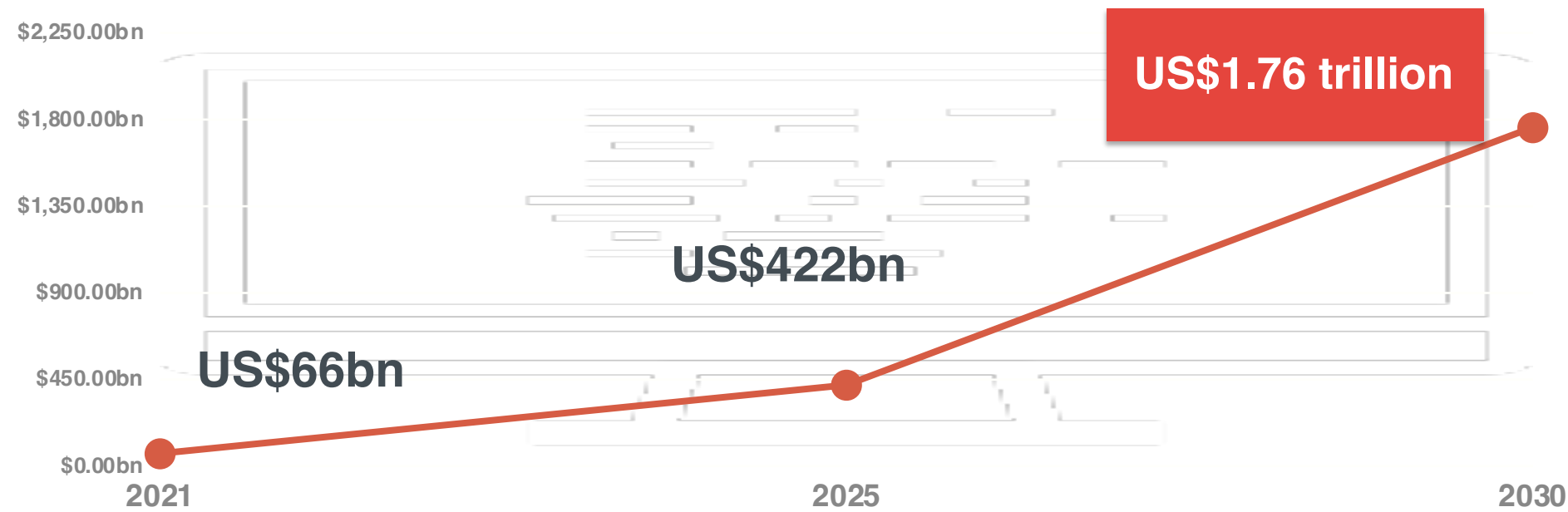
Securing the Web3 World



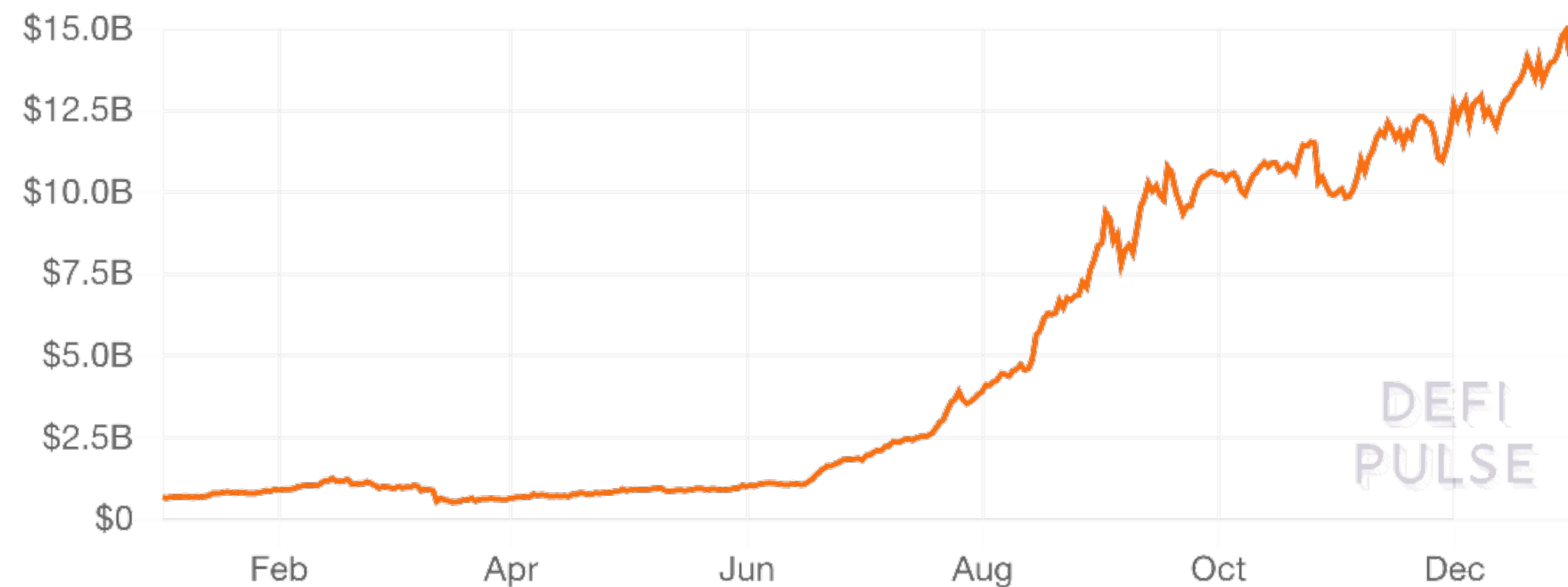
Blockchain's Growing Pains

Blockchain's global economic impact

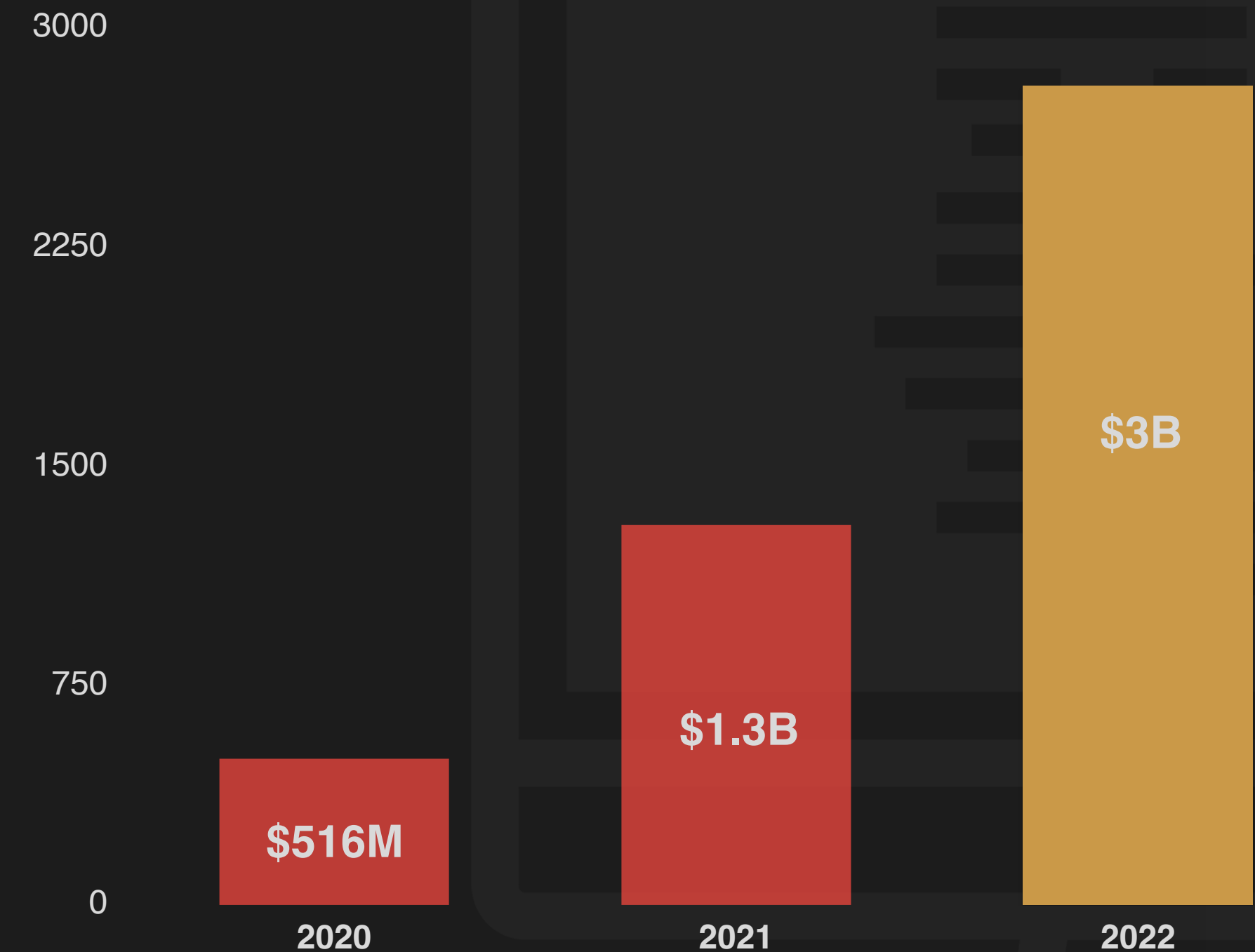
PwC expects blockchain to boost global GDP by over **25x** within 10 years



Total Value Locked in DeFi: increased by 23 times



Growing Financial Loss due to Program Errors



As blockchain's growth boomed in 2020, thefts have grown as well. New forms of innovation, including DeFi, have opened the door to new vulnerabilities.

Improved Security is Necessary for Adoption

“

Still, to one holding digital/cyber assets at a time when **cyber offense** is much more powerful than **cyber defense**, the cyber risk is a risk that I can't ignore.

”

— **Ray Dalio**

Co-Chief Investment Officer & Co-Chairman of
Bridgewater Associates, L.P.

What I Think of Bitcoin, January 2021

Giant Challenges in Securing Safety-Critical Software

PC, Web2, Cloud, ...

Security rate < **97%**

- Monitoring, sandbox, etc.
- Pro-active defense
- Patching vulnerabilities
- Black-box attacks
- Less costly

CPU Hardware

Security rate > **99.9%**

- **Formal Verification**
- "It took **22** years to discover Meltdown and Spectre vulnerabilities"



Blockchain & Web3

- New technical stack
- World computers that **no one can stop**
- Smart contracts are **hard** to change
- Most codes are **open sourced**
- 1 vulnerability can lead to > **\$10MM** lost

“

Formal reasoning about **concurrency** [in software] seems to be still in the **early** stages ”

”

— NSF Formal Methods for Security Report [2016]



Founded in 2018 by two professors, CertiK leverages the leading **Formal Verification** technology to mathematically ensure the **highest level of security** for blockchains, smart contracts, and Web3 apps.



Prof. Ronghui Gu, Ph.D.

Co-Founder

Ronghui Gu is the Tang Family Assistant Professor in Computer Science at Columbia University. He obtained his Ph.D. degree from Yale University in 2016 and bachelor's degree from Tsinghua University in 2011.

Gu is the primary designer and developer of the first verified concurrent OS kernel CertiKOS. For his work in systems verification, Gu received: three Amazon Research Awards, an OSDI Jay Lepreau Best Paper Award, an SOSP Best Paper Award, a CACM Research Highlight, and a Yale Distinction Dissertation Award.



Prof. Zhong Shao, Ph.D.

Co-Founder

Zhong Shao is **Thomas L. Kempner Professor** and **Department Chair** in the Department of Computer Science at Yale University. He earned his Ph.D. in Computer Science from Princeton University in 1994.

Shao has been a leading figure working on the highly visible research fields on cybersecurity, programming languages, operating systems, and certified software. He and his FLINT group at Yale have developed the world's first hacker-resistant concurrent operating system CertiKOS—a major milestone toward building cyber-physical systems that are provably free from software vulnerabilities.

Creators of **CertiKOS**, the world's **first and only, fully verified** multi-core OS kernel and hypervisor.

“

Ten years ago, no one would predict that we could prove the correctness of a single-threaded kernel, much less a multi-core one. Zhong and his team have really blazed a spectacular trail for the rest of us.

”

— **Greg Morrisett**

Dean and Vice Provost of Cornell Tech
Former Dean of the Faculty of Computing and Information Science
at Cornell University

**CACM
2019**

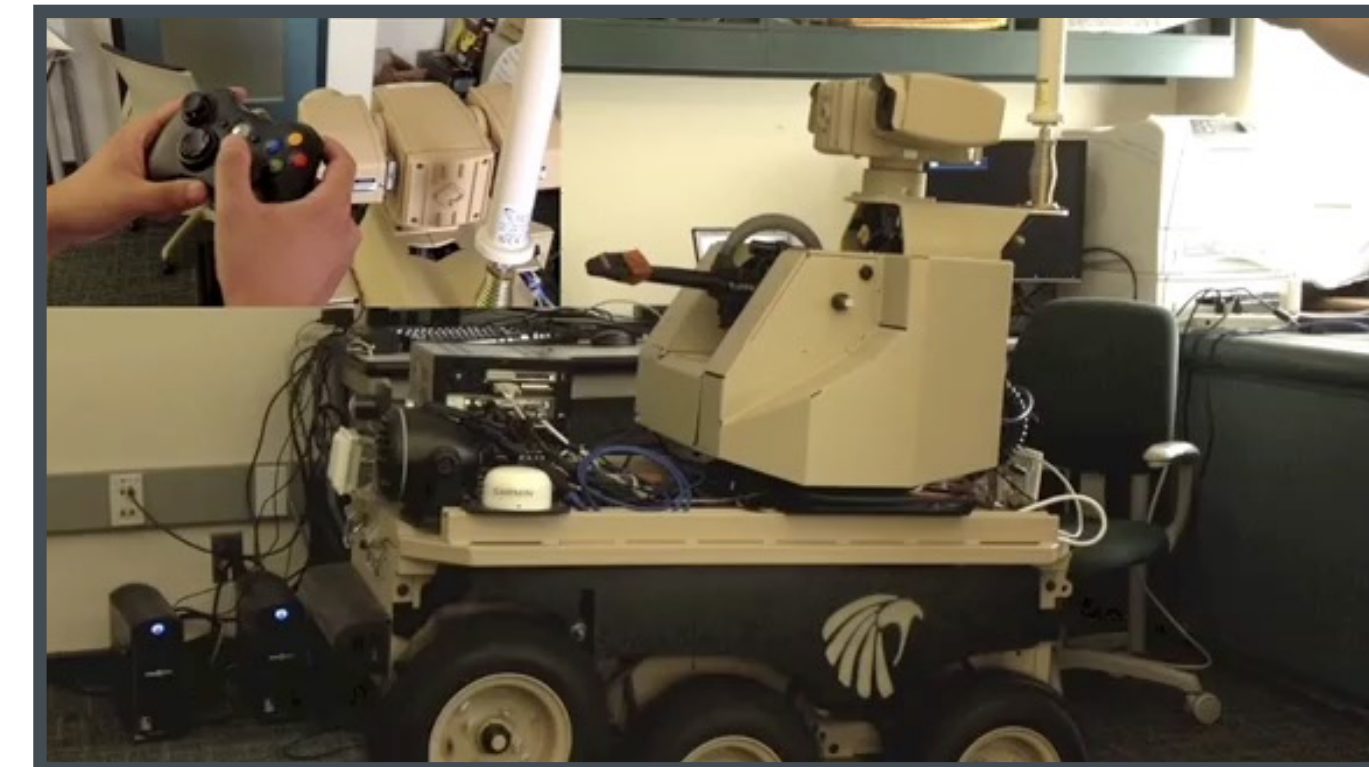
**SOSP
2019**

**OSDI
2021**

**Amazon
Research
Awards**

**VMware
Research
Award**

CertiKOS related work won the **Best Paper Awards** of SOSP'19 and OSDI'21, **3 Amazon Research Awards**, **1 VMware Systems Research Award**, and was selected as the **Research Highlights** by CACM (Communications of ACM).



CertiKOS was deployed on the LandShark Robotics, an Unmanned Ground Vehicle (UGV).

#1 cybersecurity company
in the blockchain and web3 industry

>\$300B

Assets Secured

>30%

Market Share of All
Audited
Web3 Projects

70%+

Market Share of
All 17,000
CoinMarketCap

63%+

Share of Voice

5,000+

Audit
Performed

60,000+

Vulnerabilities
Detected



Globe Awards

2022 Cyber Security
Global Excellence Awards

Global Awards Silver Winner



CBINSIGHTS

2022 CBINSIGHTS
Blockchain 50

The Top Blockchain Companies



CBINSIGHTS

2021 CBINSIGHTS
Blockchain 250

The Top Blockchain Companies

>\$300B

Assets Secured

65%+

Market Share Of
Top 200
CMC

69%+

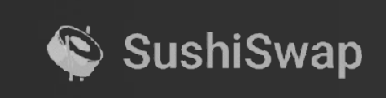
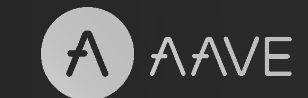
Market Share Of
Top 500
CMC

72%+

Market Share Of
Top 10,000 CMC

#1 cybersecurity company
in the blockchain and web3 industry →

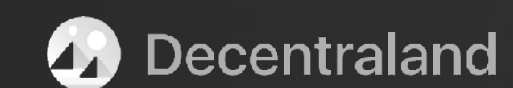
DeFi



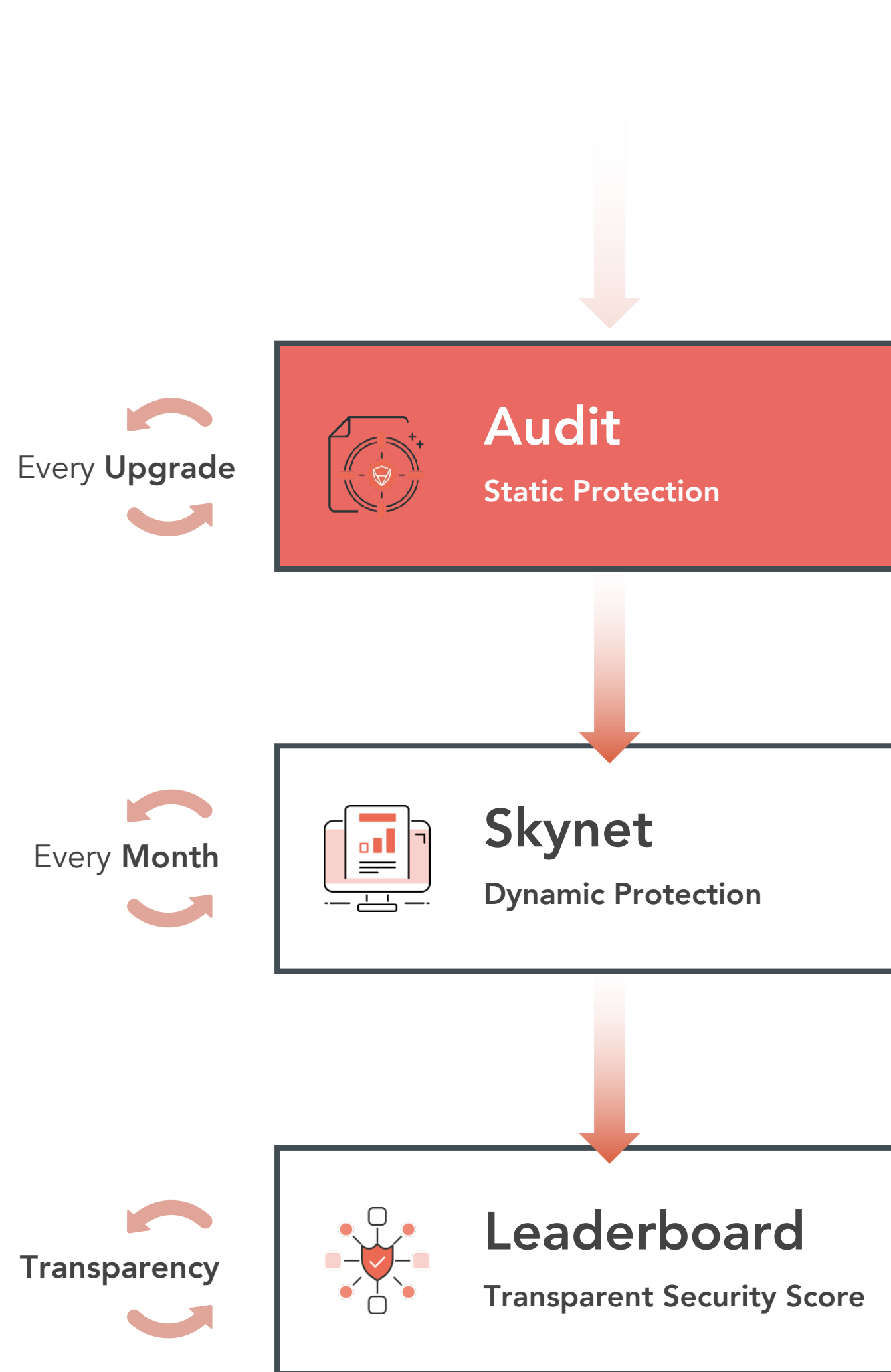
Platform



NFT & Metaverse



Defending Against Code Vulnerabilities



CertiK Audit/Verification Integration



Defending Against Code Vulnerabilities



CertiK Audit/Verification Integration

Every Upgrade

Audit
Static Protection

Every Month

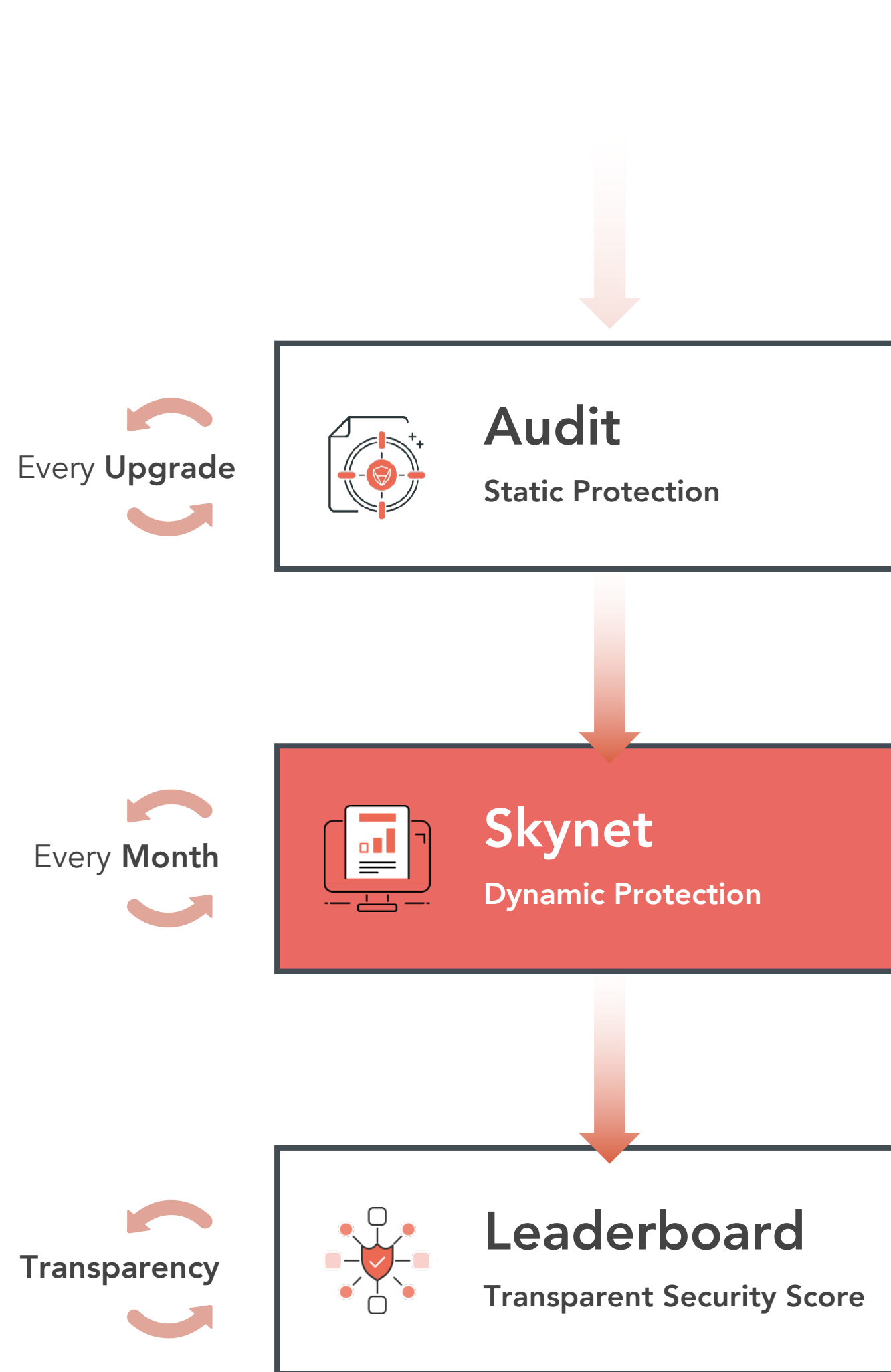
Skynet
Dynamic Protection

Transparency

Leaderboard
Transparent Security Score

```
1 /**  
2  *Submitted for verification at BscScan.com on 2021-08-15  
3  */  
4  
5 /**  
6  *Submitted for verification at BscScan.com on 2021-08-08  
7  */  
8  
9  // SPDX-License-Identifier: Unlicensed  
10  
11 pragma solidity ^0.6.7;  
12  
13 interface WETH {  
14     function deposit() external payable;  
15 }  
16  
17 abstract contract Context {  
18     function _msgSender() internal view virtual returns (address payable) {  
19         return payable(msg.sender);  
20     }  
21  
22     function _msgData() internal view virtual returns (bytes memory) {  
23         this; // silence state mutability warning without generating bytecode - see https://github.com/ethereum/solidity/issues/2691  
24         return msg.data;  
25     }  
26 }  
27  
28  
29 interface IERC20 {  
30  
31     function totalSupply() external view returns (uint256);  
32     function balanceOf(address account) external view returns (uint256);  
33     function transfer(address recipient, uint256 amount) external returns (bool);  
34     function allowance(address owner, address spender) external view returns (uint256);  
35     function approve(address spender, uint256 amount) external returns (bool);  
36     function transferFrom(address sender, address recipient, uint256 amount) external returns (bool);  
37     event Transfer(address indexed from, address indexed to, uint256 value);  
38     event Approval(address indexed owner, address indexed spender, uint256 value);  
39  
40 }  
41 }  
42  
43 library SafeMath {  
44  
45     function add(uint256 a, uint256 b) internal pure returns (uint256) {  
46         uint256 c = a + b;  
47         require(c >= a, "SafeMath: addition overflow");  
48     }  
49 }
```

Defending Against Real-time Attacks



CertiK Skynet Dynamic Monitoring System

On-chain security monitoring and data insights engine with 24/7 security intelligence

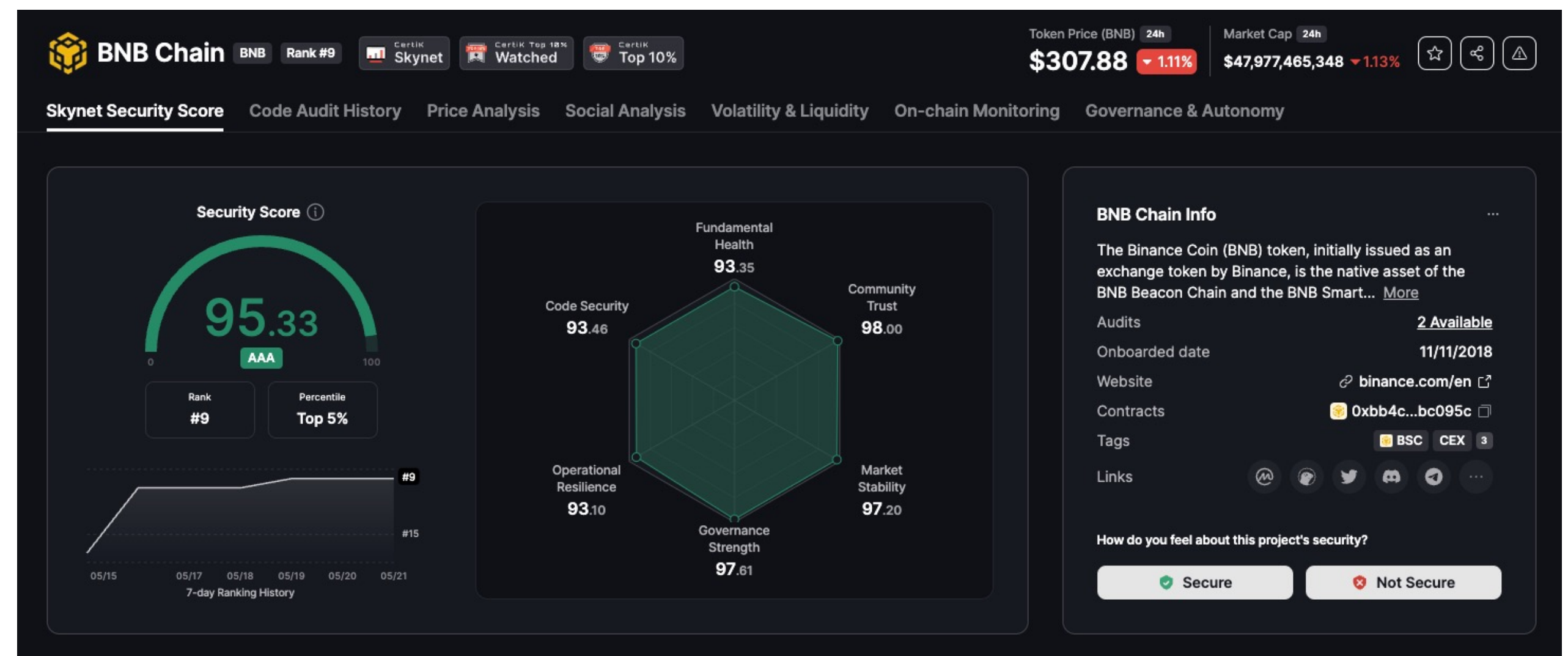
Perform **post-deployment** monitoring and security coverage

Delivers comprehensive **real-time** on-chain insights for projects

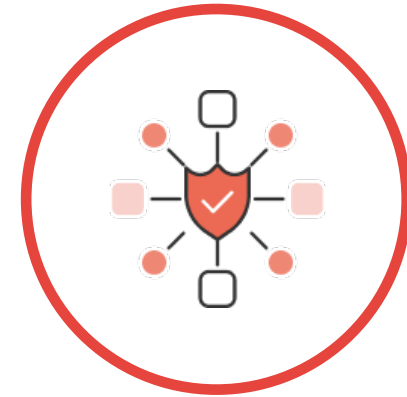
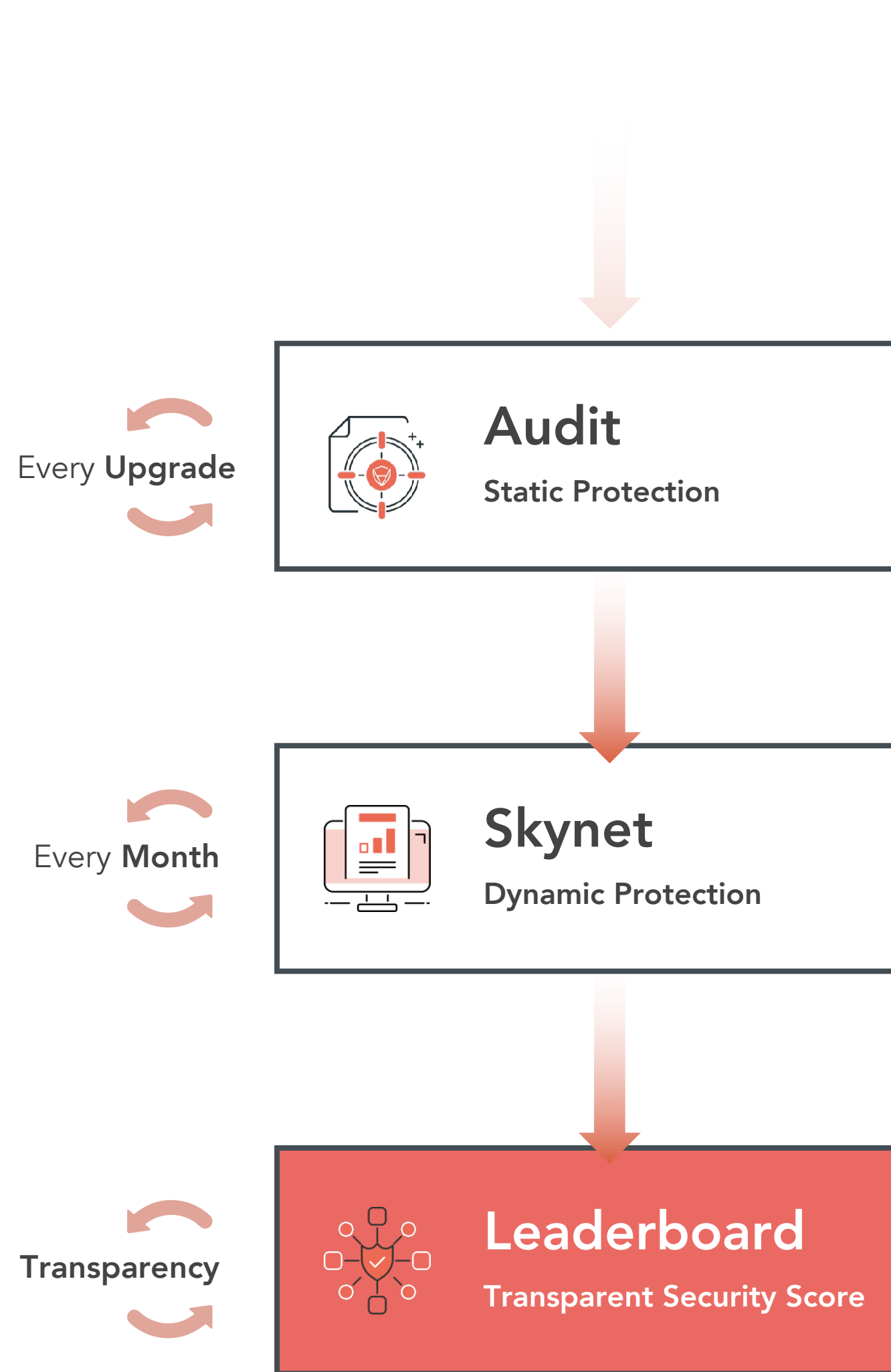
Monitored **7.8 billion** assets transfers

Labeled **4.2 million** accounts

Over **800** enterprise subscriptions since 2021



Transparent Security Leaderboard – Community Impact



CertiK Security Leaderboard

- Provides the community with transparent, easy-to-understand security insights
- **10,000+** listed projects
- Total users: **3M+**

Web3 Security Leaderboard
Provable Trust For All

\$364B Market Cap Assessed | **3,379** Projects Audited

Search Project by Name / Token

Skynet
Actively monitor on-chain smart contracts in real-time and present actionable security and Web3 app data insights for the community.
[Enable Skynet Today](#)

CertiK Skynet Alerts

Deribit Exploit	11/1/2022	CONFIRMED
Skyward Finance Exploit	11/1/2022	CONFIRMED

Trending Projects

Rank	Project	Trust Score	Market Cap
1	Shentu	95	\$77.14M
2	Terra	87	\$1.47B
3	Ceek	95	\$106.76M

Recently Completed

Rank	Project	Date
1	SHIBW	11/3/2022
2	UVTOKEN	11/3/2022
3	Baby Bali	11/3/2022

Watchlists

#	Name	Trust Score	Audit	Price / 24h	Market Cap	Ecosystem	Category	Badge & Honor
1	Polygon	95	2	\$1.12 ↑ 15.9%	\$9.82B	L2 Scal...	2	3
2	Shiba Inu	92	1	\$0.00 ↓ 3.42%	\$6.53B	DEX	3	3
3	Aave	95	2	\$88.47 ↑ 5.79%	\$1.25B	DeFi	3	3
4	The Sandbox	93	9+	\$0.85 ↑ 1.33%	\$1.28B	Gaming	4	3
5	ApeCoin	90	2	\$4.52 ↑ 2.09%	\$1.39B	NFT	4	3

Currently Onboarding

Anfrilabs	Reviewing	85%
Super Athletes C...	Reviewing	85%
Metropoly	Reviewing	71%
Pooky	Reviewing	79%
Baby Shark Unive...	Reviewing	74%
MMM	Reviewing	85%
MetaDex	Remediating	95%
Intuitive Machin...	Reviewing	85%

Our Investors





CERTIK