

Storm catch

ROBOT AUTHORIZATION



DO NOT TRUST ROBOTS

Autonomous machines are rapidly integrating into public spaces, workplaces, and homes—but **there is no way to verify trustworthiness.**

This affects everyone, from businesses deploying machines to the public interacting with them. Robot adoption continues to surge and so do the risks.

SECURITY THREATS AND DATA BREACHES

Businesses and users risk interacting with unauthorized, malfunctioning, or even malicious machines unknowingly.

Not only is this prone to become the biggest privacy concern to date, also our security is at stake. Compromised machines would be able to silently influence or aggressively damage operations and society.

LACK OF TRUST HINDERS ADOPTION

The problem isn't the machines—it's the missing trust layer. Businesses deploying and employing autonomous machines need to prove security and reliability to their customers and end-users.

Who is the **owner?**

How about **privacy?**

Unauthorized use protection?

Is my data well **secured?**



DO YOU TRUST AUTONOMOUS MACHINES?

	TODAY	SOON
in the grocery store	✓	
scanning your passport	✓	
delivering your medicines	✓	
cooking your food		?
entertaining your kids		?

STORMCATCH SOLVES TRUST & SECURITY

Stormcatch provides unique verifiable identities, authorized permissions, and reputation tracking for autonomous machines, ensuring verifiable trust between machines and humans.



IDENTIFICATION

Unique verifiable machine identities ensure users know what they are interacting with.



AUTHORIZATION

Clear permissions define what machines are allowed to do.



REPUTATION

Transparent performance and compliance records incentivise trustworthy machine behavior over time.



THE TEAM

REMCO KOEMANS

Stormcatch Founder



20+ years IT business owner, **developer**, and **serial entrepreneur** with 20 successful startups, including 4 times co-founder of startups and scale-ups. Remco combines **technical expertise** with **strategic insight** and is recognized for bringing together the right people, ideas, and funds to **drive innovation**.

FRANK VAN DER HULST

Robotics lead



12+ years **hands-on robotics** development, space-to-ground robot teleoperation systems, peer-reviewed **research**, **patented technology**, and experience as a founder. Frank is known for his **broad technical vision** and ability to transform hardware and software ideas into **practical solutions**.

NICK ROSSENBERG

Blockchain lead



Former tech lead at a **Layer 1 blockchain** platform for sidechain creation and interoperability. Nick stands out in **hands-on Web3** development, with expertise in smart contract **security** audits, decentralized system **implementation**, and scalable architecture development.

ADRI WISCHMAN - Blockchain Advisor

Serial entrepreneur, blockchain evangelist, and specialist in real world application of distributed ledger technology.

EDUARD LIEVENS - Blockchain Lawyer

Highly experienced in IT, AI, and privacy, with a career starting at IBM during a period of breakthrough advancements.

SPECIALISTS

NORALY OONK - Web & Frontend

MARK HELLINGS - Design

JANET SCHOUTEN-DEN BUTTER - Marketing

STORMCATCH MODEL - TRUST FOR THE PUBLIC, VALUE FOR BUSINESS

Stormcatch addresses the needs of both the general public and business users. The SCATCH token enables a model in which network security and token stability scale with market size.

FREE OPEN ACCESS DRIVES ADOPTION AND TRUST

Anyone can verify a machine's identity, guaranteeing transparency and proven safety for end users.

BUSINESS USERS DRIVE MONETIZATION

Stormcatch solves the trust issue such that robot developers and integrators can focus on their use-case.

STORMCATCH ENABLES **ECOSYSTEM**

The opportunities for robotics in the blockchain space are numerous. Stormcatch provides the trust layer that enables new use-cases in the ecosystem.



SCATCH

The native SCATCH ecosystem token powers transactions and staking. It drives ecosystem applications and the incentivization model around staking interest and reputation-based transaction discounts.

NETWORK SECURITY AND TOKEN STABILITY WITH SCALE

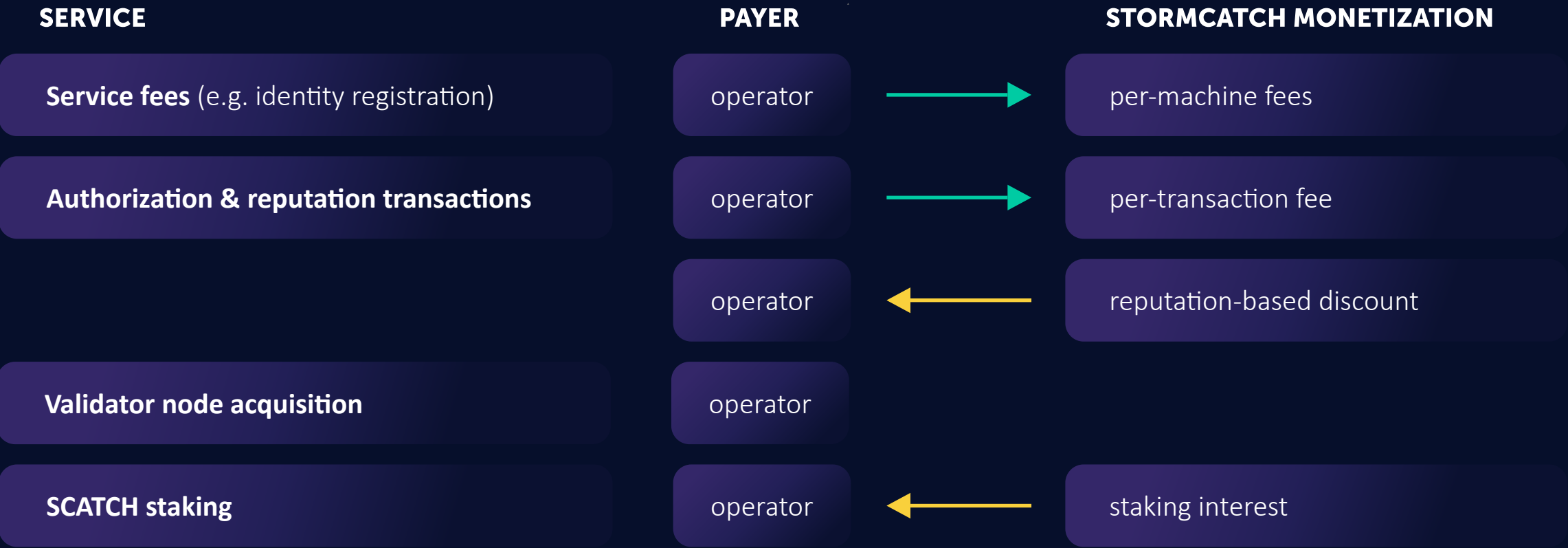
Business users are incentivised with discounts and governance rights to stake SCATCH and run validator nodes. As an effect, **network security scales with market size**. Additionally, staking models encourage long-term token holding to **stabilize token value**.

GOVERNANCE OVER AUTHORIZATION PROTOCOLS AND UPGRADES

Voting rights are awarded to high reputation participants and staking businesses with the goal to keep security in-check and incentives balanced.

BUSINESS MODEL – SCALING TRUST & VALUE

The Stormcatch model leverages a **self-reinforcing growth cycle**, generating revenue as **more users** deploy **more robots**.



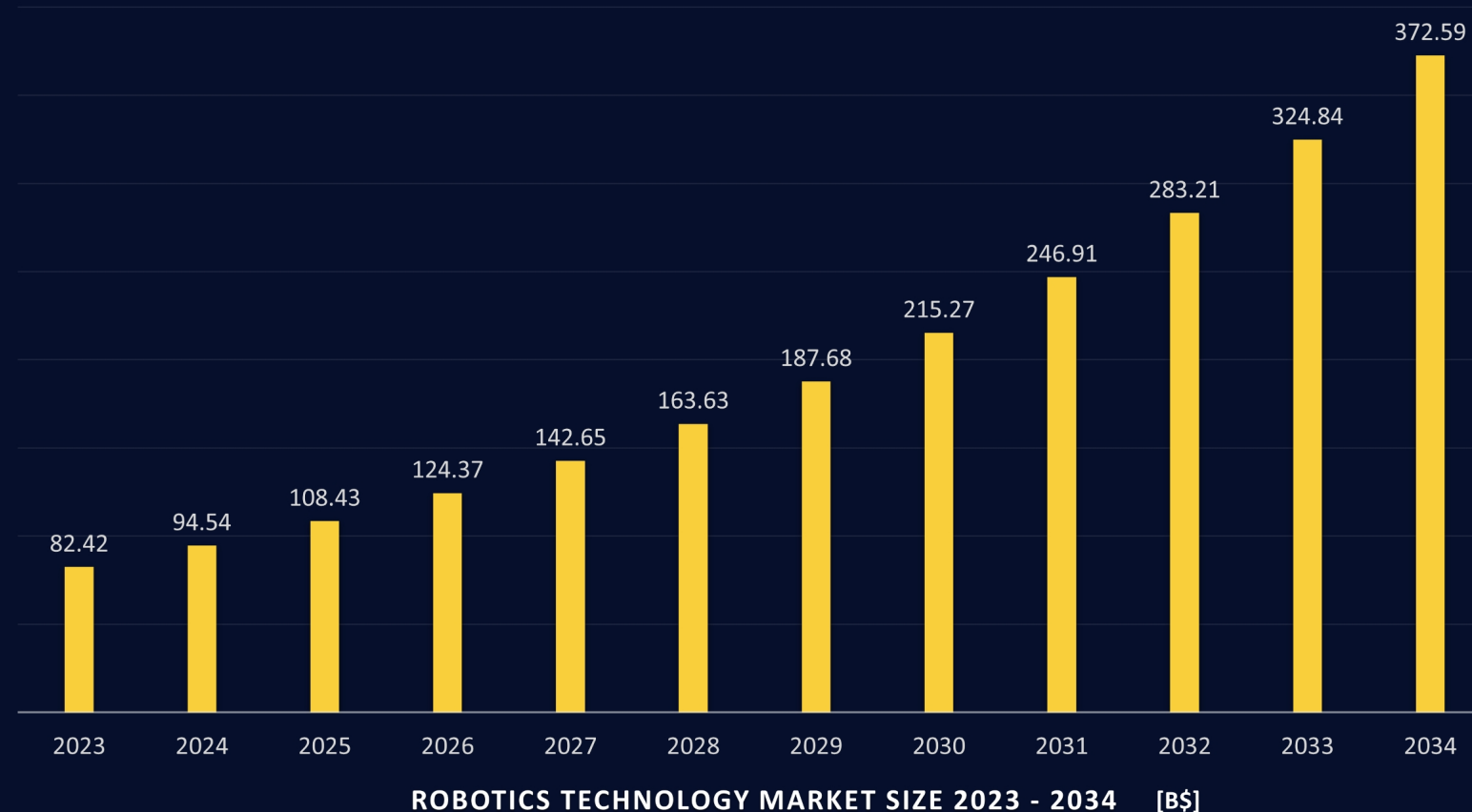
LONG-TERM VALUE

On the long-term, **tokenized machine ownership scales Stormcatch value** by aligning with the rapidly expanding Robots-as-a-Service (RaaS) market.

The Stormcatch system enables ecosystem-led business models such as staking pools for funding, investment, ownership, and control. Scaling Stormcatch monetization on service fees and transactions.



A GROWING MARKET FOR AUTONOMOUS MACHINE SECURITY



Rapid Growth of Autonomous Machines across domains is driven by technological advancements, rising automation demand, and the flexibility of Robotics-as-a-Service (RaaS), reducing upfront costs for businesses.

The **RaaS market** is projected to grow from \$1.8B in 2023 to \$4.0B by 2028 (CAGR 17.4%)¹, with some estimates reaching \$125.17B by 2034 (CAGR 25.52%)²

The **broader robotics technology market** is also surging, expected to grow from \$94.54B in 2024 to \$372.59B by 2034 (CAGR of 14.70%)³

1 [MarketsandMarkets](#) | 2 [Market Research Future](#) | 3 [Precedence Research](#)

SECURITY GAP

Current solutions focus on machine functionality, but lack sophisticated security measures able to secure against today's challenges. Being focussed on their end-application and short time to market, businesses in the robotic space have little expertise and interest in developing security in-house.

OPPORTUNITY

Stormcatch fills this gap with a scalable solution for machine trust and security, addressing the critical need for security while keeping robotics developers and integrators focussed on their application and use-case.

TECHNICAL FOUNDATION – OFFLOADING CUSTOMERS FROM THE SECURITY BURDEN

The general public can scan Stormcatch-enabled machines via a dApp to verify identity, authorization, and reputation. Businesses integrate this functionality into their surveillance or robot fleet systems and may Stormcatch-enable their own machines by registering identities.



MACHINE IDENTITY LEDGER

A Stormcatch-enabled machine receives a unique on-chain identity via Verifiable Credentials (VC), with identity metadata hashed and stored off-chain.



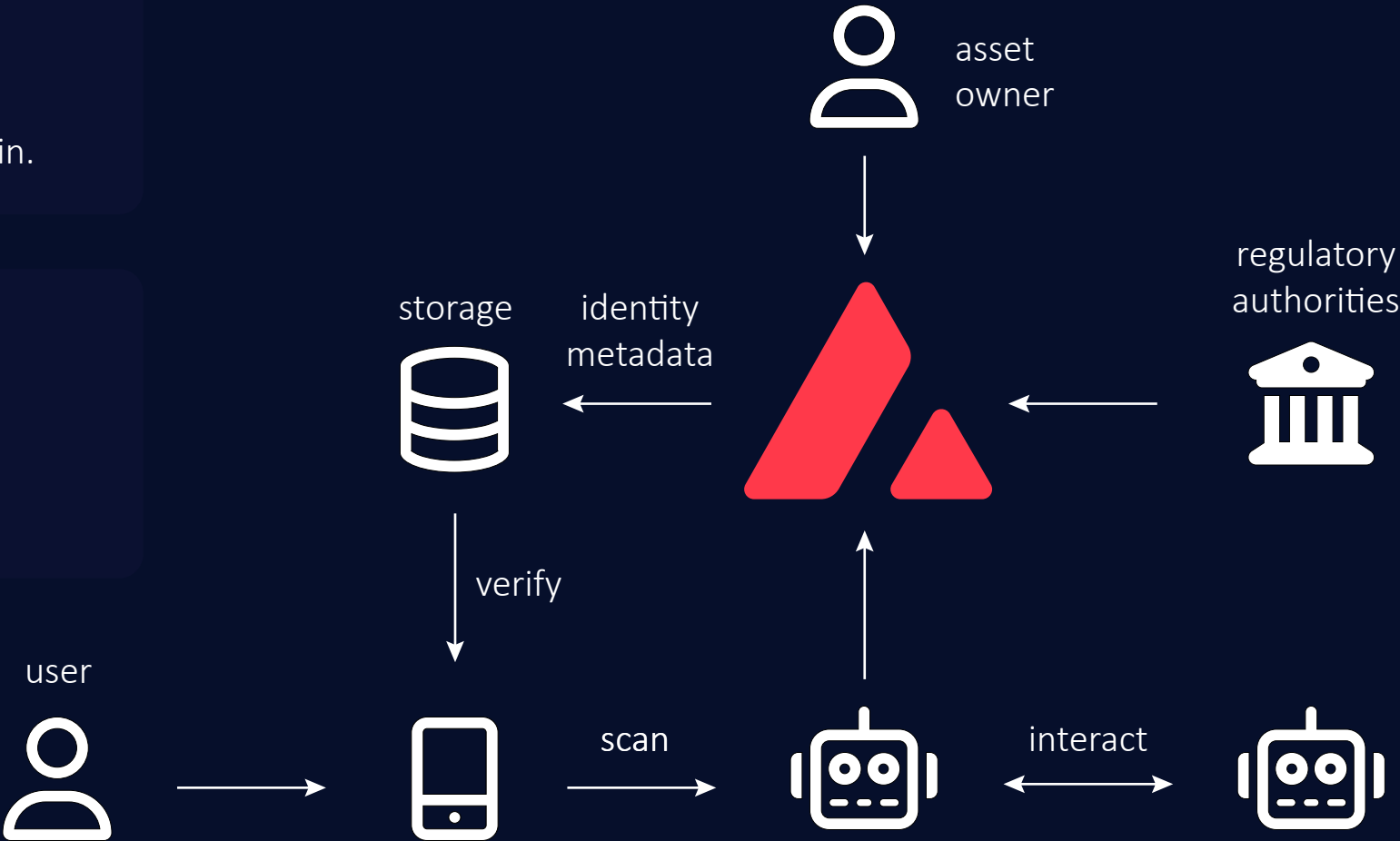
AUTHORIZATION ENGINE

Owners and regulatory authorities assign authorizations (e.g., area access, speed permits, or industrial ratings), managed by smart contracts for registration, enforcement, and revocation.



REPUTATION ENGINE

On-chain reputation tracks performance (e.g., timeliness, accuracy), compliance (e.g., service history, EX-rating), and violations (e.g., data breaches, speeding), all governed by smart contracts.



STORMCATCH ♥ AVALANCHE

The Avalanche network enables Stormcatch to scale machine trust verification globally, leveraging its cost-effective high transaction throughput at sub-second finality.

SUB-SECOND FINALITY IS CRITICAL

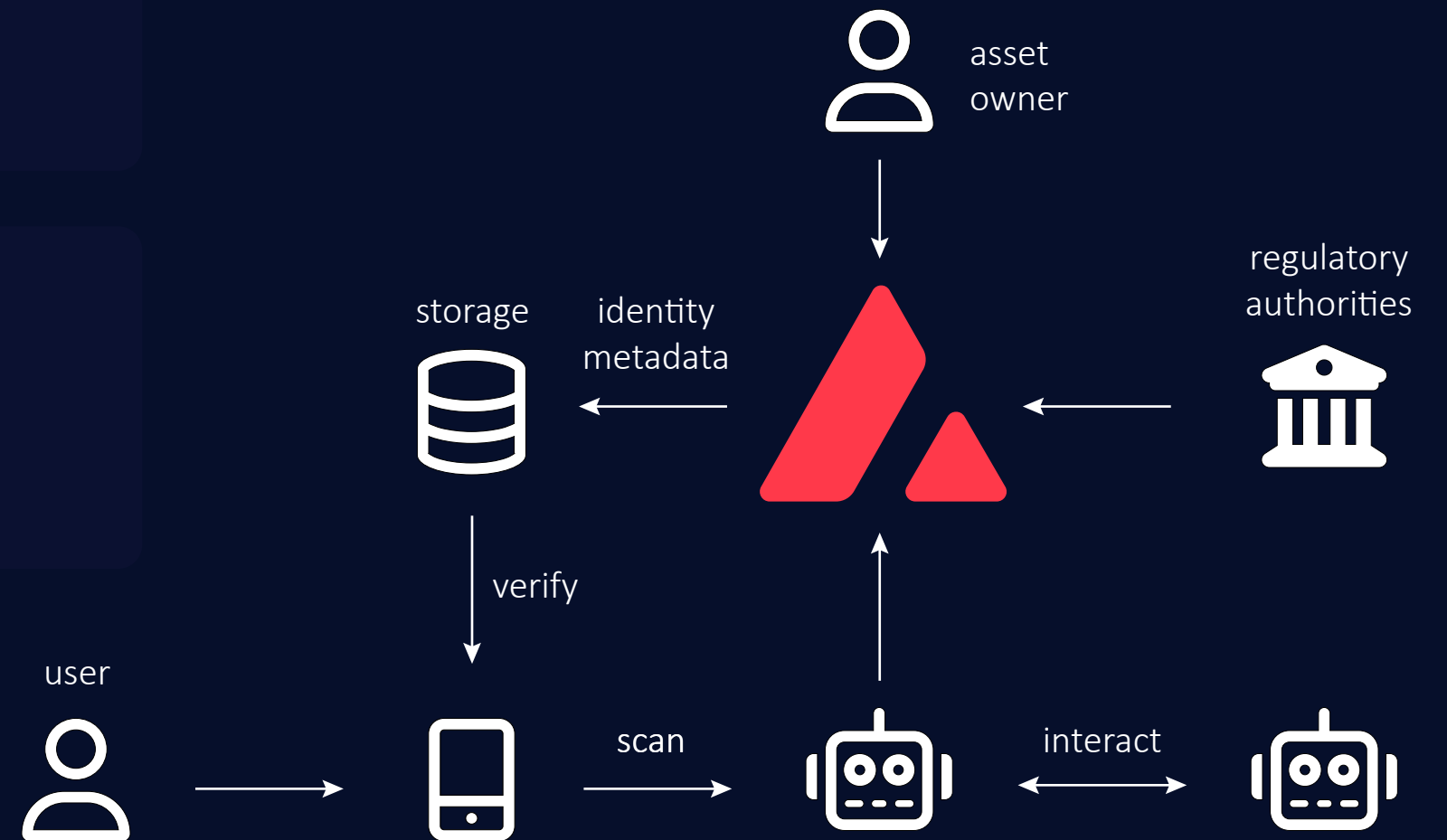
Transactions must happen in real-time with every machine interaction.

LARGE-VOLUME VERIFICATION AT LOW FEES

Stormcatch targets a fundamental role in the ever-expanding robotics market—more users deploying more robots. Within three years, reaching 100 users managing 100 robots each, with 1,000 daily transactions per robot, is ambitious yet well within Avalanche’s scalability limits.

STORMCATCH’S SOVEREIGN AVALANCHE L1

Stormcatch operates its own high-performance Avalanche L1, ensuring dedicated resources, custom governance, and tailored security policies, powered by the native SCATCH token for transactions, rewards and staking.



DEVELOPMENT ROADMAP – FROM MVP TO SCALABLE ADOPTION

MVP
mid. 2025
TRL*3

OBJECTIVE: PROOF CONCEPT

- Identity ledger
- Authorization & reputation engines
- Machine integration in test environment

CODEBASE SCOPE

- Custom L1 configuration
- Authorization & reputation smart contracts
- Tokenized machine ownership (optionally)
- Testnet integration

DEMONSTRATION
mid. 2026
TRL*6

OBJECTIVE: PROOF ADDED VALUE WITH VALIDATING PARTNER

- Machine integration
- Demonstration in relevant environment

COMMERCIALIZATION
mid. 2027
TRL*9

OBJECTIVE: BUSINESS TRACTION, NETWORK & TOKEN REINFORCEMENT

- Account abstraction for seamless customer onboarding
- Business validator node participation
- Community-driven governance

**CONTINUAL
DEVELOPMENT**

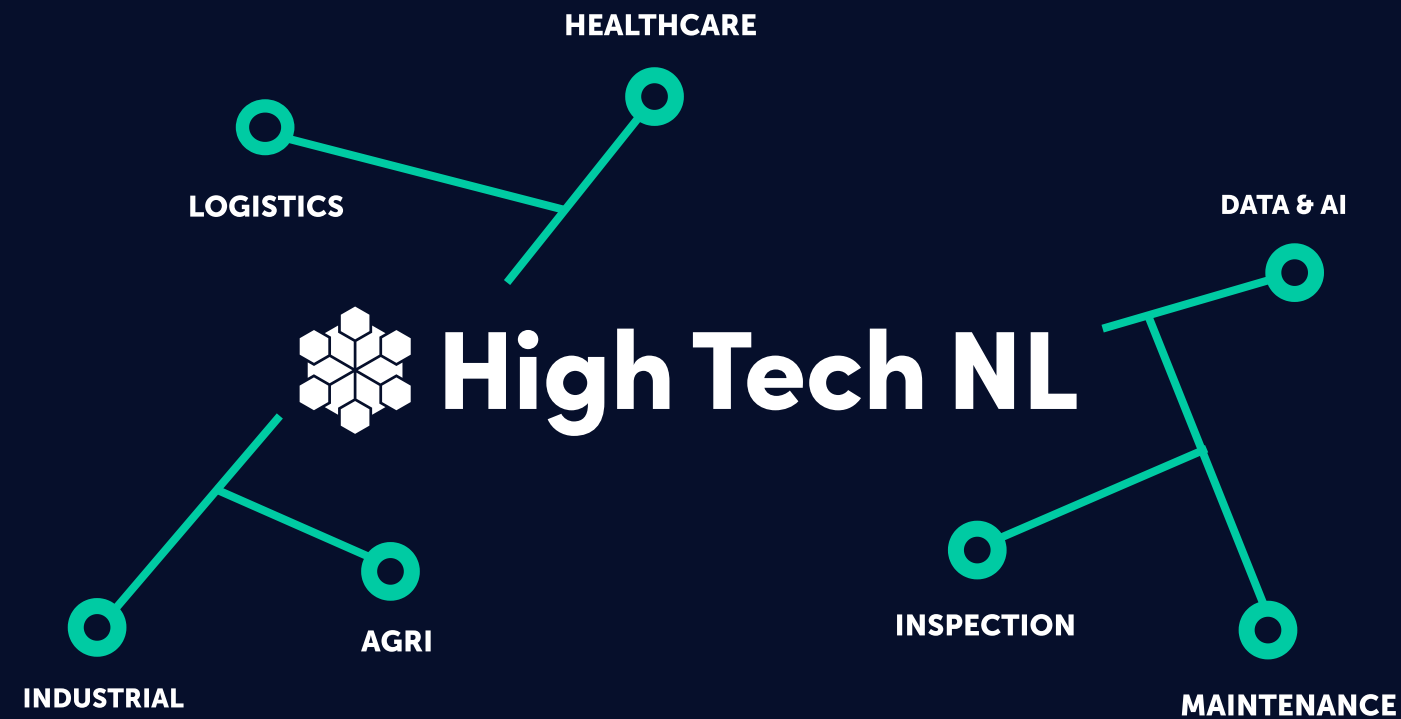
OBJECTIVE: DRIVE ADOPTION AND ECOSYSTEM GROWTH

- Public SDK and docs for low-barrier adoption
- Open-source fostering community verification, feedback and eco-system growth

*Technology Readiness Level (TRL)

GO TO MARKET WITH OUR PARTNERS

Stormcatch is proud member of the **High Tech NL Robotics ecosystem**, bringing together businesses, academy, and government. Comprising over 140 leading robotics stakeholders in the Netherlands, Belgium and Germany, ranging from promising startups to SME's and technology leaders such as **ASML** and **Philips**.



TARGET VALIDATING PARTNER

Stormcatch aims to leverage the High Tech NL Robotics ecosystem to collaborate with validating partners in key sectors, including medicine delivery robots, explosion-proof certified robotics, and autonomous agri/food robotics. These sectors are all represented within the ecosystem, providing strong collaboration opportunities.

TARGET CUSTOMERS

Robot developers and integrators seeking a turnkey security layer. Fleet managers and RaaS providers delivering autonomous services at scale.

KNOWLEDGE

Access to cutting-edge knowledge.

FUNDING

Funding through grants, innovation loans and subsidies.

JOIN STORMCATCH SECURING AUTONOMOUS MACHINES



INVEST

Invest in the future of trusted autonomous machines.



INTEGRATE

Integrate Stormcatch into your robot fleet.



ENGAGE

Join the Stormcatch ecosystem and contribute to existing or new developments.



Stormcatch.com

