

boosty

# INTRODUCTION TO BOOSTY LABS

Accelerate Your Growth in a Decentralized Era

# 250+

Projects successfully delivered

# 150+

People in 6 countries

# 150+

Clients in 30 countries

## Bēhance

Boosty Labs has collected 4 awards from Behance for achievements in UX design

## replit

Boosty Labs had partnered with Replit, a cutting-edge integrated IDE and deployment platform driven by AI



Boosty Labs' web site won a CSS Design Awards in the Web Site of the Day Nomination

## Media Features

### Forbes



### MarketWatch

### yahoo!finance



### barchart

### BENZINGA

# Clients

TEMASEK

McKinsey  
& Company

vodafone

LEDGER

TRUSTANA

consensys

STORJ

Affinidi

POKT

elixir

ZION

ICON

paraswap

parity

BOONJI  
PROJECT

Blockchain.com

CasperLabs

CONCORDIUM

Bloom

SAMSUNG

# Technology Stack

## Blockchain stack

- Solidity
- Rust
- Cosmos/Tendermint
- FunC (TON)
- Motoko (Dfinity)
- C++
- Haskell (Cardano, Concordium)
- Cadence (Flow)

## DevOps

- AWS/GCP/Azure
- DigitalOcean
- Kubernetes
- Docker
- Terraform
- Jenkins
- Ansible
- Hybrid / Hardware

## Backend

- Golang
- Node.js
- Next.js
- Rust
- C#
- .NET
- Java

## Web

- React.js
- Vue.js
- Angular.js
- Knockout.js

## Distributed/ Decentralized

- IPFS
- Storj
- Filecoin
- DFINITY
- Fluence Network

## Mobile

- Android Native
- iOS Native
- React Native
- Flutter
- Xamarin

## Design

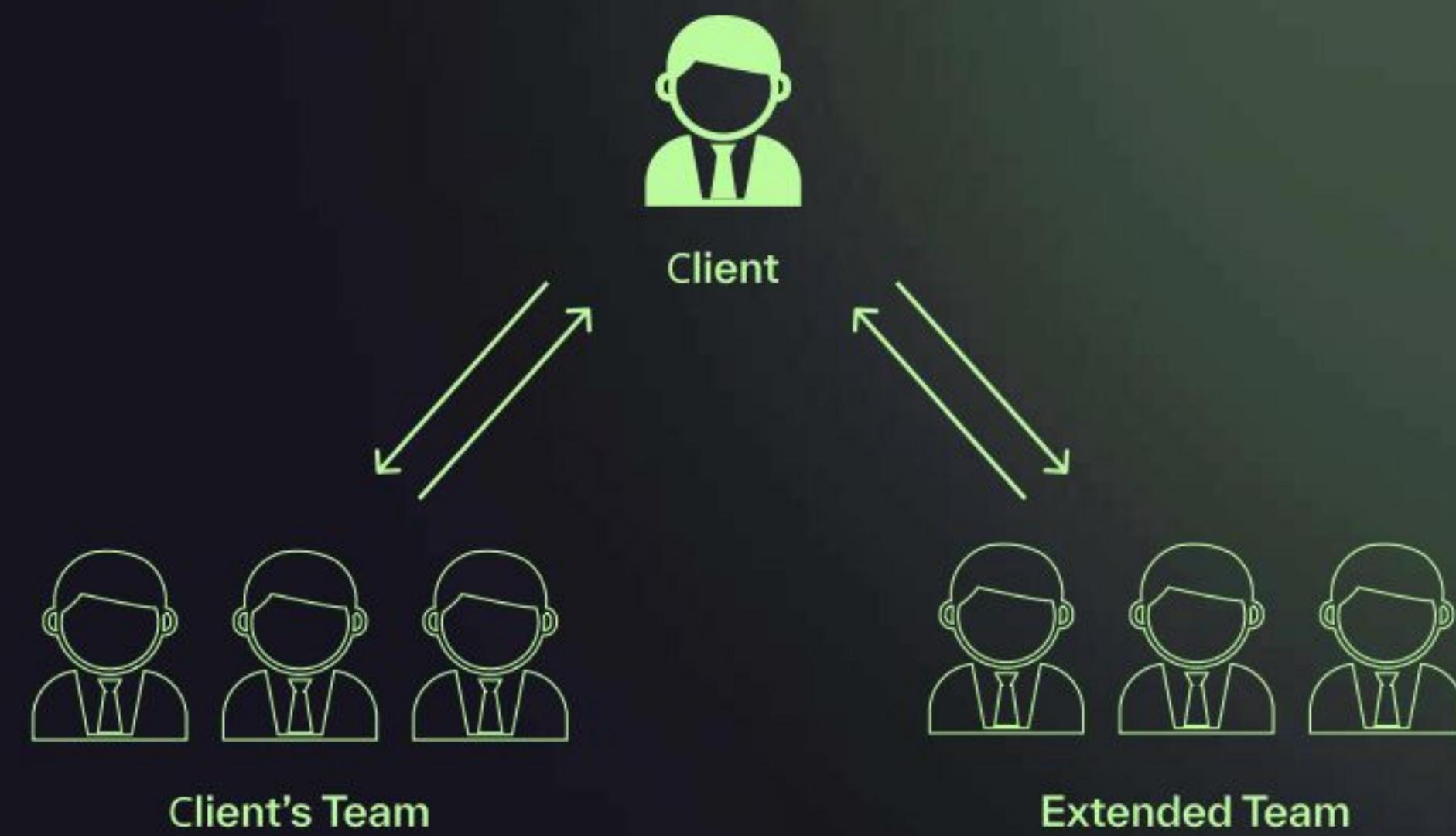
- UI/UX product design
- AR/VR Graphic design
- Voice User Interface (VUI) design
- Firefly design
- Interactive design
- Ai prompt engineering design
- Game Meta-World design
- Brand Meta design
- T-shaped product designer
- Ai prompt PS design

## Delivery

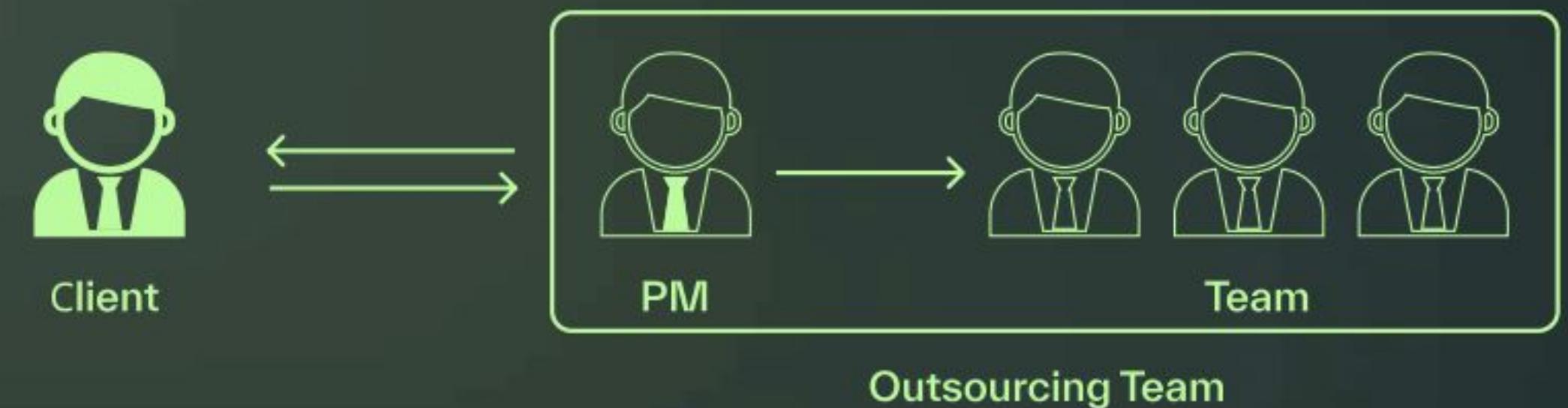
- Product management
- Business analysis
- Project management

# Utilization of Development Resources

## Outstaffing



## Outsourcing



- Boosty Labs provides outstaffing services, offering skilled professionals to augment your existing team's capabilities.
- We ensure seamless integration with your projects, delivering expertise and flexibility to meet your specific needs.

- Boosty Labs offers comprehensive outsourcing services, enabling businesses to efficiently delegate their IT and development projects.
- Our expert teams deliver high-quality solutions, focusing on innovation and timely delivery, covering full cycle of production.

# Project execution mechanism

## Start

- Review the scope of work + review the estimates + review the team composition
- Prioritize the scope
- Create a roadmap, sprint plan, risk register, collect the necessary links, communication plan, change request log
- Prepare the Jira board, Confluence space, access for the team
- Project backlog creation → Sprint backlog creation

## Communication

- Create convenient communication channels with stakeholders
- Follow the communication plan (approved with the stakeholders)
- Project communication with stakeholders - any suitable channels
  - for quick communication (discussions on updating/questions/ decisions confirmation)
- Mailing via emails (project updates/sprint reports/time reports/ important notifications or updates)
- Weekly or bi-weekly meetings with the team (stakeholders <> dev team)
  - For project status updating/ discussions regarding feature implementation/decision-making/ timeline aligning/ change requests

# Project execution mechanism

## Reporting

- Sprint Reports: reflect the current status of development/features, possible risks, timeline, and description of issues raised, and plans for the upcoming sprint (may include additional information requested by stakeholders)
- Time Reports: contains detailed information regarding the scope that was conducted in the sprint
- Covers the questions: what tasks did this sprint include? who worked on what? how many hours were spent?
- Additional information can be provided by a request

### Reviews

- The Tech leads of each sub-team provide technical review (BE team/FE team/Mob team)
- QA team provides reviewing of feature quality and correctness of work according to the requirements
- Daily review of tasks status

### Milestones (Milestone = Epic)

- Defined in the Discovery stage and included in the project planning
- Each defined milestone has its timeline and is reflected in the project roadmap/project plan
- Status of each milestone can be tracked by Sprint Report/Roadmap

### Demo

- Project demonstration: demo meetings are conducted at the end of each sprint.
- Goal: to show the visual progress in the project development and collect feedback from the stakeholders (the results of the sprint iteration)

# Project execution mechanism

## Support

- The dev team (or separate team members) can support the launched project by request from the stakeholders (bug fixing/issue resolving/ tech support on the prod environment/ any change requests or possible updates)
- Post-production phase of the project development performed on base of new project vision and roadmap. Could be changed team configuration (could be extended), Project management approach based on the current requirements and business needs.

### Training Sessions:

- Offer training sessions for end-users and administrators to ensure they are proficient in using the system.
- Provide training materials, user guides, and FAQs to assist users in troubleshooting common issues.

### Documentation and Knowledge Transfer:

- Ensure that all project documentation is up-to-date and well-organized.
- Provide comprehensive documentation on the system architecture, codebase, and any custom configurations.
- Conduct knowledge transfer sessions with the support team to familiarize them with the project.

### Bug Fixing and Maintenance:

- Establish a process for bug tracking and resolution. Address any outstanding issues or bugs from the development phase.
- Implement a maintenance plan for routine updates, patches, and bug fixes.

### Feedback and Continuous Improvement:

- Gather feedback from users to identify areas for improvement.
- Use feedback to iterate on the system, addressing usability issues or feature enhancements.

### End-of-Life Planning:

- Develop a plan for the eventual end-of-life of the system, including migration strategies for data and users to newer solutions

# Integration Partnership

## What is an integration partnership?

- Integration partnerships happen when SaaS companies team up to connect their software, making the user experience better. This means the software programs can easily share data in real time, making things run smoothly for users.
- In the context of such partnerships, users do not need to enlist a developer to establish connections between their systems. The process of linking these programs is user-friendly and doesn't demand extensive technical expertise.

## Why consider integration partnerships?

- Most companies use software that doesn't easily connect with other tools—only about 28% do. This creates a great chance for smart businesses to team up with the right SaaS companies. By integrating, they can offer users even more value, making it a win-win.
- Allocating Development Resources, specifically a dedicated Development Team, to the processes of development, testing, and implementation is a key success factor in achieving a high-quality, reliable, and user-friendly integrated solution within the framework of an integration partnership.

# What Benefits Do You Receive From Having An Integration Partner?

Choosing the right integration partner is essential in ensuring successful B2B integration that delivers value to a company for years to come.

01

## Improved Customer Satisfaction:

Enhances user experience, automates processes.

Streamlines tasks, saves time for customers

02

## Deepened Industry Relationships:

Builds strong partnerships, mutual benefits.

Enables co-marketing campaigns, referrals, and revenue sharing.

03

## Faster Business Scaling:

Drives growth through new products and services.

Increases efficiency, saves time and money.

04

## Enhanced Customer Service:

Automation leads to quicker and efficient processes.

Better customer experience, key to business growth.

# CASE STUDIES

**Boosty focuses on the tangible value provided  
to our clients**



Zion is a mobile application, a peer-governed social network where members truly own their data.

## Challenge

With Zion, you can post content to your friends and/or subscribers, explore and chat in communities run and managed by Zion members, and view content from your favorite creators. Additionally, Zion sidesteps corporate profit motives and empowers every user with full sovereignty and irrevocable custody of their personal information and data. This creates a network free of targeted ads, centralized moderation, and arbitrary censorship. Creators can utilize communities to grow their audience and gain revenue from boosts on the content they post and from community fees.

## Solution

**Web3-Based Authentication:** Developed a service which was responsible for generating a unique 12-word mnemonic seed phrase (must be stored by user) as the main entry point to the application. This seed phrase is then used to generate the user's Decentralized Identifier (DID) and derive unique private keys (stored on the device) used to sign WRITE operations via a DWN-based API.

**DWN-Based API:** A Decentralized Web Node (DWN) is a data storage and message relay mechanism entities can use to locate public or private permissioned data related to a given Decentralized Identifier (DID). This involved developing a single endpoint responsible for every WRITE operation a user performs.

**Payment System Based on Bitcoin Lightning Network (Lightning Wallet):** Developed a service responsible for producing payments between users using the Bitcoin Lightning Network. Users can establish specific fees for joining, posting, commenting, etc., in their communities. Users can also send tokens to each other by paying pre-generated invoices.

**Post Feed:** Developed a Twitter-like feed with posts coming from featured communities or the ones the user is subscribed to.

**Boost System:** Developed Bitcoin Lightning Network-based quick payments that can be performed by anyone who reads a post or comment. The tokens go to the post or comment owner.

**Notification System:** Developed a regular notification system using Firebase to notify users if something is happening with their account (e.g., post in community, boost, follow, etc.).

**Open Chat:** Developed an explicit open live chat for every community in the system.



## Description

Storj is an open source, decentralized file storage solution. It uses encryption, file sharding, and a blockchain-based hash table to store files on a peer-to-peer network.

Starting out in the US in 2011, Storj now has over ten million users, and serves tens of thousands of agencies and organizations. Currently Storj is one of the world's largest blockchain file hosting.

### We worked with a bunch of Storj products:

**Storj Mobile**

**Mirroring Service Application**

**Satellite Account**

# Storj Mobile

## Description

Storj Mobile is designed to offer a seamless and secure cloud storage experience, mirroring the functionality of the Dropbox mobile application. It includes account creation, data encryption and file management. Despite the inherent challenges of mobile processing power compared to computers, Storj Mobile ensures a smooth and efficient performance, bringing the power of secure cloud storage to your fingertips.

## Challenge

The main challenge was to create an efficient and real-time synchronization system for different folder structures on Android and iOS devices.

### For Android:

- **Synchronization Complexity:** Android users can select multiple folders to sync with Storj. This required a system that could handle real-time updates efficiently.
- **Background Service Development:** The need to constantly monitor and synchronize new files or folders in the background added significant complexity due to the varied nature of Android devices and their resource limitations.

### For iOS:

- **Limited Folder Sync:** On iOS, synchronization was limited to the Photos folder. Despite being simpler than Android, it still required a reliable system to monitor and sync photos.

## Solution

To overcome these challenges, the development team implemented the following solutions:

### For Android:

- **Complex Background Service:** A sophisticated background service was developed to monitor selected folders continuously. This service detects any updates or new files in real-time and synchronizes them with Storj, ensuring that data is always up-to-date.

### For iOS:

- **Simplified Sync System:** The sync system for iOS was streamlined to monitor and sync only the Photos folder. This made the implementation more straightforward compared to Android.

# Mirroring Service Application

## Challenge

The primary challenge was to address the hesitation of large companies in adopting a decentralized blockchain solution due to concerns about data security and potential loss of sensitive information.

## Solution

We implemented:

### Dual Storage Mechanism:

- The Mirroring Service allows companies to store documents simultaneously in both their existing cloud service (e.g., Amazon Web Services) and Storj Labs, a decentralized storage platform.
- An application was created to intercept files at the moment they are sent for storage and duplicate them, ensuring they are saved in both locations.

### Cost and Security Comparison:

- At the end of each month, company employees can compare the costs and security of storing files in the traditional cloud service versus Storj Labs.
- This comparison helps companies evaluate the potential cost savings and security benefits of using decentralized storage without fully committing to it.

### Risk Mitigation:

- The Mirroring Service provides a safe way for companies to test blockchain storage solutions without risking their data. Since the data remains stored in the traditional cloud service, there is no immediate risk of data loss.
- This approach enables companies to gradually explore blockchain technology and make informed decisions based on their findings.

# Satellite Account

## Challenge

Storj faced a significant challenge when it grew to 200,000 operator nodes. The primary problem was with the deletion process of files. If a file was to be deleted but the node hosting the file was offline at the time, the delete command would not be received. Consequently, the file would remain on the node permanently, even though it no longer existed in the database. This resulted in the accumulation of "garbage" data, which could lead to storage inefficiencies and potential collapse. Additionally, since Storj's payment system was centralized, nodes were paid based on total storage, including any "garbage" data, leading to unnecessary costs.

## Solution

### Satellite Applications:

- **User Interface and Management:** Satellites provide a user-friendly interface for account creation, payment methods, project management, and API key generation. This allowed users to interact with the decentralized storage network more efficiently.
- **Data Management and Synchronization:** By creating API keys, users could securely upload and manage their files within the network, ensuring that files were correctly identified and stored.

### Integrated Payment Systems:

- **Stripe Integration:** Implemented for traditional payment methods, allowing prepayments, post-payments, and automated billing.
- **CoinPayments Integration:** Facilitated crypto payments. Users could top up accounts using Storj tokens, with transactions automatically converted to dollar equivalents for consistency in billing.
- **Incentive Programs:** Introduced referral and bonus systems to encourage the use of Storj tokens and attract new users.

### Comprehensive Dashboard and Visualization:

- Developed a dashboard to visualize data storage, usage statistics, and manage billing, ensuring users could easily track their storage activities and costs.

# LEDGER

Ledger is a prominent company specializing in the development of hardware wallets designed to securely store and manage cryptocurrencies and NFTs.

## Challenge

The primary challenge is to achieve comprehensive and efficient indexing of ERC721 and ERC1155 tokens, along with their associated metadata, across Ethereum and its compatible chains. This is crucial for facilitating optimized search and management of Non-Fungible Tokens (NFTs) and their collections.

## Solution

To efficiently index ERC721 and ERC1155 tokens and their metadata, we implemented a robust NFT Metadata Indexer Pipeline with the following key features:

### Comprehensive Log Indexing:

- The pipeline indexes logs for all ERC721 and ERC1155 tokens and collections. This ensures complete data retrieval, capturing every transaction and event associated with these tokens across Ethereum and compatible chains.

### Metadata Management:

- **Downloading and Caching:** Metadata associated with each NFT is downloaded and cached. Caching enhances performance by allowing quick access to metadata without repeatedly fetching from external sources.
- **Parsing:** The cached metadata is parsed to ensure it is accurately formatted and structured for efficient data management.

### Optimized Search Engine Indexing:

- The parsed metadata is indexed on a search engine. This optimizes the retrieval process, allowing users to efficiently search for and manage NFTs and collections based on criteria such as token ID, owner, and specific metadata attributes.



## Bloom Is A Decentralized End-To-End Identity Attestation

### Challenge

The main challenge addressed by Bloom is providing financial services, specifically credit scoring and risk assessment, to billions of people who currently lack access to traditional banking services. These individuals often do not have a bank account or a credit score, making it difficult for them to obtain loans and other financial products from both traditional and digital currency lenders.

### Solution

The solution consists of several key components:

#### Bloom SDK:

- **Encryption Tools:** Ensures that all interactions with Bloom's storage are secure, protecting user data from unauthorized access.
- **Bloom Storage Integration:** Facilitates secure data storage and retrieval using the Ethereum blockchain and IPFS (InterPlanetary File System).
- **Wallet Functionality:** Allows users to securely manage their digital identities and assets.
- **Data Verification and Signing:** Provides mechanisms for verifying the authenticity and integrity of data, ensuring that all information shared within the network is trustworthy.

#### Decentralized Identifiers (DIDs) and Verifiable Credentials:

- **Standardized Identification and Verification:** Establishes a unified standard for decentralized identity verification. This allows individuals to electronically prove their identity and credentials in a secure manner.
- **Digital Credentials:** Converts traditional physical documents, such as passports, driving licenses, and qualification certificates, into digital forms. These can be easily verified and used for various online services, facilitating access to financial products for those who lack traditional banking records.



Akave is the innovative L2 based, fully decentralized storage ecosystem, built for automated data storage.

## Challenge

Due to the competitiveness of the market and Filecoin specificity, it was required to proceed with the fast-paced development prior to doing feasibility studies. Work has been performed on top of existing open-sourced solutions, combining in-house knowledge base and iterative architectural approach (phased based, oriented at small-steps). Platform was designed to be cost-efficiently scalable, and as modular as the stack allows. Go has been selected as language of preference, in order to facilitate future maintenance.

## Solution

**Protocol:** in order to speed up proof-of-concept availability, a complete pod of experts (full stack, web3-native) was tasked with creation of baseline flow, then gradually develop upload and download SDK capabilities, enhance and integrate existing APIs and S3-like native gateway, finally optimizing the stack. #Filecoin, #IPFS, #IPC, #libp2p

**Communication:** due to strict requirements of S3-compatible interaction layer on top of newly created SDK, API has been created to support complete flow: AWS S3 CLI, REST calls, and direct SDK integration. To increase backwards compatibility and facilitate integration, complete endpoints mapping has been implemented. Separate authentication and authorization methodology has been developed to support enterprise scale absorption. #Go, #MinIO, #Auth

**Reliability:** data availability, durability and accessibility within decentralized ecosystem was achieved thanks to innovative approach, on one hand utilizing replication and erasure coding approach, on second adjusting scalability through zoning and dynamic data reallocation. Approach of on-chain driven data allocation allowed creation of sustainable mechanism for data tampering, with L2 subnet know-your-data approach, and documented processes of application, data and infrastructure lifecycles. #EC, #DR



## Solution

**Security:** due to enterprise flavor of the product, additional security guard rails have been implemented, including e.g.: e2e computationally optimized encryption, code rearranging for quicker bug-fixing, lifecycle-based approach for functional development, or adjusted APIs for automated MLOps pipelines (low trust environments). Due to requirements of local regulations, a mechanism for (meta)data tagging has been spread to the entire system - not only the S3 part.

**Marketplace:** forward planned tokenomics and full chain transparency allowed robust metadata collection, further enhancing monetization capabilities, including "proof-of-everything" approach. This includes market differentiation, in the form of geospatial data allocation, compliance with regulations, and the possibility to utilize the platform as a store-and-forget one step aggregator. #Filecoin, #IPC

**Development:** small-steps methodology allowed optimization of testing team (focus on automated testing, preparation of crawlers for health-checking in a form of secondary checks, opt-in metrics collection), as well as incremental Solidity work - per actor / per user journey. Optimization has been achieved through a scalable pods approach, where developers within all units were able to support the long-pole in a tent. #Go, #Solidity, #CICD, #EnterpriseArchitecture

**Value gained:** thanks to high development momentum, product has been released in a timely manner, addressing market niche and allowing expenditure within the competitive segment of alternative storage platforms. Grasping the approach of easy integrability, the enterprise sector is capable of evaluating solution applicability with low entry cost. Modularity of solution allows more frequent functional packs development and budget planning.



Pocket Network (POKT) is a decentralized infrastructure platform that provides reliable, performant, and cost-effective blockchain data access for Web3 applications.

## Challenge

Integrating Ethereum and Pocket Network (Pokt) through a bridge, while addressing the complexities of managing token transfers, liquidity, and ensuring real-time balance updates and notifications. The primary challenge involves modifying the existing mintable bridge implementation to handle Wrapped Pocket (wPOKT) tokens, ensuring efficient balance management, and preventing liquidity issues that could lead to transaction failures.

## Solution

To address the challenges of integrating Ethereum and Pocket Network, the following enhancements were implemented:

- **Token Management:** Modified the Ethereum contract to handle wPOKT tokens for deposits and withdrawals, replacing the minting/burning mechanism with direct sending and receiving of tokens.
- **Balance Management:** Expanded the bridge to store and retrieve balances, implemented periodic balance updates, and ensured real-time synchronization between Ethereum and Pokt.
- **Liquidity Management:** Developed a notification system to alert admins when liquidity is low, added front-end balance displays, implemented a confirmation dialog for low liquidity warnings, and restricted transaction amounts to available liquidity.
- **User Interface:** Displayed current bridge balances on the transfer page and designed a user-friendly confirmation block to inform users of potential liquidity issues.

These improvements ensured efficient token transfers, real-time balance management, and enhanced user experience and trust in the bridge system.



**SOFTSWISS**  
WINNING COMBINATION



**boosty**

## Introduction

SoftSwiss, a leading provider of iGaming software solutions, found CoinsPaid, a prominent crypto payment processor, to enhance the cryptocurrency transaction capabilities within the gaming industry. This case study explores the objectives, solutions, and outcomes of this collaboration, particularly focusing on the comprehensive system audit and subsequent development phases following a significant security breach.

## Objectives

- Enhance Crypto Payment Integration:** Improve the efficiency and security of crypto transactions for online gambling.
- Increase Market Share:** Expand the use of cryptocurrencies in the iGaming sector.
- Recover and Secure Systems Post-Hack:** Conduct a thorough audit and rebuild critical system components to prevent future breaches.
- Innovate iGaming Solutions:** Maintain a competitive edge by incorporating cutting-edge crypto technologies.

## Challenges

- Security Breach:** CoinsPaid faced a significant hacking incident, necessitating an immediate and comprehensive audit.
- Market Competition:** The rapidly growing crypto gambling market demanded robust and innovative solutions to stay ahead.
- Regulatory Compliance:** Navigating complex regulatory environments across different jurisdictions.
- Technology Integration:** Seamlessly integrating CoinsPaid's payment processing capabilities with SoftSwiss's existing platforms.



## Solution

- System Audit:** Conducted a thorough audit of the entire payment system post-hack to identify vulnerabilities and areas for improvement.
- Optimization of Payment Routes:** Streamlined and optimized the payment routes to enhance efficiency and reduce transaction times.
- Rebuilt Data Aggregation:** Redesigned the data aggregation system to handle:
  - Payment provider data.
  - Customer requests.
- Security Enhancements:** Developed new test flows to secure assets and ensure robust protection against potential threats.

## Implementation

- Platform Upgrades:** SoftSwiss updated its platforms to support the enhanced and secured CoinsPaid payment gateway.
- Audit and Optimization:** Conducted a detailed audit, followed by the optimization of payment routes and data aggregation systems.
- Security Protocols:** Implemented enhanced security protocols and test flows to safeguard user data and transaction integrity.
- User Training:** Provided training and resources to clients for smooth adoption of the new and improved payment system.

## Results

- Increased Transaction Volume:** Post-integration and optimization, SoftSwiss saw a significant increase in crypto transaction volumes, reflecting higher user engagement and trust.
- Improved Security Posture:** The comprehensive audit and subsequent security enhancements significantly reduced vulnerabilities and improved overall system security.
- Recognition and Awards:** SoftSwiss was named Crypto Company of the Year at the International Gaming Awards 2024, highlighting the success and impact of their innovative solutions.

boosty

**BOOSTY VENTURE**

# Kaminari

Lightning Network infrastructure for instant and affordable global payments

## Problem:

Bitcoin is impractical for microtransactions

- Expensive (up to \$7.5 per transaction in May 23)
- Slow (taking 10+ minutes to settle)

+ Unpredictable delays caused by network congestions

## Solution:

The Lightning Network offers near-zero fees and instant transactions  
Affordable (0.003% per transaction)

- Affordable (0.003% per transaction)
- Instant (taking a few seconds to settle)

+ A minimum payment amount of \$0.0003

++ Available to over 100 million people



The GGX blockchain—a novel solution poised at the crossroads of the Bitcoin, Cosmos, and Ethereum communities. GGX addresses the pressing need for efficient cross-chain communication and offers innovative solutions for decentralized custody and DeFi liquidity provisioning.

GGX Chain has been designed to offer a secure and efficient solution for distributed Bitcoin custody. One of the fundamental challenges in the blockchain space is to strike a balance between security, decentralization, and efficiency.

### Liquidity linking protocol

Liquidity escrow layer

01

### Communication protocol

Message passing/  
communication layer

02

### VM - GGx Chain

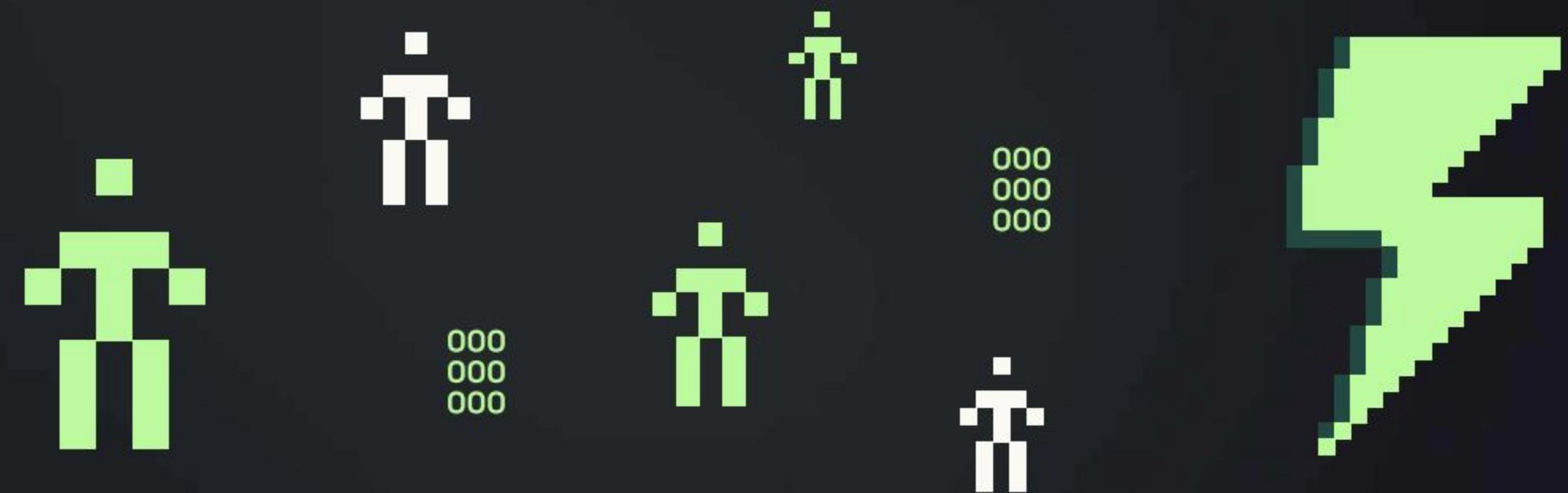
Application layer

03

# STROOM

Stroom is a Liquid Staking Protocol for Bitcoin. It allows users to deposit BTC into Lightning Network in a trustless manner, earn fees without running a node, and get lnBTC token at a 1-to-1 ratio to use in Ethereum's DeFi ecosystem.

In July 2023, Stroom has closed an oversubscribed \$3.5M Seed round led by Greenfield Capital.



# Contact Us

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Ready to make a major push towards your web3 strategy? Let us guide you through decentralized universe and implement you a solution that will serve your business to achieve needed revenue & other goals leveraging power of a blockchain universe!

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