Revitalizing Kusama

Proponent: Virto DAO
Beneficiary: Virto DAO - AssetHub sovereign account
Date: Sep 2024
Requested KSM: **8,000 KSM** [147,200 USD (18.4 USD EMA7)]
Track: BigSpender
Short description: Virto aims to revitalize Kusama providing simple ways to start and manage organizations that can grow effortlessly with the Kreivo infrastructure

Context of the proposal

Our canary network Kusama, has faced challenges in establishing its identity and attracting long-term development. Its motto, "expect chaos," while emphasizing its role in rapid testing and iteration, has inadvertently discouraged serious projects and investors. This perception, combined with the steep learning curve that identifies Polkadot related technology, has led many to view Kusama merely as a testnet rather than a valuable network in its own right. As a result, very few teams develop Kusama-exclusive projects, often preferring Polkadot for its perceived stability and visibility. Despite its potential for rapid development and affordability, Kusama has struggled to attract and retain early-stage projects that could benefit from its unique features.

The Virto team proposes a comprehensive strategy divided in two main areas of focus with deliverables in Q3 and Q4 to address these challenges and revitalize the Kusama network while bringing more utility to the KSM. Our vision is to transform Kusama's image from a chaotic testnet to a dynamic ecosystem where innovative organizations can thrive and achieve sustainable growth. We aim to significantly reduce the barriers to entry for organizations starting a Web3 business, making it accessible even to those with limited or non-existent blockchain experience. By developing a simple to use platform to create and manage all sorts of decentralized organizations, we'll encourage the creation of projects that leverage Kusama's unique strengths. Our solutions will position Kusama as the go-to place for early-stage projects, providing teams with all the necessary tools to take an idea to a profitable business ready to seek funding and scale to a large user base.

Previous work in Q2

During Q2, the Virto team made significant progress on both the application that exposes the organization management infrastructure to end users and the Kreivo blockchain now hosting 13 new communities/organizations, while also conducting valuable market research to inform our product strategy.

Virto App Development

We successfully launched a preview version of the Virto app, which introduces several key features:

1. Simple onboarding for organizations using just 1 KSM
2. Creation of initiatives, such as adding members to communities
3. Simple voting functionality for community members on these initiatives

This preview version represents a significant step towards our goal of making DAO creation and management accessible to a wider audience.

Blockchain Infrastructure

Our engineering team deployed critical blockchain infrastructure, including:

1. DAO infrastructure based on OpenGov contributing to the PolkadotSDK
2. Memberships system, designed to become the primary income source for the protocol and give new utility to the KSM
3. Payments system with escrow capabilities
4. XCM transfer functionality for DOT
5. Smart contract support
6. Design and partial implementation of the *pass* system that will enable fee-less and wallet-less transactions.

These developments lay the foundation for a robust, flexible, and user-friendly blockchain ecosystem.

Product Research Insights

To ensure our development efforts align with market needs, our product team conducted extensive research, yielding several key insights:

1. Current Tools and Scalability: Many organizations use instant messaging and spreadsheets for communication and financial management. While functional, these solutions aren't seen as scalable for growing communities, presenting an opportunity for Web3 platforms to offer more comprehensive, scalable solutions.
2. Accessibility and Usability Challenges: Some organizations with technical knowledge of DAO tools find existing solutions lacking in accessibility and usability. This highlights the need for more intuitive, easy-to-use Web3 tools.
3. Multisig Complexity: Blockchain-savvy organizations often use multisig solutions for transparency, but find them difficult to manage across different time zones. There's a clear need to simplify these tools with more user-friendly interfaces.
4. SME Financial Management: In Latin America, many small businesses prefer basic tools like spreadsheets due to the high costs of existing SME solutions. This presents an opportunity for accessible, customized Web3 products catering to SME financial management needs.

These insights have shaped our understanding of market needs and influenced our product development priorities, ensuring that our technical achievements align with real-world user requirements.

Some early success cases

- Virto: The team has been able to use Kreivo to transparently manage funds as a DAO
- GrowDAO: Onboards DAOs and manages their funds with their own governance
- KSM Community: A decentralized voice using the 1 member, 1 vote decision mechanism to vote on Kusama OpenGov proposals.

Roadmap

As a user-centric platform, we prioritize community feature requests. Our goal is to help them build their vision more quickly than ever using technology that empowers individuals and removes location barriers to finance and governance tools. To make it happen we need to break the barriers of web3 and install the benefits in products that people can use without the noise of crypto.

Context: The following OKRs are defined with the primary purpose of testing features, rather than focusing on growth. While we are aligned with all stakeholders to onboard as many accounts and organizations as possible, our current focus and budget is on product development rather than marketing or growth strategies. Therefore, our OKRs are designed to establish clear criteria for the acceptability of the technology behind.

Milstone Q3: Making Virto non-crypto friendly, removing web3 complexity Part I

Objective: Enable organizations to onboard members without a web3 wallet, without sacrificing control, custody or usability.

We are committed to advancing web3 adoption. To achieve this, we will implement top-tier account abstraction on Polkadot via the latest on-device capabilities. This will allow anyone with a browser to interact with blockchain via native webauthn & open-id providers, eliminating wallet constraints and enabling direct use of the technology.

Key result 1: Onboard 20 members through keyless accounts
Key result 2: Sign 10 transactions using keyless accounts
Key result 3: Integrate 2 open-id providers (webauthn, Auth0)

Objective: Improve governance and actions for communities

Being autonomous means taking responsibility for our decisions. To enhance organizational control over their sustainability, virto is introducing more tools and functionalities. Soon, organizations will be able to apply for funds, remove members, manage vesting schedules, send/request payments and even trade with other communities, expanding their capabilities and autonomy.

Key result 1: Deploy 10 new actions in our platform
Key result 2: Deploy 2 new governance mechanisms.
Key result 3: Create a platform for discussions for the communities.

You can check the details and progress here. If you have any ideas or suggestions, please

share them with us. Create an issue in our repositories and become a part of this journey. Your input is valuable to us!

Kreivo Roadmap - Virto SDK roadmap - Virto Communities Roadmap

Milstone Q3: Making Virto non-crypto friendly, removing web3 complexity Part II

Objective: Enable organizations and members get paid and pay with local payment methods.

Access to crypto liquidity is one of the initial challenges users encounter when trying to leverage the benefits of web3 platforms. By utilizing both non-USD and USD stablecoins provided by virto communities that specialize in on/off ramps, such as COPm, we are forging a bridge between decentralized finance (DeFi) and traditional infrastructure. This integration enables a wider range of use cases, such as crowdfunding, paying salaries in local currencies, and selling products and services through credit cards or other user-friendly methods. Simultaneously, it allows organizations to maintain value on-chain, ensuring greater control and transparency.

Key result 1: Process 10K USD in non-stable usd via local payment methods such credit card, ACH payments, etc.
Key result 2: Integrate dUSD/USDt/USDc in our platform via communities.
Key result 3: Integrate 1 offramp solution for COPm

General Projects Overview

1. Kreivo: The "pseudo-system parachain" with focus on organizations, usability and governance. It serves as a testbed for innovative features aimed at creating a more accessible and efficient environment for both developers and users.
    - OpenGov experimentation: We keep a fork of PSDK to introduce features that might make it upstream such as "dynamic tracks", "referenda hooks", "candle confirmation", "edit on prepare".
    - Communities: A complement to pallet-referenda for DAO management and diverse decision-making mechanisms.

- Payments: Elevating payment experience with escrows, subscriptions, "streaming", disputes, advanced fees and more.
- Pass: WebAuthn-based keyless account abstraction
- Memberships: Traits (auto-implemented for NFTs pallet) for group management with roles, ranks, lifetimes or "gas tank" for free transactions.
- Listings: Traits (auto-implemented for NFTs pallet) useful for marketplaces and organizations offering goods and services.
- Managed contract instantiation: Developer monetization with anti-copycat measures

  Example: We want a DAO of builders to set up a Smart Contract Marketplace, making use of the payments and curated listings systems, it can create an environment where developers can monetize their work where other organizations or individuals pay the creator of a contract (and the DAO) for each instance of a contract.

2. VirtoSDK: Rust-based toolkit for Polkadot development with focus on simplicity and portability:
   - Scales: Embedded friendly dynamic SCALE data (de)serialization.
   - libwallet: Toolkit for soft/hard wallets and signers with native platform integrations.
   - Pjs-rs: Rust-based web extension connectivity
   - Sube: Light and simple substrate client with planned XCM first support and multiple language bindings (JS, Python*, Kotlin*, Swift*)

3. Virto App/Communities: operative system for our ecosystem, it offers a user friendly frontend for all the capabilities available in kreivo.
   - Open Governance for organizations based in an innovative actions system.
   - Treasury management
   - Membership management.
   - Token Launch Platform.
   - Discussions and general communications

Team

Daniel (Team Lead)

Github: https://github.com/olanod

Fellowship member. Software architect.

Pablo Dorado (Senior SWE - Blockchain)

Github: https://github.com/pandres95

PBA Alumni (W3), Fellowship member, Rust and Runtime development.

David Barinas (Senior SWE - Platform)

Github: https://github.com/S0c5

Senior Rust Full-Stack. Cybersec. Former YCombinator founder.

Brayan Vargas (Mid-level SWE - Platform)

Github: https://github.com/b-avb

Rust Full-stack developer.

Ailén Grimaldi (Junior SWE - Platform)

Github: https://github.com/ail3ngrimaldi

Junior Rust developer.

Juan Pablo Gutierrez

(Junior SWE - Blockchain)

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Johan Duque

(Senior embedded eng. - Blockchain)

Github: https://github.com/johandroid

PBA Alumni(W4). Fellowship candidate. Linux and embedded engineer.

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Isabella Paz

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Communications, Marketing, Business Development.

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Product Researcher- Product Ops Manager

Quarterly Budget and spend process:

Summary

Average cost FTE: **7,000 USD**

Average total monthly cost 7 FTE: **49 000 USD/month**

Milstone Q3: Making Virto non-crypto friendly, removing web3 complexity!		
Feature A: Enable organizations to onboard members without a web3 wallet, without sacrificing control, custody or usability		
Name	**Resources**	**Time**
Kreivo	2	2 Month
Virto SDK	1	
Virto Communties	1	
Feature B: Improve governance and actions for communities		
Name	**Resources**	**Time**
Kreivo	0	1 Month
Virto SDK	2	
Virto Communties	2	
Milstone Q3: Making Virto non-crypto friendly, removing web3 complexity!		
Feature C: Enable organizations and members get paid and pay with local payment methods.		
Name	**Resources**	**Time**
Kreivo	2	2 Month
Virto SDK	1	
Virto Communties	1	

Execution						
Q3-	**1**	**2**	**3**	**4**	**5**	**6**
	A	A	D	D	D	D

		B				
					C	C

~ Gracias ~